



# CATV Directory

OF EQUIPMENT, SERVICES, & MANUFACTURERS

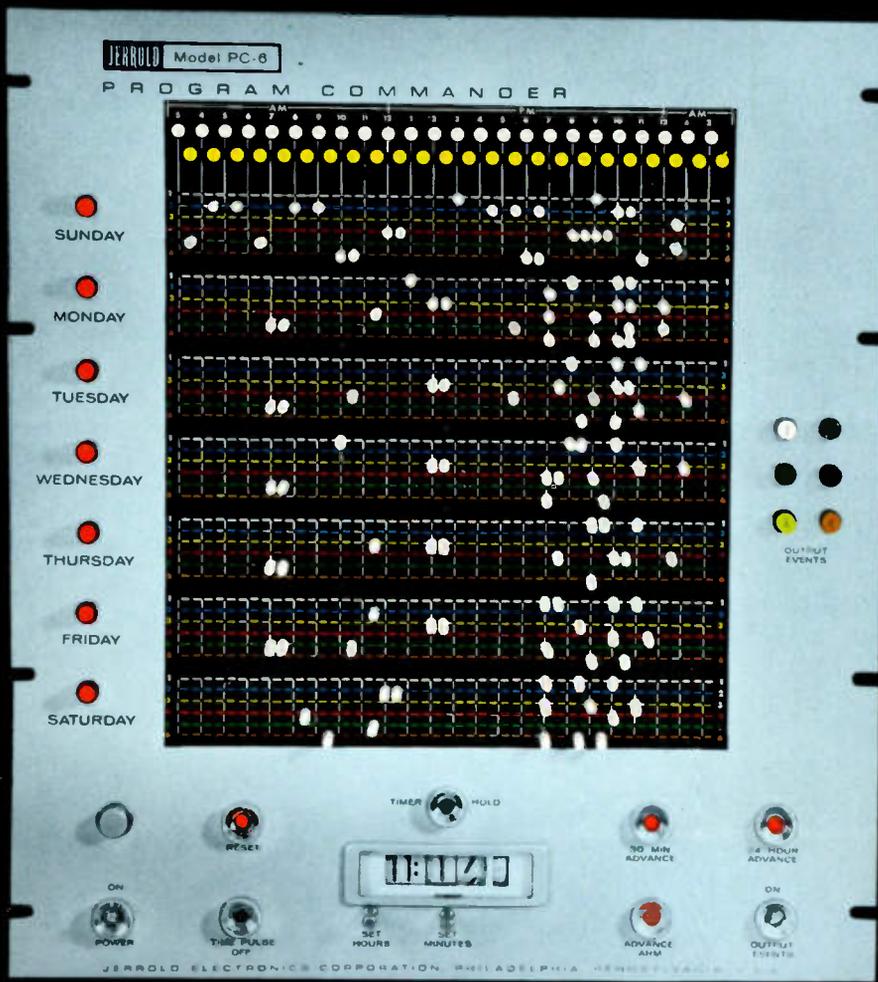
1967  
EDITION



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Cable Television Review

207 N.E. 38th, Oklahoma City, Oklahoma 73105



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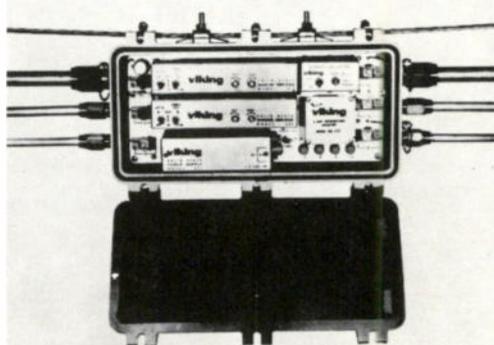
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# Introduction

During the past year the purchase of CATV equipment and components has risen to \$100 million per annum. With the continuing construction of new systems and expansion of existing systems, the *Directory of CATV Equipment and Services* has become increasingly important. This Fourth Edition is carefully organized for rapid reference to all products and services provided to CATV operators, contractors and investors.

The publication staff, working closely with manufacturers and suppliers, has carefully arranged the listings of CATV system components—from the antenna, to head-end, and all the way down through the distribution system to the subscriber tap. Local origination equipment, test equipment, and microwave sections conclude the equipment section, followed by listings of professional services available to cable television operators.

The publishers and editorial staff have compiled these comprehensive listings in order to provide a completely logical and wholly useful reference book, an indispensable time saver and purchasing guide for use in your business. All information included in this Directory was furnished by the firms listed. The publishers do not give or imply an endorsement of particular companies, products or specifications listed.

Robert A. Searle  
*Editor*

Communications Publishing Corporation  
Oklahoma City, Oklahoma

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Stanley M. Searle and Patrick T. Pogue  
*Publishers*

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# CATV Directory

## OF EQUIPMENT & SERVICES—1967 EDITION

Published by Communications Publishing Corporation  
Publishers of TV COMMUNICATIONS magazine and CABLE TELEVISION REVIEW.

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### STAFF

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Stanley M. Searle and Patrick T. Pogue, Publishers

**General Offices:** Communications Publishing Corporation, 207 Northeast 38th, Oklahoma City, Oklahoma 73106, Telephone (405) 528-3523. **Distribution:** The CATV Directory of Equipment and Services is sent without additional charge to subscribers of TV COMMUNICATIONS magazine and CABLE TELEVISION REVIEW. Additional copies are available at \$4.95 each, postpaid. **Editorial Listings:** Contents of this Directory are compiled from material furnished by manufacturers and suppliers serving the cable television industry. Listings are made free of charge to qualified firms upon submission of adequate information in proper form. Requirements and deadlines available upon request.

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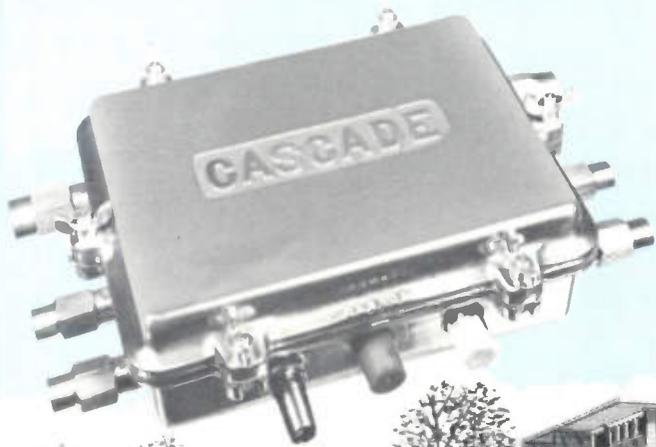
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**June——Annual Pre-Convention Edition**

**July——NCTA Annual Convention Edition (June 25-28, Chicago)  
NCTA CONVENTION REVIEW\*\***

**August——Annual NCTA Convention Coverage Edition**

**NCTA CONVENTION SOUVENIR PHOTO ALBUM\***

**September—Fall Construction Edition**

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# CATV MANUFACTURERS & SUPPLIERS

## Addresses • Key Personnel • General Data

The following section includes general information listings on all firms listed in the various CATV product and services sections of this Directory. Included below are the proper firm name and address, key personnel, type of ownership, and general information concerning the firm's products and services available to the CATV operator. Firms are listed in alphabetical order—display advertisers in this Directory are listed in bold type.

### **GEORGE P. ADAIR ENGINEERING CO.**

901 Twentieth Street, N.W., Washington, D.C. 20006; Ph. (202) 333-1116. Services: consulting, supervising, engineering. Partnership. Owners: George P. and Evelyn F. Adair.

### **ABERDEEN COMPANY**

3833 Wilshire Blvd., Los Angeles, California 90005; Ph. (213) 382-4225. Products: lashing wire, clamps. Owner: George M. Acker.

### **ADLER ASSOCIATES**

519 Transportation Building, Washington, D.C. 20006; Ph. (202) EX 3-3400. Service: CATV consultant. Officer: William Adler, president.

### **ADVANCE INDUSTRIES**

705 Douglas Street, Sioux City, Iowa 51101; Ph. (712) 252-4475. Products: towers, buildings, passive reflectors, associated equipment.

### **ALPHA WIRE**

711 Lidgerwood Ave., Elizabeth, New Jersey 07207; Ph. 925-8000. Product: drop cable. Corporation: public stock. Officers: Howard B. Saltzman, president; Jack Kirschbaum, executive vice president. Division of Loral Corporation.

### **ALTO FONIC PROGRAMMING, INC.**

6362 Hollywood Boulevard, Hollywood, California 90028; Ph. 466-9261. Products: tape musical programming. Corporation. Officer: D. Alan Clark, president.

### **AMECO, INC.**

2949 West Osborn Road, Phoenix, Arizona 85017; Ph. (602) 262-5500. Products: complete line of solid-state equipment. Services: system design, construction, consultation, "turnkey" services, financing and leasing. Corporation: public stock. Officers: Bruce Merrill, president; R. Bruce Walters, vice president; Dick Yearick, vice president; Don Corbitt, secretary; Carter F. Page, treasurer; Richard S. Ray, controller.

### **AMERICAN CABLE ELECTRONICS**

988 Wilshire Boulevard, Beverly Hills, California; Ph. CR 3-4450.

### **AMERICAN ELECTRONIC LABORATORIES, INC.**

Box 552, Richardson Road, Lansdale, Pennsylvania 19446; Ph. (215) 822-2929. Products: distribution equipment. Corporation: public stock. Officers: Dr. Leon Reibman, president; C. J. Fowler, executive vice president; S. Merion, vice president-marketing; I. Brager, vice president, manufacturing.

### **AMERICAN MICROWAVE COMMUNICATIONS, INC.**

Box 2116, Alpena, Michigan 49707. Service: microwave common carriers.

### **AMERICAN PAMCOR, INC.**

Box 1776, Paoli, Pennsylvania 19301; Ph. (215) 647-1000. Products: coaxial connectors, house grounding blocks, wall receptacles. Corporation: public stock. Officers: William Kremer, general manager; D. F. Miersch, general sales manager; A. Maslin, assistant-general manager. Division of AMP, Inc.

### **AMERICAN SALES PROMOTION CO.**

9888 Wilshire Boulevard, Beverly Hills, California. Service: sales promotion. Division of Jack Kent Cooke, Inc.

### **AMERICAN TELEVISION RELAY INC.**

2980 Grand Ave., Phoenix, Arizona; Ph. (602) 252-2384. Services: microwave and transmission services, microwave consulting and construction services.

### **AMERICAN TRACTOR EQUIPMENT CORP.**

9131 San Leandro Street, Oakland, California 94604; Ph. (415) 638-2466. Products: tractor and grader-mounted cable laying equipment. Corporation. Officers: D. W. Woodlridge, president; A. W. Kant, vice president; Ed Smallman, sales manager.

### **AMPEX CORP.**

401 Broadway, Redwood City, California 94063. Products: video recorders. Corporation: public stock. Officers: William E. Roberts, president; Alexander M. Poniatoff, board chairman.

### **AMPHENOL CABLE DIVISION**

6235 South Harlem, Chicago, Illinois 60638; Ph. 586-3000. Product: coaxial cable.

Corporation. Officers: C. Camillo, president; J. Aylward, marketing manager. Parent firm: Amphenol Corp.

### **ANACONDA ASTRODATA CO.**

1430 S. Anaheim Blvd., Box 3772, Anaheim, California 92802; Ph. 635-0150. Products: Complete CATV systems, amplifiers, power inserters, matching transformers, splitters, directional couplers. Services: engineering, installation, financing. Corporation. Officers: W. E. Rianda, president; A. L. Ginty, vice president; marketing & sales; S. C. Forrest, vice president-manufacturing & engineering; D. R. Crews, comptroller.

### **ANDREW CORPORATION**

Box 807, Chicago, Illinois 60642; Ph. (312) 349-3300. Products: cables, pressurization equipment; transfer switches, microwave antenna systems.

### **ANDREWS TOWER INC.**

1420 Layton Ave., Fort Worth, Texas 76117; Ph. TE 1-1222. Products: towers, reflectors, buildings. Corporation. Officer: John A. Andrews, vice president general manager.

### **ANTENNA PRODUCTS COMPANY**

Box 520, Mineral Wells, Texas 76067; Ph. (817) FA 5-3301. Products: HF, VHF and UHF antennas, towers, and related equipment. Corporation: private stock

### **ARMADILLO MANUFACTURING COMPANY**

847 East Colfax Avenue, Denver, Colorado 80218; Ph. 255-3666. Products and Services: furnish and install fiberglass buildings. Corporation. Officer: F. C. Walz, Jr., president.

### **ARTIE M. LOFTIS CONSTRUCTION**

Box 1028, Athens, Texas 75751; Ph. (214) OR 5-4616. Service: construction. Officer: Artie M. Loftis, president.

### **ASSOCIATED AGENCIES, INC.**

175 West Jackson Blvd., Chicago, Illinois 60604; Ph. 922-1780. Service: insurance. Corporation. Officer: A. A. Freeman, vice president.

### **ASTEROID CORPORATION**

5665 Kearny Villa Rd., San Diego, California 92123; Ph. (714) 277-3710. Products: video and sound loss detectors, video demodulators, emergency alert instrumentation, weather data units. Services: engineering, construction. Corporation. Officers: W. J. Buck, president; Michael L. Wegmann, vice president; R. W. Kennedy, vice president; James R. Kennedy, manager field operations; Ernest R. Murillo, marketing director.

### **ATWELL & ASSOCIATES**

5800 North Nineteenth Avenue, Suite 209, Phoenix, Arizona 85015.

### **BAKER EQUIPMENT MANUFACTURING CO.**

1710 Highpoint Avenue, Richmond, Virginia 23230; Ph. 358-9131. Products: towers, service bodies, trailers, construction cranes and accessories. Partnership. Officer: E. I. Deas, general manager. Parent firm: Baker Equipment Engineering Co.

### **BARASH ADVERTISING**

403 South Allen Street, Box 77, State College, Pennsylvania 16801; Ph. (814) 238-9471. Services: advertising and public relations. Owners: Sy and Mimi Barash

### **J. C. BARNARD AND ASSOCIATES, INC.**

10121 Manchester Road, St. Louis, Missouri 63122; Ph. (314) YO 6-2116. Services: consulting, engineering, feasibility and field strength surveys. Corporation: private stock. Officers: J. C. Barnard, president; E. H. Shonholz, vice president; C. L. Todd, vice president; A. B. Cekovsky, secretary.

### **BENCO TELEVISION ASSOCIATES**

27 Taber Road, Rexdale, Ontario, Canada; Ph. (416) 244-4296. Products: complete CATV equipment line. Corporation. Officer: C. J. Evans, general manager. Parent firm: Redifon (Canada) Limited.

### **BENCO TELEVISION CORP.**

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equipment line. Corporation. Officer: Harry D. Gray, sales manager. Parent Firm: Redifon (Canada) Limited.

#### BENDIX ENVIRONMENTAL SCIENCES DIVISION

1400 Taylor Avenue, Baltimore, Maryland 21204; Ph. (301) 825-5200. Products: precision weather instruments. Corporation. Officers: David W. Martin, general manager; John H. Newman, director of marketing.

#### BISHOP MANUFACTURING CORP.

10 Canfield Road, Cedar Grove, New Jersey 07009; Ph. (201) 239-2400. Products: splicing, terminating and shielding materials. Corporation. Officers: N. H. Tuthill, president; Carolyn M. Spatts, secretary; William E. Geib, treasurer; F. X. McCormack, vice president-sales.

#### BLACKBURN & COMPANY, INC.

1725 K Street, N.W., Washington, D.C. 20006; Ph. FE 3-9270. Services: newspaper brokers negotiations, financing, appraisals. Corporation. Officers, James W. Blackburn; Jack V. Harvey; Joseph M. Sitrick.

#### BLONDER-TONGUE LABS, INC.

9 Alling Street, Newark, New Jersey 07102. Products: distribution equipment, video monitors, accessories. Corporation. Isaac S. Blonder, board chairman; Ben H. Tongue, president.

#### BRAND-REX DIVISION

Box 498, Willimantic, Connecticut 06226; Ph. (203) 423-7771. Products: coaxial cable. Corporation. Officers: R. J. Rodday, vice president and general manager; B. Van Wagner, director of sales and marketing; S. F. Luques, director of engineering. Parent firm: American Enka.

#### BURNUP AND SIMS, INC.

Box 2431, West Palm Beach, Florida 33402; Ph. 683-8311. Services: complete construction services, including power and telephone plant rearrangement and tree trimming. Corporation. Officers: Russell J. Burnup, board chairman; Riley V. Sims, president; J. H. Graham, executive vice president.

#### BUTLER MANUFACTURING COMPANY

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#### CABLE TV CONSTRUCTION, INC.

223 North State Street, Iola, Kansas 66749; Ph. EN 5-2177. Services: engineering and construction. Corporation. Officer: Larry Hudson, president.

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1698 East Twenty-fifth Street, Signal Hill, California 90802; Ph. 426-7041. Services: construction engineering, management, installation, feasibility surveys. Corporation. Officer: Robert G. Owens.

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Box 604, Wenatchee, Washington 98801; Ph. TU 4-7161. Services: engineering and construction. Corporation. Officers: Arthur W. Reider, president; Lloyd H. Wilbanks, vice president; Peter Young, attorney, secretary-treasurer.

#### CASCADE POLE COMPANY

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#### CAS MANUFACTURING COMPANY

Box 47066, Dallas, Texas 75207; Ph. (214) 81 3-3661. Products: head-end, amplifiers, power supplies, weather instrument packages, fittings and accessories, antennas, cable. Corporation: private stock. Officer: John G. Campbell, president.

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1375 Laurel Street, San Carlos, California 94070.

#### CATV-DIRECT MAIL MARKETING, INC.

290 Duffy Avenue, Hillsville, New York 11801; Ph. (516) WE 8-8050. Services: direct mail. Corporation: private stock. Officer: Milton S. Stevens, president.

#### C-COR ELECTRONICS, INC.

60 Decibel Road, State College, Pennsylvania 16801; Ph. (814) 238-2461. Products: trunk amplifiers, bridging amplifiers, splitters, couplers, tap units. Corporation: public stock. Officers: James R. Palmer, president; George P. Dixon, vice president-chief engineer; Robert K. Arbogast, marketing manager.

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620 West Foothill Boulevard, Box 35, Glendora, California 91740; Ph. 963-1694. Products: cable accessories for aerial or buried plant, pedestal housings, splice and equipment closures. Services: consultation and engineering. Corporation. Officers: William H. Channell, president; Glenn M. Rhode, director of sales.

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Box 66, Perry, Oklahoma 73077; Ph. (405) 336-4404. Products: Ditching equipment, vibratory plows, back-hoe equipment, work load platforms. Corporation.

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#### COLEMAN INSURANCE COMPA

414 Twenty-second Avenue, Tuscaloosa, Alabama; Ph. 758-4486.

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Dallas, Texas 75207; Ph. (214) AD 5-9511. Products: microwave relay and program channeling equipment. Services: field survey, systems engineering, installation. Corporation: public stock. Officers: Arthur A. Collins, chairman and president; W. W. Roodhouse, executive vice president; E. A. Williams, vice president-control and finance; J. H. Boyle, vice president-corporate marketing.

#### COMMUNICATIONS DYNAMICS CORP.

289 Nepperhan Ave., Yonkers, New York 10701; Ph. YO 5-3006. Products: connectors, fittings, cable assemblies. Corporation: private stock. Officers: Richard A. Bolz, president; George V. Iaccino, vice president; Jack Zinaman, vice president.

#### COMMUNICATION SYSTEMS CORP.

140 East Main Street, Huntington, New York 11743.

#### CONRAC DIVISION

600 North Rimsdale Avenue, Covina, California 91722; Ph. (213) 966-3511. Products: broadcast and closed circuit television monitors, related accessories. Corporation. Officers: W. J. Moreland, vice president-general manager. Parent firm: Giannini Controls Corp.

#### CRAFTSMAN ELECTRONIC PRODUCTS, INC.

133 West Seneca St., Manlius, New York 13104; Ph. (315) 682-9105. Products: trunk and feeder couplers, splitters, modular tapoffs, matching transformers, connectors, terminators. Corporation: private stock. Officers: John Mezzalingua, board chairman; Dan Mezzalingua, president.

#### CUSHCRAFT

621 Hayward Street, Manchester, New Hampshire 03103; Ph. (603) 625-9814. Products: complete antenna systems. Services: engineering and consultation on antenna design and installation. Owner: Lester A. Cushman.

#### DAGE-BELL CORP.

455 Sheridan Ave., Michigan City, Indiana; Ph. (219) 874-3251. Products: cameras, camera controls, monitors, film chains. Corporation: public stock. Officer: Joseph Butler, president. Subsidiary of The Raltheon Co.

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Tampa, Florida 33612  
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**DIAMOND EXPANSION BOLT CO., INC.**

500 North Avenue, Garwood, New Jersey 07027; Ph. (210) 789-1400. Products: pole line hardware. Corporation: public stock. Officers: C. H. Bunker, president; C. W. Fuhrer, vice president-sales. Parent firm: General Cable Corp.

**DIERKS FORESTS, INC.**

810 Whittington Avenue, Hot Springs, Arkansas 71901; Ph. (501) NA 3-7762. Products: poles, posts and lumber. Corporation. Officers: Frank Watkins, sales manager; A. J. Wadkins, assistant sales manager.

**C. C. DOUGLASS MFG. & SALES**

231 Twenty-first St., Bakersfield, California 93301; Ph. 327-0258. Products: service bodies and accessories. Owner: C. C. Douglass, Jr.

**DOW-KEY CO., INC.**

2260 Industrial Lane, Box 265, Broomfield, Colorado 80020; Ph. (303) 466-7303. Products: coaxial switches and connectors. Corporation.

**DUO-SAFETY LADDER CORP.**

513 West 9th Avenue, Oshkosh, Wisconsin 54901; Ph. (414) 231-2740. Products: wood and aluminum industrial ladders. Corporation. Officers: E. J. Arps, president; E. H. Schwab, secretary-treasurer.

**DYNAIR ELECTRONICS, INC.**

6360 Federal Blvd., San Diego, California 92114; Ph. 582-9211. Products: modulators, demodulators, head-end system, sideband analyzers, switches, amplifiers. Corporation. Officers: E. G. Gramman, president; R. N. Vendeland, vice president-marketing; G. W. Bates, vice president-engineering; P. R. Seng, vice president-finance & treasurer; F. P. Ciambrone, vice president-operations; R. J. Klitgaard, secretary.

**DYNAMIC RADIO LTD.**

Box 458, Sutton, Quebec, Canada; Ph. (514) 538-2649. Products: antennas, connectors, tools. Corporation: private stock. Officer: Edmund Eberdt, president.

**EASTERN METAL OF ELMIRA, INC.**

Sullivan Street, Industrial Park, Elmira, New York 14903; Ph. (607) 734-2295. Products: work area protection equipment. Corporation. Officers: Alexander Falk, president; John H. Knapp, Jr., vice president-treasurer; Burleigh M. Names, vice president-sales.

**ECONOMY FINANCE CORP.**

108 East Washington Street, Indianapolis, Indiana 46204; Ph. (317) 638-1332. Service: financing. Corporation. Officers: James Ackerman, president; Harold Owen, vice president; Gail Oldfather, assistant vice president.

**EDWARD SHAFER & COMPANY, INC.**

8121 Georgia Avenue, Suite 903, World Building, Silver Spring, Maryland 20910; Ph. 585-3200. Services: consulting, investment, market analyses, technical surveys, appraisals, brokerage, contract negotiations, management services. Corporation: public stock.

**EDWIN TORNBURG & COMPANY, INC.**

60 East 42nd Street, New York, New York 10017; Ph. (212) 687-4242. Services: brokerage, consultation, financing and leasing. Corporation. Officers: Edwin Tornberg, president; Edward Wetter, vice president; Douglas Kahle, vice president.

**EITEL ELECTRONICS (EITELCO)**

211 East Sheldon, Prescott, Arizona 86301; Ph. (602) 445-0691. Products: pre-amps, converters, amplifiers, re-modulation equipment, antennas, transmitters. UHF-VHF. Owner: George E. Eitel.

**ELECTRONIC SYSTEMS DEVELOPMENT INC.**

1818 Westlake Ave. N., Seattle, Washington 98109; Ph. (206) 283-6425. Products: time-weather units, non-duplication switches, message units, video accessories. Corporation. Officers: J. Bruce, Orkney, president; William Lee, vice president; R. Sherwin, vice president; M. K. Widdekind, secretary-treasurer.

**ENTRON, INC.**

2141 Industrial Parkway, Silver Spring, Maryland 20904; Ph. 622-2000. Products: pre-amplifiers, converters, complete head-end, amplifiers, splitters, connectors, power supplies, multi-tap and pressure tap units, matching transformers, coaxial cable. Services: antenna site surveys, pole line surveys, system engineering, complete turnkey construction. Corporation.

**EPPINGER & RUSSELL CO.**

420 Lexington Avenue, New York, New York 10017. Products: poles-creosoted, Penta, Creo.-Penta.

**L. M. ERICSSON ELECTRONIC TUBES**

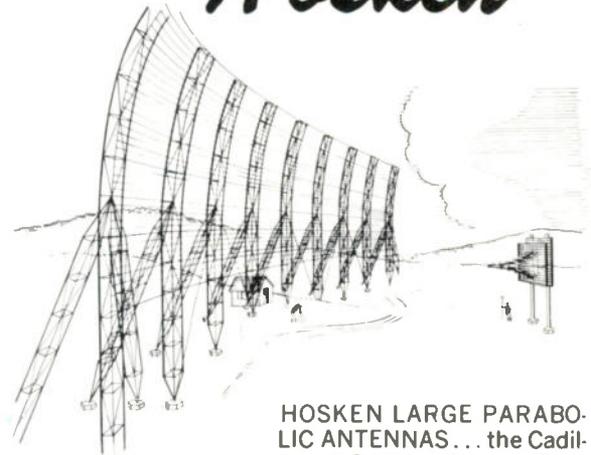
215 Park Avenue South, New York, N.Y. 10003; Ph. (212) 677-8400. Products: electronic tubes, microwave equipment.

**E-Z WAY PRODUCTS, INC.**

13155 Nebraska Avenue, Box 17196, Tampa, Florida 33612; Ph. (813) 932-5321. Products: design, fabrication and erection of towers, antenna mounts and supports. Corporation: private stock. Officers: Allan V. DeMarco, president-treasurer; Thomas A. DeMarco, vice president; Frances M. DeMarco, secretary.

CATV Equipment & Services

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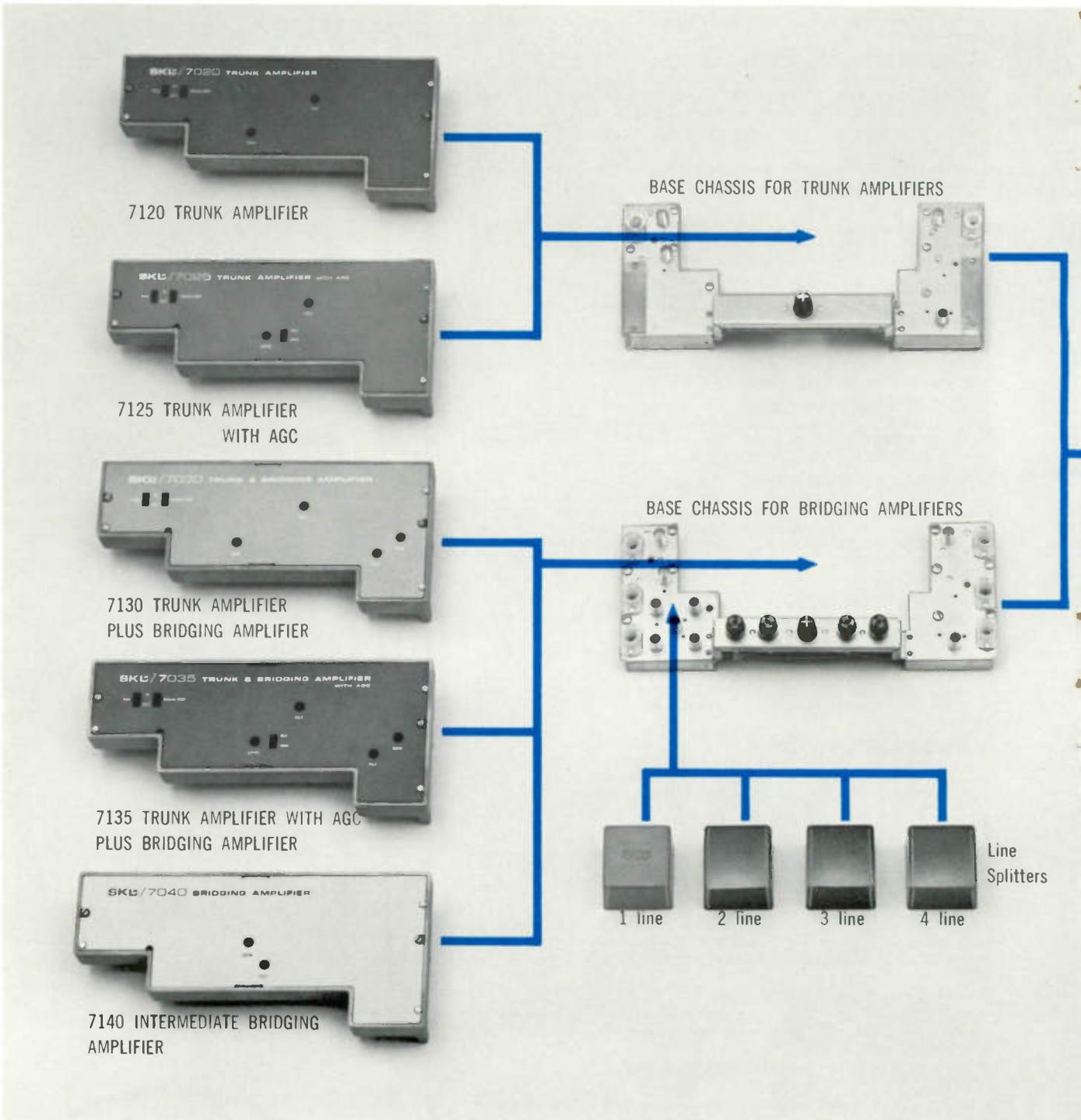
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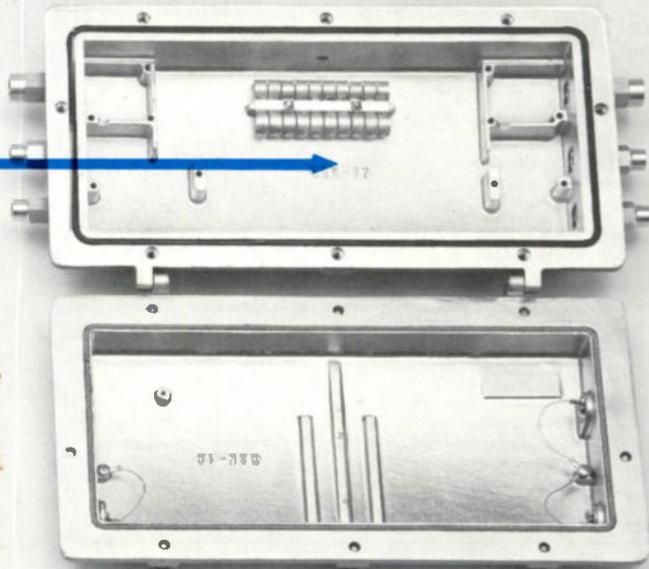
## BRIEF SPECIFICATIONS

|   | TRUNK AMPLIFIERS        | BRIDGING AMPLIFIERS     | INTERMEDIATE BRIDGING AMPLIFIERS |
|---|-------------------------|-------------------------|----------------------------------|
| Frequency Band                                | 50-220MHz               | 50-220MHz               | 50-220MHz                        |
| Response Flatness                             | $\pm .25$ dB            | $\pm .5$ dB             | $\pm .5$ dB                      |
| Min. Full Gain —Ch. 13                        | 26 dB <sup>(1)</sup>    | 18 dB <sup>(2)</sup>    | 33 dB <sup>(3)</sup>             |
| Min. Return Loss, I&O                         | 16 dB                   | 16 dB                   | 16 dB                            |
| Max. Noise Figure Ch. 2<br>(Full gain) Ch. 13 | 8<br>11                 | —<br>—                  | 26<br>22                         |
| Min. Output Level                             | 48 dBmv. <sup>(4)</sup> | 48 dBmv. <sup>(4)</sup> | 48 dBmv. <sup>(4)</sup>          |

**(1)** 25 dB for trunk/bridging units. **(2)** Above trunk amplifier output level. **(3)** Before splitting. Splitter loss is 0 to 6.5 dB. **(4)** Output at high channels for 12 carrier cross-modulation of -57 dB. Bridging amplifier output before splitting.

# COLORBURST/7000

AERIAL HOUSING



## THE INSIDE STORY

The Colorburst 7000 line of trunk and bridging amplifiers is the industry's new Rolls Royce, despite pricing 5-10% below direct competition. Look at these features:

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- 5 color-coded plug-in amplifier modules.
- Color-coded plug-in splitters for 1, 2, 3, or 4 lines.
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- Connectorless cable fittings.
- Cascadability of 50 or more amplifiers.
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- Aerial and underground housings.
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Consider these other important new SKL products for your distribution system, too.

- SKL/7300 Line Extension Amplifier. 24 dB gain.
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1360 SOLDIERS FIELD RD., BOSTON, MASSACHUSETTS 02135

**FAIRCHILD SPACE AND DEFENSE**

30 Park Place, Paramus, New Jersey 07652; Ph. 262-700. Products: cameras, monitors, lenses. Corporation. Division of Fairchild Camera and Instrument Corp.

**FANNER MANUFACTURING COMPANY**

Electrical Products Division, Brookside Park, Cleveland, Ohio 44109. Products: deadening devices, splices.

**FERRANTI ELECTRIC, INC.**

East Bethpage Road, Plainview, New York 11803; Ph. (516) 293-8383. Service: sales and marketing. Corporation. Officers: D. G. Pacy, executive vice president; G. T. Galvin, secretary; L. Levine, treasurer. Parent firm: Ferranti, Limited.

**FORT WORTH TOWER CO., INC.**

5201 Bridge St., Box 8597, Fort Worth, Texas 76112; Ph. JE 6-5676. Products: towers, booms, reflectors, equipment buildings. Corporation: public stock. Officers: T. W. Moore, president; T. F. Moore, vice president; Betty Moore, secretary-treasurer.

**HOWARD S. FRAZIER, INC.**

1736 Wisconsin Avenue, N.W., Washington, D.C. 20007; Ph. (202) 338-1720. Services: system financial projections, appraisals and brokerage. Corporation. Officers: Howard S. Frazier, president; Horace W. Gross, vice president.

**G. C. ELECTRONICS**

400 South Wyman Street, Rockford, Illinois 61101; Ph. (815) 968-9661. Products: antennas and hardware, accessories. Corporation: public stock. Officers: A. C. Valius, president; E. J. Naretta, sales director; R. L. Fleming, market director. Parent firm: Hydrametals, Inc.

**GABRIEL ELECTRONICS**

Box 471, North Street, Saco, Maine 04072; Ph. (207) 282-1526. Products: microwave antennas and accessories. Corporation: public stock. Officer: T. N. Paplocous, general manager. Division of Maremont Corp.

**GAMBLE BROTHERS, INC.**

Louisville, Kentucky. Products: safety ladders.

**GENERAL CABLE CORP.**

730 Third Avenue, New York, New York 10017; Ph. (212) YU 6-3800. Product: coaxial cable.

**GENERAC CORP.**

Box 8, Waukesha, Wisconsin 53186.

**GENERAL MACHINE PRODUCTS CO.**

Old Lincoln Highway at Penn. Turnpike, Trevose, Pennsylvania 19049; Ph. (215)

EL 7-5500. Products: cable installation equipment and accessories. Corporation. Officers: George M. Pfundt, board chairman; G. Nelson, Pfundt, president; L. W. Rielley, executive vice president; David P. Mertz, vice president-sales.

**GILBERT ENGINEERING CO., INC.**

3700 North Thirty-sixth Avenue, Phoenix, Arizona 85019; Ph. (602) 272-7871. Products: coaxial cable connectors. Corporation. Officers: Earl E. Gilbert, president; R. E. O'Brien, sales manager.

**GIRARD PROJECTION**

4433 Bissonnet Boulevard, Bellaire, Texas 77401.

**GRASIS FABRICATING CO.**

Kansas City, Missouri. Products: towers, microwave reflectors, passive repeaters. Corporation: private stock. Officers: August Grasis, president; Norman Kouba, general manager; Ernest Weber, sales manager.

**GRIFFITH LIBERTY TOWER MFG. CO.**

Rt. 45 North, Effingham, Illinois; Ph. (217) 342-2835. Products: towers.

**HALLINE UTILITY EQUIPMENT CO.**

5525 S.E. 28th Street, Portland, Oregon 97202; Ph. (503) 236-1178. Products: aerial ladders, hydraulic derricks, earth augers, aerial beams. Corporation. Officer: Fred R. Wiley, Jr., vice president-general manager.

**HEATH PRODUCTION**

1122 Thatcher Blvd., Safford, Arizona 85546. Products: record albums, other promo programs.

**HENKELS & McCOY, INC.**

1800 Johnson Street, Elkhart, Indiana 46514; Ph. (219) 264-1121. Services: consultation, engineering, construction, equipment rentals. Corporation: private stock. Officers: Andrew Lewis, president; Paul Henkels, executive vice president; Richard Gable, vice president.

**SAMUEL HENRY & ASSOCIATES**

1029 North First Street, Phoenix, Arizona 85009. Services: subscriber promotion.

**HEWLETT-PACKARD COMPANY**

1501 Page Mill Road, Palo Alto, California 94304; Ph. 326-7000. Products: waveform monitors, electronic test instruments, cable testers, leak detectors. Corporation: public stock. Officers: David Packard, board chairman; William R. Hewlett, president; W. Noel Eldred, vice president-marketing.

**HICKOK ELECTRICAL INSTRUMENT CO.**

10514 Dupont Avenue, Cleveland, Ohio 44108; Ph. (216) 541-8060. Products: electronic test equipment. Corporation: public stock. Officers: Robert D. Hickok Jr., president; R. A. Nieminen, executive vice president; K. F. Petersen, vice president-marketing.

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335 Francom Street, Ajax, Ontario, Canada (Branch Office: 601 United Office Building, Niagara Falls, New York); Ph. (416) 942-1232. Products: manufacturer of tropo-scatter-parabolic antennas for CATV. Also manufacturer of Multi-Channel Head-end tower-antenna systems. Gives multi-band reception with a small number of antennas. For smaller systems. Head-end building included as part of the tower-antenna package.

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Galveston, Texas. Product: creosoted Southern Pine poles.

## INTERNATIONAL GOOD MUSIC, INC.

Box 943, Bellingham, Washington 98225; Ph. (206) 733-4567. Products: non-duplication switchers, background music systems. Corporation. Officers: Rogan Jones, Jr., president; Lee Facto, vice president; Danny Coulthurst, vice president-engineering.

## INTERNATIONAL TELEPHONE & TELEGRAPH CORP.

Wire and Cable Division, 172 Sterling Street, Clinton, Massachusetts 01510; Ph. EM 5-6331. Products: aluminum sheathed coaxial cable, other flexible coaxes. Corporation. Officers: Glenn W. Bailey, president; E. C. Utz, executive vice president; K. R. MacLean, vice president-marketing; V. N. Tannahill, sales manager.

## JAMPRO ANTENNA COMPANY

6939 Power Inn Road, Sacramento, California 95828; Ph. (916) 422-1177. Products: TV and FM receiving antennas. Corporation.

## JACOBSEN ELECTRONICS

415 Sixth Street, Rapid City, South Dakota; Ph. 343-7232. Products: amplifiers, field strength meters, transistorized headend amplifiers and conversion units. Individual ownership.

## JERROLD ELECTRONICS CORP.

401 Walnut Street, Philadelphia, Pennsylvania 19105; Ph. (215) OS 2-0800. Products and Services: design, engineering, installation and manufacturing of all types of CATV equipment. Corporation. Officers: Robert H. Beisswenger, president and chief executive officer; Jerry Hastings, manager of CATV division; Arthur D. Hall, vice president-chief engineer.

## JFD ELECTRONICS CO.

15th Avenue and 62nd Street, Brooklyn, New York 11219; Ph. (212) 331-1000. Corporation: private stock. Officers: Albert Finkel, president; Edward Finkel, executive vice president; Harvey Finkel, vice president; Jack Goodman, vice president.

## KAISER-COX CORPORATION

Box 9728, Phoenix, Arizona 85020; Ph. (202) 944-4411. Products: transistorized amplifiers and accessories. Services: turnkey; financing. Corporation. Officers: Edgar F. Kaiser, board chairman; J. Leonard Reinsch, president; Robert Behringer, executive vice president and general manager; C. P. Bedford, William F. Freistat, Marcus Bartlett, vice presidents.

## KINGS ELECTRONICS CO., INC.

40 Marbledale Road, Tuckahoe, Westchester, New York 10707; Ph. (914) 793-5000. Products: RF connectors. Corporation: private stock. Officers: F. Lorge, president; O. Wayne, vice president; G. Nuremburg, chief engineer; E. D. Corcoran, general sales manager.

## LA RUE MEDIA BROKERS, INC.

116 Central Park South, New York, New York 10019; Ph. 265-3430. Services: system transactions. Corporation. Officer: Hugh Ben LaRue, president.

## LENKURT ELECTRIC CO., INC.

1105 County Road, San Carlos, California 94070; Ph. 591-8461. Products: microwave radio systems and associated equipment. Corporation. Officers: Charleton W. Hunter, president; Alan F. Culbertson, vice president-engineering; A. George Ewing, vice president-manufacturing; H. K. Kregel, vice president-marketing; Gerd D. Wallenstein, vice president-planning; Leroy G. Phillips, vice president-controller.

## LINDSAY ELECTRONICS

50 Mary Street West, Lindsay, Ontario, Canada; Ph. (705) 324-2196.

## MALARKEY, TAYLOR & ASSOCIATES

1101 17th Street, N.W., Washington, D.C. 22036; Ph. (202) 223-2345. Services: brokerage, consultation, financing, appraisals, management, subscriber promotion, engineering and construction. Corporation. Officers: Martin F. Malarkey, president; Archer S. Taylor, vice president; Martin R. Smith, treasurer; Alexander Lipkin, Esq., secretary.

## MARK PRODUCTS

5439 West Fargo, Skokie, Illinois 60076; Ph. (312) OR 5-1500. Products: antennas and accessories. Division of Dynascan Corp.

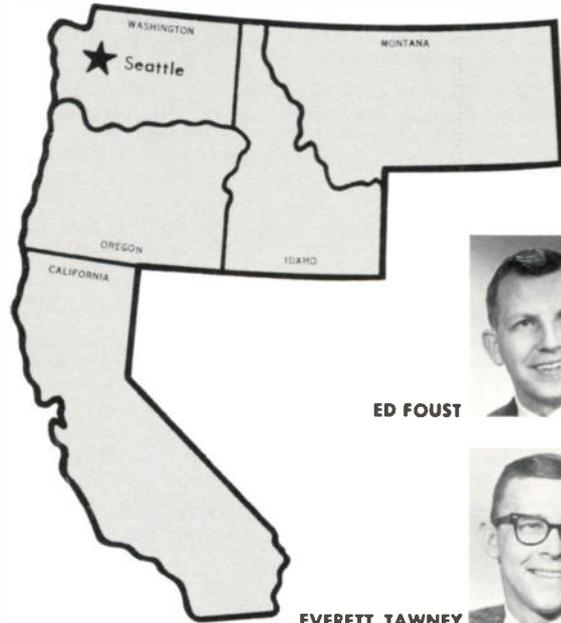
## MASTER TOWER CO.

121 Main Street, Sioux City, Iowa 51102; Ph. 258 0108. Products: towers, passive reflectors. Corporation: private stock. Officers: Milton Glazor, president; Glen Houpt, vice president-chief engineer; Richard Krone, treasurer-sales manager.

## MATHIAS KLEIN & SONS, INC.

1200 McCormick Road, Chicago, Illinois 60645; Ph. (312) JU 8-6820. Products: hand tools and linemen's climbing tools. Corporation: private stock. Officers: Mathias A. Klein, president; Mathias A. Klein, Jr., vice president; Richard T. Klein, secretary and plant manager.

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**METROTECH INC.**

670 National Ave., Mt. View, California 94040; Ph. 968-8389. Products: tape recorders, reproducers, loggers, background music systems. Corporation: private stock. Officers: E. A. Feichtmeir, president; E. J. Peterman, vice president; W. S. Smith, secretary; L. J. Gamba, treasurer.

**MICROFLECT CO., INC.**

3575 Twenty-fifth Street, S.E., Salem, Oregon 97302; Ph. 363-9267. Products: towers, passive repeaters, reflectors, antenna mounts. Corporation: private stock. Officers: James S. Kreitzberg, president; Richard A. Kreitzberg, vice president; George F. Kreitzberg, secretary-treasurer.

**MICRO-LINK/VARIAN ASSOCIATES**

1375 Akron Street, Copiague, New York 11726; Ph. (516) 598-2240. Products: amplifiers. Corporation: public stock. Officers: Dr. Edward Ginzton, president; Emmet Cameron, vice president; David L. McPherson, division manager. Parent firm: Varian.

**MICROMEGA**

4134 Del Rey Avenue, Venice, California 90291; Ph. (213) 391-7137. Products: microwave amplifiers. Corporation: public stock. Officers: Matthew L. Devine, president; Fred G. Pace, secretary; Harold E. Sortor, treasurer. Division of Amphenol Corp.

**MIDWEST LAWN-SAVER EQUIPMENT CO.**

925 North Bluemound Drive, Appleton, Wisconsin 54911; Ph. (414) 739-6396. Products: underground cable plows. Corporation: private stock. Officers: D. J. Killoren, president; S. P. Balcomb, vice president; John Spalding, secretary-treasurer.

**MILLS-DOHERTY & CO.**

1505 Mercantile Securities Building, Dallas, Texas 75201; Ph. RI 1-1632. Services: insurance. Owner: Ben C. Doherty.

**MINNESOTA MINING & MANUFACTURING CO.**

2501 Hudson Road, St. Paul, Minnesota 55119; Ph. 7733-1110. Products: splicing insulations and related products. Corporation.

**MOORE ASSOCIATES, INC.**

893 American Street, San Carlos, California 94070; Ph. (415) 591-5363. Products: monitoring and alarm equipment. Corporation: private stock. Officers: Dan G. Sully, president; Paul H. Stone, vice president-sales; Milton K. East, vice president-production; Robert E. Lanctot, secretary-treasurer.

**MOTOROLA INC.**

9401 West Grand Avenue, Franklin Park, Illinois 60605. Products: cameras, monitors, weather vision systems, microwave equipment. Corporation: public stock.

**NORAM CABLE CONSTRUCTION LIMITED**

1111 Albion Road, Rexdale, Toronto, Ontario, Canada; Ph. 741-0566. Services: engineering, construction, rebuilding, system planning, administration, maintenance and sales, parabolic engineering and construction. Corporation. Officers: C. Forster, president & general manager; D. Gow, secretary-treasurer; T. Milligan, vice president; T. Page, chief engineer.

**PACKARD-BELL CO.**

Lawrence & Arnold Drive, Newbury Park, California; Ph. (805) 498-6601. Products: video cameras, RF modulators, video monitors. Corporation: public stock. Officers: W. B. Sell, president; H. Horne, vice president.

**PENNSYLVANIA GROWTH INVESTMENT CORP.**

308 Gateway Center, Pittsburgh, Pennsylvania 15222; Ph. 281-1403. Service: financing. Corporation. Officers: William Mosenson, president; Louis Vayda, vice president; William Meyer, Sr., secretary; Charles Weinkauff, treasurer.

**PETE COLLINS CO.**

285 Milwaukee Street, Denver, Colorado 80206; Ph. (303) 355-8919. Services: engineering, construction, maintenance. Individual ownership. Officer: Pete Collins, president.

**PHELPS DODGE COPPER PRODUCTS CORP.**

300 Park Avenue, New York, New York 10022; Ph. PL 1-3200. Products: transmission lines and accessories. Corporation: public stock. Officers: E. P. Dunlaevy, president; C. D. Dimity, vice president; F. W. DeTurk, sales manager.

**PIERCE AUTO BODY WORKS, INC.**

Box 616, Appleton, Wisconsin 54911. Products: truck units.

**PITMAN MANUFACTURING CO.**

Box 605, Grandview, Missouri 64030; Ph. (816) SO 1-1851. Products: truck-mounted cranes, digger-derricks, telescopic and articulated aerial devices, line construction and service bodies. Corporation: public stock. Officers: Wayne Stallard, president; C. Echels, vice president-marketing; R. Waecht, vice president-engineering. Parent firm: A. B. Chance Co.

**PLANT SERVICE CORP.**

2118 East 30th Street, Erie, Pennsylvania 16510; Ph. 456-2396. Services: system engineering and construction. Corporation: private stock.

**PLASTOID CORP.**

42-61 Twenty-fourth Street, Long Island City, New York 11101; Ph. (212) 786-6200. Products: cables and connectors. Corporation. Officers: Louis Danenberg, president; E. H. Cooper, plant manager; W. Grant, director of sales.

**POLARIS INDUSTRIES, INC.**

Roseau, Minnesota 56751; Ph. (218) 463-2312. Products: snow mobiles. Corporation. Officers: Allan Hetteen, president; Carl Wahlberg, director of marketing; Don Hedland, director of sales; Roy Baumgartner, sales manager; Don Erickson, advertising manager.

**PREFORMED LINE PRODUCTS COMPANY**

5349 St. Clair Avenue, Cleveland, Ohio 44103; Ph. 881-4900. Products: pole line hardware, cable, connectors. Corporation: private stock. Officers: Edmund Brown, board chairman; Jon Ruhlman, president; Max Lekson, sales manager.

**PRODELIN, INC.**

Box 131, Highstown, New Jersey 08520; Ph. (609) 448-2800. Products: coaxial cables, antennas. Corporation: public stock. Officers: L. A. Bondon, president; A. Haselman, executive vice president; H. J. Myers, vice president-finance; R. F. Lewis, vice president-engineering.

**PRUZAN COMPANY**

1963 First Avenue South, Seattle, Washington 98135; Ph. 624-6505. Products and services: all materials and services for system construction; speciality items, safety equipment. Corporation. Officers: Jack Pruzan, president; Herbert L. Pruzan, vice president; Rubin Salant, vice president.

**RADIO CORPORATION OF AMERICA**

Broadcast and Communications Products Division. Front and Cooper Streets, Camden, New Jersey 08102; Ph. (609) 963-8000. Products: television systems. Corporation: public stock.

**RF SYSTEMS INC.**

155 King Street, Cohasset, Massachusetts 02025; Ph. (617) 383-1200. Products: parabolic antennas, single channel yagis, feed systems. Services: testing, consulting, engineering. Corporation.

**RATCLIFF HOIST COMPANY**

614 Mountain View Avenue, Belmont, California 94002; Ph. (415) 593-6070. Products: hoists, load binders. Corporation. Officer: Ralph A. Ratcliff, president.

**RATELCO, INC.**

610 Pontius Avenue, North, Seattle, Washington 98109; Ph. (206) 624-7770. Products: equipment enclosures, mobile intercom equipment. Corporation: private stock. Officers: Phil Duryee, president; Paul Burton, business manager; Nick Kun, chief engineer; Bill Lince, purchasing agent.

**REEF INDUSTRIES**

Box 33248, Houston, Texas 77033; Ph. RE 3-5481. Product: TerraTape. Corporation: private stock. Officers: William Cameron, president; Robert Hosack, sales manager. Division of Griffolyn Company, Inc.

**R. H. TYLER CO.**

1405 Fifteenth Street, Wellington, Texas 79095; Ph. (806) 447-5814. News and weather instruments. Owner: R. H. Tyler.

**RICHARDS & ASSOCIATES, INC.**

Box 88, Carrollton, Georgia 30117; Ph. (404) 832-7001. Services: construction. Corporation.

**ROHN MANUFACTURING COMPANY**

Box 2000, Peoria, Illinois 61601; Ph. (309) 637-8416. Products and services: design, fabrication and installation of towers, lighting, antenna booms, buildings, microwave reflectors. Corporation. Officers: Dwight Rohn, president-treasurer; Donald Rohn, secretary.

**ROLATAPE CORPORATION**

1301 Olympic Boulevard, Santa Monica, California 90404; Ph. EX 4-8296. Products: measuring wheels. Corporation. Officers: P. W. Evans, president; R. H. Spurrell, vice president; Charles L. Jones, secretary-treasurer.

**ROME CABLE**

421 Ridge Street, Rome, New York 13440; Ph. 337-3000. Product: coaxial cable. Corporation: public stock. Division of Alcoa.

**SAXTON PRODUCTS, INC.**

215 North Route 303, Congers, New York 10920. Products: transmission line, connectors, guy wire. Corporation: public stock. Officers: Edward Abbo, president; Stanley Axelrod, vice president; Jerome Johnson, secretary; Norman Abo, treasurer.

**SCIENTIFIC-ATLANTA, INC.**

Box 13654, 3845 Pleasantdale Road, Atlanta, Georgia 39324; Ph. (404) 938-2930. Products: antennas. Services: consultation, engineering, construction. Corporation: public stock. Officers: S. M. King, vice president-marketing; Thomas D. Smith, antenna and microwave product line manager.

**SIGMA INDUSTRIES, INC.**

115 O'Brien Drive, Menlo Park, California 94025; Ph. 322-6691. Products: splice covers, plastic tubing, tape and other materials. Corporation: private stock. Officers: W. D. Weagant, president; R. W. Reardon, vice president.

**SITCO ANTENNAS**

10330 NE Marx, Portland, Oregon 97220; Ph. 253-2000. Products: antennas and accessories. Corporation. Officers: Gustave Berliner, president. Parent firm: Simplicity Tool Co., Inc.

**SONY CORP. OF AMERICA**

Industrial Products Division, 516 West Florence Ave., Inglewood, California; Ph. (213) 678-3011. Products: program origination equipment: video tape recorders. Services: application engineering. Corporation. Officers: E. B. Schwarzenbah, president; B. L. Birchard, vice president.



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For technical information, call, write or wire Collins Radio Company, Microwave Marketing, Dallas, Texas, Area Code 214, AD 5 9511.



### **SOUTHWIRE COMPANY**

Fertilla Street, Carrollton, Georgia 30117; Ph. 832-6311. Products: electric wire, power and distribution equipment, aluminum and copper rod. Corporation. Officers: Roy Richards, president; J. H. Griffin, vice president; Margaret Sample, secretary-treasurer.

### **SPACE DIVERSITY ENGINEERING CO., INC.**

Box 8597, Fort Worth, Texas 776112; Ph. (817) JE 6-5676. Products: parabolic antennas. Services: engineering, construction. Corporation: private stock. Officers: T. W. Moore, president; John Threadgill, vice president; Jack Threadgill, vice president.

### **SPENCER-KENNEDY LABORATORIES, INC.**

1360 Soldiers Field Road, Boston, Massachusetts 02135; Ph. 254-5400. Products: complete equipment line. Services: complete engineering installation and equipping of wide-band systems. Corporation: public stock. Officers: George W. Brewster, chairman; Charles H. Wright, president & chief executive officer; George Green, vice president-marketing and finance; Denis W. Sparks, vice president-technical operations; John E. Beard, clerk & secretary; Paul S. Rosenthal, controller.

### **STAHL METAL PRODUCTS, INC.**

4750 West 160th Street, Cleveland, Ohio 44135; Ph. 914-2377. Products: truck bodies, aerial ladders, side boxes, pick-up trucks.

### **STAN SOCIA CORPORATION**

734 Petroleum Building, Tyler, Texas; Ph. LY 3-0911. Products and services: complete turn-key installation, engineering, map studies, consultation. Corporation. Officers: Stanford G. Socia, president; William E. Socia, Jr., vice president; George T. Griffin, secretary-treasurer.

### **STATE LABS, INC.**

215 Park Avenue South, New York, New York 10003; Ph. (212) 677-8400. Services: supplies all types and brands of electronic tubes.

### **STEFFEN BODY COMPANY**

612-23 West Seventh Street, Sioux City, Iowa.

### **STROMBERG-CARLSON**

100 Carlson Road, Rochester, New York 14603; Ph. (716) 482-2200. Products and services: complete turnkey services. Corporation. Officers: Dause L. Bibby, president; William A. Rockwood, vice president; telecommunications group; O. D. Center, vice president-finance. Subsidiary of General Dynamics Corp.

### **SUBSCRIPTION BUILDERS**

1202 Lakeview Towers, Oklahoma City, Oklahoma. Services: Solicitation of subscribers for CATV systems.

### **SUPERIOR CABLE CORP.**

Box 489, Hickory, North Carolina 28601; Ph. (704) 328-2171. Products: cable, connectors, housings, accessories. Corporation: public stock. Officers: J. L. Robb, president; J. H. Bowman, vice president-marketing; W. T. Smith, vice president-engineering & research; L. J. Styles, vice president-manufacturing.

### **SURFACE CONDUCTION INC.**

1501 Broadway, New York, New York 10036; Ph. LO 5-5535. Products: transmission, feeder, and trunk lines, G-lines. Corporation. Officers: Dr. Theodore Hafner, president.

### **SYSTEMS, INC.**

235 Bear Hill Boulevard, Waltham, Massachusetts 02154; Ph. 891-5480. Services: design, engineering, construction. Corporation. Officer: R. Suprenant, president. Parent firm: National Teline Corp.

### **TAPE-ATHON CORPORATION**

523 South Hindry, Inglewood, California 90301; Ph. (213) 678-5445. Products: background music and equipment. Corporation: private stock. Officers: George M. Anthony, president; David J. Anthony, executive vice president; H. J. Halvorson, music division head.

### **TAYLOR-PIEDMONT CO.**

Box 5447, Spartansburg, South Carolina 29301; Ph. (803) 583-4551. Product: poles. Corporation: private stock. Officers: W. J. Maroney, president; Thomas A. Moore, vice president-sales; R. H. Gardner, vice president; D. S. Burnside, secretary-treasurer.

### **TCA TOWER CO., INC.**

4325 Bankhead Highway, Mableton, Georgia 30059; Ph. (404) 948-3369.

### **TECHNICAL APPLIANCE CORPORATION**

1 Taco Street, Sherburne, New York 13460; Ph. (607) 674-2211. Products: antennas and accessories. Corporation. Officer: Paul A. Garrison, president. Parent firm: The Jerrold Corporation.

### **TELEIMATION, INC.**

2275 South West Temple, Salt Lake City, Utah 84115; Ph. 846-7564. Products: complete origination systems; time, weather, news equipment; non-duplication switchers; cameras and accessories; modulators, monitors, switchers, background music; audio and video recorders. Corporation: private stock. Officers: Lyle O. Keys, president and general manager; Ray M. Unrath, marketing manager; Benny Morinaga, production manager; William G. Laird, vice president-engineering; Richard H. Johnson, comptroller.

### **TELE-SIGNAL ELECTRONICS LTD.**

1915 Stainsbury Avenue, Vancouver 12, British Columbia, Canada; Ph. (604) 876-6213. Products: variable tapoffs and amplifiers. Services: engineering and consultation. Corporation: partnership. Officers: John McKay, general manager; Sulo Koshimin, director of engineering.

### **TELSTA CORPORATION**

1700 Industrial Road, San Carlos, California 94070; Ph. (415) 591-7611. Products: aerial lifts. Corporation. Officers: J. Eitel, president; W. W. Alving, sales manager. Parent firm: General Cable Corporation.

### **THE INTERNATIONAL TELEMETER CORP.**

Ampli-Vision Corp., 200 Stoner Avenue, Los Angeles, California 90025; Ph. GR-8-7751. Products: converters. Officers: William Rubenstein, president; George Brownstein, vice president.

### **TEXAS ELECTRONICS, INC.**

Box 7151, Inwood Station, Dallas, Texas 75209; Ph. ME 1-2490. Products: weather instruments. Corporation: private stock.

### **T.I.C. ENGINEERS, INC.**

Box 20097, Billings, Montana 59102; Ph. 252-4113. Services: consulting engineering. Corporation: public stock. Officers: Edward W. Messinger, Jr., president; Fred B. Liquin, vice president; Denes G. Istvanffy, secretary-treasurer.

### **TIMES WIRE AND CABLE CO.**

358 Hall Avenue, Wallingford, Connecticut 06492; Ph. 269-3385. Products: coaxial cable, RF connectors. Corporation. Officers: L. J. DeGeorge, president; R. W. Burton, vice president-sales; N. D. McDonald, vice president-manufacturing; W. D. Benedict, controller. Division of International Silver Company.

### **TRANS COM, INC.**

216 Clayton Street, Denver, Colorado 80206; Ph. (303) 333-5859. Service: microwave consulting engineers. Officer: Roland G. Yount, president.

### **TRI-EX TOWER CORPORATION**

7182 Rasmussen Avenue, Visalia, California 93277; Ph. 732-8383. Products: towers. Corporation. Officers: A. J. F. Clement, president; Edward R. Borges, general manager; John Kettl, chief engineer; Clyde Blyleven, director of marketing.

### **TUCKER SNO-CAT CORP.**

Box 1529, Medford, Oregon 97501; Ph. (503) 772-7179. Products: over-snow vehicles. Corporation. Officers: Emmitt M. Tucker, president; Jasper J. Tucker, general manager.

### **TUTORTAPE LABS**

777 Lexington Avenue, New York, New York.

### **TV CABLE SUPPLY CO.**

Box 38, 1312 Holly Pike, Carlisle, Pennsylvania 17013; Ph. (717) 243-4918. Products: CATV accessories. Corporation: private stock. Officer: George F. Gardner, president.

### **UNITED STATES EXTRUDED VINYL PRODUCTS, INC.**

4627 Van Nuys Boulevard, Sherman Oaks, California.

### **UNIVERSAL FIELD SERVICES, INC.**

Box 166, Tulsa, Oklahoma 74101; Ph. (918) LU 4-1639. Services: title search, acquisition and leasing of sites. Corporation: private stock. Officers: Gene L. Land, president; R. Tom Benson, executive vice president; Gene A. Land, vice president; W. H. Porter, vice president.

### **UTILITY PRODUCTS COMPANY**

3111 West Mill Road, Milwaukee, Wisconsin 53209; Ph. (414) 352-8500. Products: buried closures. Corporation. Officers: Douglas Hamilton, president; Loren H. Pease, vice president; Kenneth C. Huff, vice president; Donald C. Christiansen, vice president.

### **UTILITY TOOL & BODY CO.**

Clintonville, Wisconsin. Products: complete line of construction and maintenance equipment.

### **UTILITY TOWER COMPANY**

Box 12027, Oklahoma City, Oklahoma 73112; Ph. (405) W1 6-5551. Services and products: design, fabrication and erection of towers, microwave reflectors, antenna booms. Individual ownership. Officers: C. E. Nelson, owner; V. C. Duvall, general manager.

### **VIDEO COMPONENTS INC.**

200 West Fifty-seventh Street, New York, New York 10019; Ph. (212) JU 2-4250. Services: manufacturers representative. Officer: Dick Turchen, president.

### **VIKING INDUSTRIES, INC.**

830 Monroe Street, Hoboken, New Jersey; Ph. (201) 656-2020. Products: complete line of CATV equipment. Corporation: public stock. Officers: Arthur Baum, president; Robert Baum, vice president-sales; Theodore Baum, vice president-engineering.

### **VIDEO INSTRUMENT CORP.**

101-06 Queen's Boulevard, Forest Hills, New York 11375. Products: field strength meters, calibrators. Parent firm: Video Labs.

### **VITRO ELECTRONICS**

919 Jesup-Blair Drive, Silver Spring, Maryland 20910; Ph. 585-1000. Products: field test meters, jack panels, patch cords. Corporation. Officers: V. Setterholm, president; O. D. Page, sales manager. Parent firm: Vitro Corp. of America.

### **WILLIAMS & ASSOCIATES**

280 Columbine Street, Denver, Colorado 80206; Ph. 388-6431. Services: brokerage and investments. Owner: Carl M. Williams.

### **WILLIAMS CONSTRUCTION CO.**

Box 261, Glasgow, Kentucky; Ph. (502) 651-5480. Services: construction, installation.

***"Fort Worth gives you complete Tower Project service, highest quality materials and workmanship, and budget minded prices."***

These three factors are the basis of every Fort Worth project proposal. Fort Worth's craftsmen have only one standard — to give you the best towers in CATV. This includes not only the tower, but the entire construction project. Twenty years of tower design and manufacturing experience assure you of a completely reliable product.

More . . . in addition to job-engineered towers, Fort Worth offers a complete array of support equipment, including head-end buildings, microwave domes, elevators, and many other related items. You get maximum performance with a perfect match of equipment and accessories.

With this extra quality, Fort Worth CATV towers cost no more than other towers. There's no reason why you should have to pay extravagant prices for tower equipment and construction services. Let us give you our quotation on your tower project. You'll be interested to know how economical good CATV towers can be.

Fort Worth towers — the standard of quality in CATV.

INQUIRE ABOUT OUR PARABOLIC TROPO-SCATTER ANTENNAS

WRITE TODAY FOR OUR NEW BROCHURE

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COMPANY**

P. O. BOX 8597 • FORT WORTH, TEXAS • (817) JE 6-5676



**ANTENNAS, TOWERS, HEAD-END BUILDINGS**

**CABLE TELEVISION REVIEW**  
*The Weekly News Service of TV's Communications Magazine*

NOVEMBER 14, 1966

**NEW YORK CITY HAS NON-FRANCHISED CATV**  
*From New Offering "Telephone Cable TV" Via Bell Leaseback*

Martin Sugar, president of Com-Tel, Inc., a subsidiary of Bell Telephone Inc., New York City CATV firm—told the Review last week that his firm is currently operating a "pilot run" cable television system serving 14 square blocks of Manhattan. The area covered, Central Park South, stretches from 136th to 138th Streets and from 5th to Broadway. Sugar reported that the cable television service is being provided in Manhattan under an exclusive leaseback arrangement with New York Telephone Co., a wholly owned AT&T subsidiary. Empire City Subway Co., Inc. owns the conduits and handles the AT&T understreet communications in New York City. It is these conduits which are being used to string the cables through which the television signals will be relayed to Com-Tel. Sugar stated that, as in most leaseback CATV operations, Com-Tel owns the head-end and terminal distribution facilities and New York Telephone owns the underground lines. He went on to point out that arrangements begin with the AT&T affiliate early this year, but the system has been energized for only a short while now.

It is well known that Empire City Subway Co. vigorously opposed the Board of Estimates' decision to allow the franchised CATV operators—Morning Information Services, TelFrog/Tel and CATV Enterprises—access to its conduits. This confrontation occurred in late January. Subsequent to that, the AT&T subsidiary attempted to obtain a revision of the rules and regulations concerning access to the conduits. The proposed revisions would, in the opinion of many, have established AT&T as the arbiter over who would be allowed to use the ducts. The three franchise holders in New York City opposed Empire City Subway's revision recommendations, and they were not accepted.

Com-Tel in recent weeks has mailed letters to building owners and tenants in its pilot area. The subscription form which accompanied the letters is interesting for two reasons. First, the form refers to the service being rendered by Com-Tel and New York Telephone as "telephone cable TV." The price structure referred to in the subscription form also merits attention. The cost is described as "flat fees plus an independent underground cable system." Specifically, Com-Tel proposes to charge \$2.50 per month plus \$18.75 installation charge. This compares

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*"Here in Montana it's almost impossible to receive regular coverage of national CATV news. That's why I read Cable Television Review. It keeps me in touch."*

**Keep in touch with  
 Cable Television Review  
 Weekly.**

# ANTENNAS • TOWERS & HEAD-END BUILDINGS

The following section includes product listings for off-the-air CATV antennas, hardware and accessories; CATV and microwave towers; and head-end equipment buildings for CATV and microwave applications. (Microwave antennas are listed in the Microwave section of this Directory). Listings marked with an asterisk (\*) indicate that new information was not submitted by the manufacturer for this year's Directory.

## SINGLE CHANNEL ANTENNAS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### ANTENNA PRODUCTS CO.

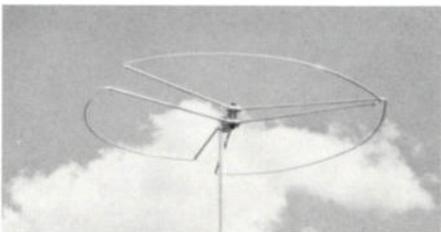
**Ruggedized yagi, model YG-1000.** Designed for single or multiple-stacked yagi antenna systems. Unique attachment method of elements, allows use of tubular boom for rigidity with minimum wind resistance. Withstands winds in excess of 100 knots in temperatures of minus 50 to plus 130 degrees F.

### CUSHCRAFT

**Ruggedized Proline.** A full series of single channel yagis for the VHF/UHF and FM bands. Booms are .058 x 1 1/4" O.D. and elements are



.058 x 1/2" O.D. 6061-T6 aluminum tubing. Element supports are machined from solid aluminum bar; have stainless steel locking bolts. All elements have internal vibration dampers. Mounting is adjustable up to 2" O.D. masts. Driven element is Reddi Match for direct 72 ohm feed without baluns or external matching networks. Available with any type coaxial fitting. Gain, 5 element models 9.6 db—10 element models 12.5 db. Average Net prices, 5 element models: Channels 2-6, \$46.00; Channels 7-13, \$28.00—UHF Channels 14-31, \$23.00; Channels 31-83, \$14.60; FM \$41.00. 10 element models: Channels 2-6, \$92.00; Channels 7-13, \$46.50—UHF Channels 14-31, \$36.00; Channels 31-83, \$22.00; FM \$83.00.



**Heavy Duty—Big Wheel** an omnidirectional, horizontally polarized gain antenna for the VHF

television channels and FM bands. It has three full wave phased dipoles in a cloverleaf configuration. The antennas are cut to individual channels or frequencies on order. Bandwidth is in 6 mc or better with a VSWR of less than 1.5-1. Phasing lines are available for stacking 2, 4 or more Big Wheel antennas.

**Heavy Duty Proline.** A full series of single channel yagis in VHF channels and the FM band. Booms are .058 x 1 3/8" O.D. and elements are .058 x 3/4" O.D. 6061-T6 aluminum tubing. Element supports are machined from solid aluminum bar. They have stainless steel locking bolts. All elements have internal vibration dampers. Mounting plate is adjustable for up to 2 1/2" O.D. masts. Driven element is Reddi Match for direct 72 ohm feed without baluns or external matching networks. Available with any type coaxial fitting. Gain, 5 element models 9.6 db, 10 element models 12.5 db. Average Net prices, 5 element models: Channels 2-6, \$67.00; Channels 7-13, \$49.00; FM \$64.00. 10 element models: Channels 2-6, \$135.00; Channels 7-13, \$77.50; FM \$130.00.

### DAVCO ELECTRONICS CORP.

Distributor of full line of SITCO, Cushcraft and TACO antennas and mounting hardware for CATV.

### DYNAMIC RADIO LTD.

Manufacturer of commercial antennas for complete UHF and VHF range. Contact manufacturer for details.

### JAMPRO\*

Special receiving antennas for difficult locations. Special directive patterns and high gain arrays. Channel filters with low insertion loss. Special consulting service.

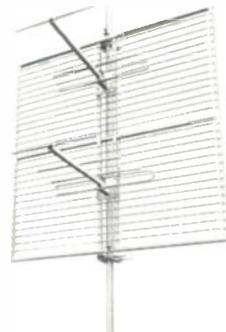
### JERROLD ELECTRONICS CORP.

**TACO Y-51 series, 5-element multi-driven yagis.** Selection of two or three driven elements enables the design engineer to select narrow or broad band response with impedance, pattern and gain characteristics to obtain highest possible efficiency. 50 to 112 mc. Features narrow bandwidth and sharp patterns. Relatively flat response over the frequency range and sharp drop-off outside the desired band. Standard models to cover each VHF TV channel and the FM band. 8 db gain. Constructed with 1 1/4" square crossarm and elements of 5/8" diameter with 3/4" reinforcing sleeves. Hermetically sealed terminal boxes. 50 ohm impedance. Y-51-2, 3, and 4—\$95.00; Y-51-5—\$90.00; Y-51-6—\$85.00. Prices for specially painted units—add \$8.00.

**5-element multi-driven ruggedized yagis, TACO Y-54 series.** 30 to 88 mc. This series is more ruggedly constructed than Y-51, to provide additional strength required in areas subject to exceptionally high winds and very heavy ice loading. Crossarms are 2" square and elements are 3/4" diameter with 7/8" reinforcing sleeves. Hermetically sealed terminal boxes 8 db gain.

50 ohm impedance. Y-54-2, 3 and 4—\$150.00; Y-54-5 and 6—\$145.00. Add \$8.00 for special painting.

**TACO SY-41 and SY-42 series, screen reflector yagis.** For single-channel, high band, applications. Screen type yagis have high front-to-back ratios and high gain. All models feature heavy-duty welded construction. Will mount easily to tower mounts. SY-41 models consist of a single



4-element yagi on a screen reflector. Yagi elements are 1/2" aluminum alloy with 3/8" reinforcing sleeves. Reflector is made with 1 1/4" aluminum frame and 3/8" reflecting rods. SY-42 models have two 4-element yagis on a screen reflector and are supplied with combining lines providing a single coaxial input. (Specify high band channel.) Prices for all models \$135.00. Add \$7.50 for special painting.

**8-element multi-driven yagis, TACO Y-81 series.** 50-66 mc. Two models available with standard ruggedized yagi construction. Three driven elements. 10 db gain at Channel 2. Heliarc welded crossarm is 1 1/4" in diameter. 5/8" elements are reinforced with 7/8" sleeves. Hermetically sealed terminal boxes. 50 ohm impedance. Y-81-2 and Y-81-3—\$155.00. Add \$9.00 for special painting.

**Triple-driven dipoles, TACO Y-101 Series.** 10 element low-band yagis. Three driven elements. Same construction features as Y-81 series. 11.2 db gain at channel 6. Available for 66-88 mc. 50 ohm impedance. Prices: Y-101-4 \$160.00; Y-101-5 \$145.00; Y-101-6 \$140.00. Add \$10.50 for special painting.

**10-element high-band yagis, TACO Y-103 Series.** Two driven elements. For television channels 7-13. Provides 12 db gain at Channel 13. Construction same as preceding listings. 50 ohm impedance. Y-103-7, 8—\$78.00; Y-103-9—\$77.00, Y-103-10, 11—\$76.00; Y-103-12, 13—\$75.00. Add \$8.00 for special painting.

**Ruggedized yagi Model Y104 series.** 10-element low-band multi-driven yagi also used for communications and special purposes. Ruggedized design features heliarc welding, square crossarms, hermetically sealed terminal boxes. Available for frequencies from 54-88 mc. 50 ohm impedance. Y-104-2—\$250.00; Y-104-3—\$245.00; Y-104-4—\$240.00; Y-104-5—\$230.00; Y-104-6—\$225.00. Prices slightly more for special painting.

# SKL

7400 POWER SUPPLY

## LINDSAY ELECTRONICS

**Ruggedized "Log Periodic Yagis" for CATV.** Single channels available or any run of channels. Gains of 12 db over reference; f/b of 30 db.

**14LPY7** Fourteen elements LPY for channel 7. For any single high band or any run — say — 8, 9, 10 and 11.

**10LPY7** Ten element LPY. Available single channel or any run of high band channels.

**12LPY2** Twelve element LPY for low band. Single channel or any combination of low band channels including FM.

**10LPY2** Ten element LPY for low band. Single channel or any combination of low band channels including FM.

## RF SYSTEMS, INC.

**Ruggedized yagis.** Full retention of vibration dampeners; full feedpoint protection. Constant impedance type "N" connectors. Specially designed support systems. Special facilities to design, construct and test antennas for individual system requirements. Write for spec sheets and prices.



**30 Ft. Parabolic Antenna.** All channels from a given area can be received with one antenna and one feed. By positioning feed in parabola, a null can be placed in direction of undesired channel. Covers all UHF and VHF channels; steel and aluminum construction.

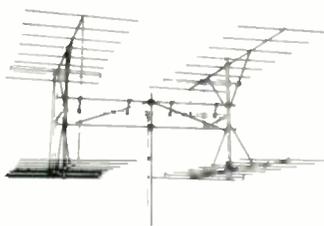
## SITCO ANTENNAS

**High band, quad yagi array, Model SHD48-4.** Complete 48 element array. Used for off-the-air pickup in extreme fringe areas. Available for all high band channels. Boom length varies from 97" (Channel 13) to 116" (Channel 7). Forward gain: 20 db, as measured in respect to a single dipole in free space. 17 to 1 front-to-back ratio. 300 ohm feed impedance. Net: \$181.50.

**Single-channel high band yagi, Model SHD12-1.** Designed for extreme fringe areas. Ruggedized heavy-duty construction. Antenna has 12 elements. Boom lengths vary from 97" (Channel 13) to 116" (Channel 7). Forward gain: 15 db. Front-to-back ratio: 15.7 to 1. 300 ohm. \$25.95.

## Low band, quad yagi array, Model SHD-32-4.

Designed for off-air pickup in extreme fringe areas. Available for all of the low band channels. Quad array has a total of 32 elements. Boom length varies from 157" (Channel 6) to 230" (Channel 2). 8 elements per single yagi, 4



yagis per configuration. Forward gain: 20 db as measured in reference to a single dipole in free space. Front-to-back ratio: 12.7 to 1 as measured on relative field strength basis. 300 ohm feed impedance. \$306 and up.

## Single-channel, high band yagi, Model MD8-1.

High band, cut-to-channel yagi designed for off-the-air pickup in extreme fringe areas. 8 element antenna with a forward gain of 13 db. Boom length varies from 64" (Channel 13) to 76" (Channel 7). Ruggedized, heavy-duty construction. Front-to-back ratio: 12.3 to 1. 300 ohm feed impedance. Net: \$16.95 for all models.

## Low band, single-channel yagi, Model SHD 8-1.

Ruggedized heavy-duty construction. Forward gain: 14 db. 8-element antenna with boom length that varies from 157" (Channel 6) to 230" (Channel 2). 9.2 to 1 front-to-back ratio. 300 ohm feed impedance. Net: \$49.95 up.

## BROADBAND ANTENNAS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

## ANTENNA PRODUCTS CO.

Complement of antennas available including log periodic, Corner reflector, and discons (omni-directional). Write for catalog.

## CUSHCRAFT

**Broadband Proline.** A seven element broadband VHF antenna covering channels 2 through 13, and the FM band. Ideal for small systems, or as a standby antenna. Boom is .058 x 1 1/4" O.D. and elements are .058 x 1/2" O.D. 6061-T6



aluminum tubing. Element supports are machined from solid aluminum bar; have stainless steel locking bolts. All elements have internal fiber vibration dampers. Mounting adjustable for up to 2" O.D. masts. Channel 2-6, Gain 4.5 db; Channel 7-13, Gain 10 db. Net price \$46.00.

## DAVCO ELECTRONICS CORP.

Distributors of rugged Cushcraft, SITCO and TACO antennas for CATV. Write for descriptive literature and prices.

## DYNAMIC RADIO LTD.

Manufactures broadband commercial antennas for complete VHF and UHF frequency ranges.

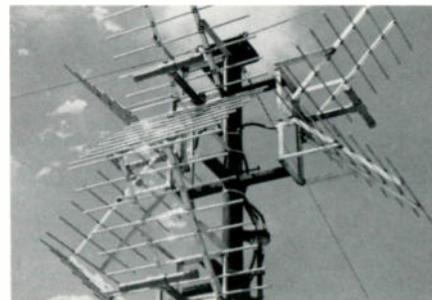
## GC ELECTRONICS

Models CM-6, CM-9, CM-12, CM-16, CM-24. Complete line of All Channel antennas for color and monochrome reception.

Models A-2002, A-2004, A-2006, A-2008, A-2010, A-2012. Complete Line of VHF High Gain Antennas.

## JAMPRO ANTENNA COMPANY

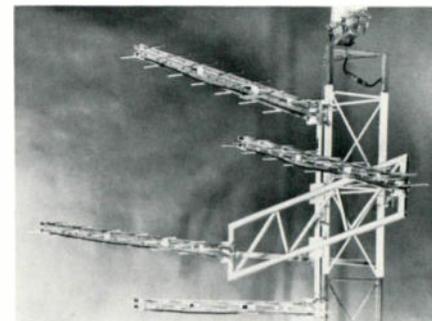
Special receiving antennas, with gains of up to 20 DB (100 times). Special adjacent channel filters, with 0.1 db insertion loss; harmonic filters for FM or other TV channel rejection.



Special receiving antennas for difficult locations. Special directive patterns, and high gain arrays. Channel filters, with low insertion loss. Special consulting service. For channels 2-13, and UHF.

## JERROLD ELECTRONICS CORP.

Color Captain series VHF antennas are available in "Diamond 4" arrays or as single antennas. Provide excellent co-channel rejection with high directivity and narrow beam widths. Model CC-234 covers channel 2, 3 and 4; CC-456 covers channels 4, 5 and 6; CC-713 covers channels 7 thru 13. Priced respectively at \$2,275; \$1,975;



and \$1,750. Single channel antennas are CC-24 (VHF 2, 3 and 4) \$525; CC-46 (VHF 4, 5 and 6) \$465; and CC-73 (VHF 7 thru 13) \$410. All mounting hardware supplied for all models.

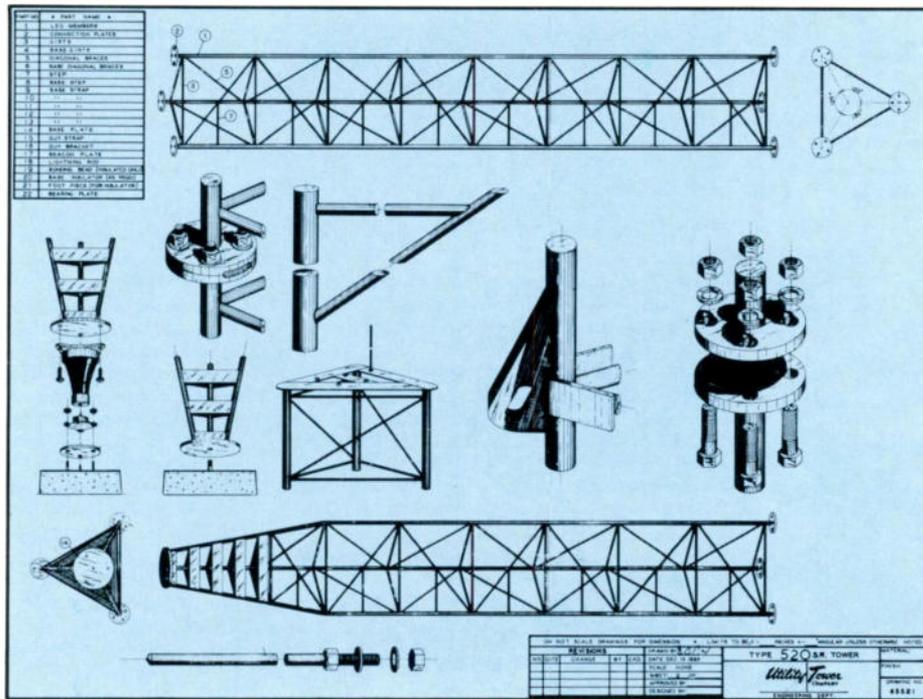
**Y-103 series,** broadband. Y-103-713 (174 - 216 mc) \$80.00, add \$8.00 for special painting.

**Y-101 series,** broadband. Y-102-C (88 - 96 mc) \$140.00; Y-101-D (96 - 104 mc) \$135.00; add \$10.50 for special painting.

**Y-51 series** broadband. Y-51-C (88 - 96 mc) Y-51-D (96 - 104 mc) \$95.00; add \$8.00 for special painting.

**Multi-channel, S-element yagis, TACO Y-53 series.** Particularly suited to broadband systems installations, these models are offered for multi-channel applications. Y-53-70—Channels 2-6; Y-53-185—Channels 7-13; Y-53-220—Channels 10-13. Same basic construction as the Y-51 Series. Prices: Y-53-70 \$110.00, Y-53-185 and Y-53-220 \$80.00. Add \$6.00 for special painting.

**Parabeam Series** UHF high-gain antennas are available as single six or eight-foot dishes, dual arrays of six or eight-foot dishes, or as quad arrays of six-foot dishes depending upon the gain required at the particular UHF channel. Parabeam arrays offer one-tenth the windload of solid surface dishes of equivalent gain, thus allowing installation at high tower elevations

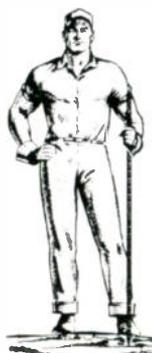


**Q. Which of these components are critical in tower construction?**  
**A. All of them.**

Most makes of towers look pretty much alike. (No one has a monopoly on construction materials or the laws of physics.) You have to look closely to detect the differences. When you get right down to it, that's where Utility Tower Company shines — we know that the smallest details make the biggest difference in quality. Utility design engineers treat every bolt, every weld as a critical pre-requisite for maximum durability and performance. From initial planning to final fabrication and in-

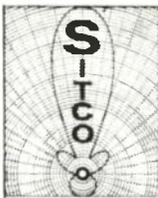
stallation, every part and procedure is checked and re-checked. Without exception. This "Certified Quality Control" covers Utility's entire CATV line — more than a dozen types of towers for every CATV use. And it's the kind of attention that makes Utility towers stand above all others in CATV. Let us show you how Utility gives you more for your money . . . how the many details of a Utility tower are designed and built specifically to serve you better.

Call or write us for complete information.



**Utility Tower**  
**COMPANY**

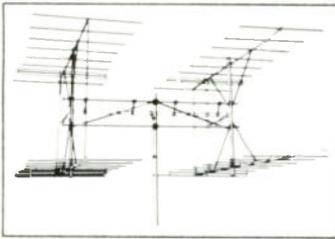
3200 N.W. 38th • OKLAHOMA CITY, OKLAHOMA • (405) WI 6-5551  
 EASTERN DIV: P.O. BOX 163 • MAYFIELD, KY. • (502) CH 7-3642



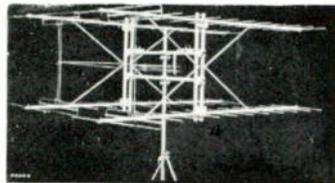
# SITCO

Antennas

Designed by SITCO for Community TV and extreme fringe area requirements.



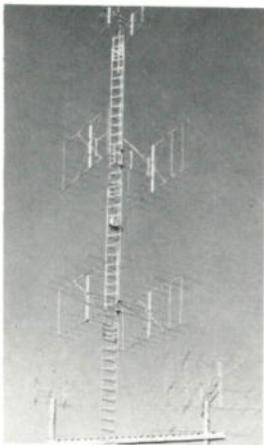
Model No. SHD 32-4



Model No. SHD 48-4 Channels 7 to 13

The SITCO Models SHD 32-4 and SHD 48-4 Quad Mount Antenna Arrays are designed to produce high gain, high front-to-back ratio and large aperture to weak signals. A completely balanced system which reduces noise pick-up and greatly improves the signal-to-noise ratio.

## HEAVY DUTY QUADS AND YAGIS



Ask about SITCO MD Series Antennas  
WRITE FOR FREE SITCO CATALOG

These antennas have been improved with sleeve strengthened SOLID BAR elements, larger diameter booms, heavier reinforced braces, and improvement in aluminum alloys.

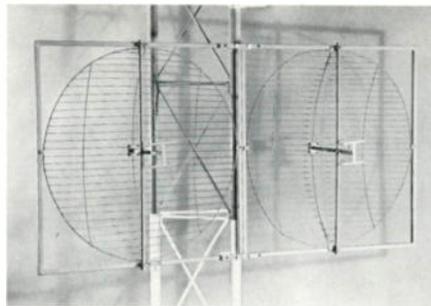


PATENTED SITCO  
WEDGE SCREW FASTENERS

# SITCO

 Antennas

10330 N. E. MARX ST. • P. O. BOX 7691  
PORTLAND, OREGON 97220



where UHF signal strength is usually greater and most uniform. They feature high gain, low VSWR, and direct coaxial output. Grid type dish design and the absence of a large back-up structure effectively reduce wind load area.

**UHF parabolic antennas Model D 1338 series.** Four models cover UHF band: D1338A-72 (ch. 14-22), D1338B-72 (ch. 23-43), D1338C-72 (ch. 44-69), and D1338T-72 (ch. 70-83). Antennas feature a 4-foot parabolic reflector and feed. 75-ohm output. All models priced at \$82.00.

**CP series cylindrical parabolic for UHF reception;** dipole driver, choice of 50 or 75 ohm input. Rugged aluminum construction.

**Model CP 16** for channels 14-18, 16.5 db gain.

**Model CP 27** for channels 19-35, 17 db gain.

**Model CP 44** for channels 36-52, 17 db gain.

**Model CP 60** for channels 53-69, 17.5 db gain.

**Model CP-76** for channels 70-83, 17.75 db gain.

Price: \$250.00.

## LINDSAY ELECTRONICS

**Ruggedized "Log Periodic Yagis" for CATV.** Single channels available or any run of channels. Gains of 12 db over reference; f/b of 30 db. 14LPY7 fourteen element LPY for channel 7. For any single high band or any run — say — 8, 9, 10 and 11.

10LPY7 ten element LPY. Available single channel or any run or high band channels.

12LPY2 twelve element LPY for low band. Single channel or any combination of low band channels including FM.

10LPY2 ten element LPY for low band. Single channel or any combination of low band channels including FM.

## RF SYSTEMS, INC.

**30 Ft. Parabolic Antenna:** all channels from a given area can be received with one antenna and one feed, with higher gain in each channel. By positioning feed in parabola, a null can be placed in direction of undesired signal. All UHF and VHF channels; steel and aluminum construction.

## SCIENTIFIC-ATLANTA, INC.

**Log Periodic, wide bandwidth for full channel or multi-channel coverage.** Very low side and back lobes, low VSWR. Rugged, weatherproof construction—furnished complete with tower hardware.

**QCA-2** 6 Elements for 54-66 MHz, 9.5 db gain minimum.

**QCA-4** 7 Elements for 66-88 MHz, 9.5 db gain minimum.

**QCA-7** 14 Elements for 174-216 MHz, 11.5 db gain minimum.

Arrays of above models, shipped complete with feed harness and tower mounting hardware.

**QCS-2** for channels 2 and 3, 15 db minimum gain.

**QCS-4** for channels 4-6, 15 db minimum gain.

**QCS-7** for channels 7-13, 17 db minimum gain.

**UCA-8 UHF Antenna.** 8 foot diameter spun-aluminum paraboloidal reflector with log-periodic feed. Antenna pre-adjusted at factory to assure maximum performance on desired channel. Shipped with all mounting hardware. Ex-

cellent VHF signal rejection — one antenna covers the entire UHF band — high gain — low sidelobes — solid reflector for maximum aperture efficiency — sealed electrical connections — rugged, corrosion-resistant construction — simple pole or tower mounting. 470-890 MHz.

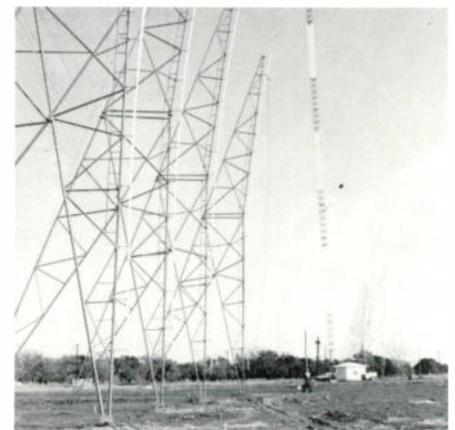
**UCA-10 UHF Antenna,** 10 foot diameter spun-aluminum paraboloidal reflector with log-periodic feed. Antenna pre-adjusted at factory to assure maximum performance on desired channel. Shipped with all mounting hardware. Excellent VHF signal rejection — one antenna covers the entire UHF band, high gain, low sidelobes, solid reflector for maximum aperture efficiency, sealed electrical connections, rugged, corrosion-resistant construction.

**16 Element Super Channeler.** 16 Element low-band (54-88 MHz) Array for long-distance reception; uses modified version of performance proven QCA series element. 110-130 mile or greater range; minimizes co-channel interference — low sidelobes high gain — high front-to-back ratio — rugged, corrosion resistant construction — multi-channel capabilities — low VSWR — high signal stability, minimum weather effect due to height advantage. 54-88 MHz.

**36 Element Super Channeler.** 36 Element High-band (174-216 MHz) Array for long-distance reception, uses modified version of performance proven QCA series element. 110-130 mile or greater range; minimizes co-channel interference, low sidelobe, high gain, high front-to-back ratio rugged, corrosion resistant construction, multi-channel capabilities, low VSWR, high signal stability, minimum weather effect due to height advantage. 174-216 MHz.

## SPACE DIVERSITY ENGINEERING CO., INC.

**Tropo Scatter Antenna System.** Parabolic Antenna — 80' Tall A Frame Construction. Standard units are 150', 210', 270' in length. Provides



high gain and directivity to furnish interference-free reception. Features space diversity — use of two antennas connected by an automatic switching unit sampling response of two antennas. If fade is experienced on one antenna, head-end equipment is switched to the alternate to provide the best possible picture available at all times.

## FM ANTENNAS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

## CUSHCRAFT

**Ruggedized Proline.** A full series of single channel yagis for the FM bands. Booms are .058 x 1 1/4" O.D. and elements are .058 x 1/2" O.D.

# BROAD NEW PERSPECTIVE IN CATV



Anaconda Astrodata's total systems capability brings a broad new perspective to the CATV industry. New in name, unique in approach, Anaconda Astrodata combines a heritage of communications and cable development with wide experience in advanced electronics systems design. Reliability and performance standards far transcending the traditions of CATV equipment are part of this broad new perspective. When planning your CATV system or expanding existing plant, consider these:

## Electronic Equipment

You can select from a complete line of dependable, solid state extended dynamic range (XDR) amplifiers for trunk line, bridger or distribution applications, in either single or dual output models. Typical dynamic range is 87 dB with single output capability of 60 dBmV nominal.

Passive units, such as directional taps, splitters, combiners, attenuators and matching transformers are all value engineered for complete physical and electrical compatibility with any 50 to 220MHz component or system.

## Coaxial Cable

Sealmetic is the first and only coaxial cable offering you an impervious moisture vapor barrier in a cable you can bend by hand without kinking. Electrically, structural return loss is guaranteed 26 dB or better.

Sealmetic is available in sizes of 412, 500, 625 and 750 and in configurations of aerial, duct and direct burial. A complete selection of weather-tight Sealcon connectors allows mating any cable and amplifier together.

## Test Instruments

A totally new approach to CATV system measurement has been taken to provide you with this radically new, portable, all solid-state line of precision instruments.

The portable, compact, 75 ohm, Model 990 System Analyzer now provides sweep frequency measurements of gain, attenuation and return loss on a large screen display scope. Frequency is continuously variable from 10 to 230 MHz. Up to 30 dB of attenuation may be attained in steps of one dB each.

The Model 912 Signal Level Meter is a high accuracy RF voltmeter for CATV system signal measurements. It has a 12 position detent tuner for selection of channel 2 through 13, and a built-in AFC that locks onto video carrier frequencies  $\pm 500$  kHz. An integral RF probe prevents interference from entering the cable past the probe.

Write, call or wire Anaconda Astrodata Co for detailed specifications and ordering information on state-of-the-art CATV equipment or systems. Specify Anaconda Astrodata: your assurance of quality products.

**ANACONDA**  
astrodata



ANACONDA ASTRODATA CO.  
1430 SOUTH ANAHEIM BOULEVARD  
ANAHEIM, CALIF. 92803 • (714) 635-0150

# SKL

## 7210 THERMAL EQUALIZER

6061-T6 aluminum tubing. Element supports are machined from solid aluminum bar; have stainless steel locking bolts. All elements have internal vibration dampers. Mounting is adjustable up to 2" O.D. masts. Driven element is Reddi Match for direct 72 ohm feed without baluns or external matching networks. Available with any type coaxial fitting.

**Heavy Duty Proline.** A full series of single channel yagis in the FM band. Booms are .058 x 1 5/8" O.D. and elements are .058 x 3/4" O.D. 6061-T6 aluminum tubing. Element supports are machined from solid aluminum bar. They have stainless steel locking bolts. All elements have internal vibration dampers. Mounting plate is adjustable for up to 2 1/2" O.D. masts. Driven element is Reddi Match for direct 72 ohm feed without baluns or external matching networks. Available with any type coaxial fitting.

**Heavy Duty-Big Wheel:** An omnidirectional, horizontally polarized gain antenna for the FM bands. It has three full wave phased dipoles in a cloverleaf configuration. The antennas are cut to individual channels or frequencies on order. Bandwidth is in 6 mc or better with a VSWR of less than 1.5-1. Phasing lines are available for stacking 2, 4 or more Big Wheel antennas.

### JERROLD ELECTRONICS CORP.

**Color Captain FM Antenna.** Model CC-FM (88-108 mc) \$465.00.

**Y-51 Series FM Antennas.** Model Y-31-FM (88-108 mc); Y-51-C (88-96 mc); Y-51-D (96-104 mc). Price: \$85.00 each (add \$8.00 for special painting).

**Y-101 Series FM Antennas.** Models Y-101-FM (88-108 mc); Y-101-C (88-96 mc); Y-101-D (96-104 mc). Price: Y-101-FM and Y-101-C \$140.00; Y-101-D \$135.00. Add \$10.50 for special painting.

### LINDSAY ELECTRONICS

**12LPY2-FM Ruggedized Log Periodic Yagi** to cover only FM or FM in combination with other low band channels. Example 12LPY-56FM — 12 element LPY for channels 5 and 6 and FM.

### MARK PRODUCTS\*

**Model number ST-7B FM Antenna.** Horizontally polarized, omnidirectional 7-element slot array for FM. 30" wide, 22" high, 5 1/2" deep. Antenna is supplied complete with all hardware for easy mast mounting.

### RF SYSTEMS, INC.

30 ft. Parabolic Antenna, all channels from a

given area can be received on one antenna (including VHF and UHF television).

## ANTENNA HARDWARE & ACCESSORIES

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### CUSHCRAFT

**"Biltz Bug" lightning arrester.** Inserts in coaxial cable to eliminate static buildup. Discharges through sealed air chamber with machined discharge points. 52 or 72 ohm. UHF or "N" type connectors. LAC-1, type 83 connectors, 1 male; 1 female for direct to equipment installation. \$3.85. LAC-2, type 83 connectors, 2 female for insertion in cable, \$4.45. LAC-2N, "N" connectors, 2 female for insertion in cable, \$5.95. Wall feed through type LAC-W, with double female UHF or "N" type fittings.

**Coaxial Stacking Kits.** A full series of multiple 1/4 wave length stacking lines for both the Proline Ruggedized and Heavy Duty antennas. They are available for two stack and four stack arrays with any type coaxial fitting.

**Hardware:** Universal stacking frame bracket 1/4" aluminum plate with steel u-bolts and machined aluminum v-blocks will take up to 2 1/2" O.D. masting both ways. Model No. PL-SFB \$7.35.

### G.C. ELECTRONICS

**Telco Mounting Hardware.** A complete line of mounts, stand-offs, and all necessary installation hardware for antennas. Write G. C. for prices and details.

### JERROLD ELECTRONICS CORP.

**TACO Ruggedized yogi antenna accessories.** Write for complete catalog.

### SCIENTIFIC-ATLANTA, INC.

**61-2 Two way power splitter** for equal amplitude and phase mixing or division. Low insertion loss, high isolation, low VSWR, DC isolation input, completely weatherproof.

**61-4A 4 way power splitter** for equal amplitude and phase mixing or division. low insertion loss, high isolation, low VSWR DC isolated input, completely weatherproof, eliminates need for impedance matching when arraying 50 ohm antennas.

**61-4B 4 way power splitted** for equal amplitude and phase mixing or division. Low insertion loss, high isolation low VSWR, DC isolated input, completely weatherproof, provides superior matching of 75 ohm antenna arrays.

## TOWERS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### ADVANCE INDUSTRIES

Manufactures a complete line of CATV, microwave and other towers, guyed and self-supporting. Also makes line of tower accessories, including anti-climbers, climbing safety devices, and lighting equipment.

### ANDREWS TOWER COMPANY

Manufactures CATV, VHF, ETV and microwave towers. Free-standing towers, including types A-360', B-340', C-320', D-300'. Guyed towers include types 250 320', 250-T 320' triangular, 350 and 350-T 400', 24 560', for CATV, 450 550', 30 630', 550 and 550-T 700', types 650 and 650-T 800', 44 1000' and type 96 2000'.

### ANTENNA PRODUCTS CO.

**Steel towers, 2410 model.** Triangular bolted construction with special "X" type cross bracing with braces welded together at the cross. Bolting permits completely knocked down shipping at reduced cost. All tubular steel, all parts hot dip galvanized. 10 ft. sections, jam-fit joints; steps provided.

**400 series, 36" face, 3 1/2" leg, galvanized, welded construction, flange joints.**

**Steel towers, 1810 model.** Triangular bolted construction as above. Designed for tower heights to 300 ft. 10 ft sections, jam-fit joints; steps provided for climbing.

### DAVCO ELECTRONICS CORP.

Supplier of Utility Tower Co. towers. Utility towers used in systems constructed by Davco.

### E-Z WAY PRODUCTS INC.

Complete line of towers and antenna supports. Contact factory for listing and prices.

### FORT WORTH TOWER CO., INC.

Manufactures towers for CATV, microwave, etc. Towers are designed to meet individual requirements and specifications. FWT also provides equipment buildings, engineering, construction, financing and leasing services.

### GRASIS FABRICATING CO.

**M-46 Microwave Tower:** New design featuring articulated base, interchangeable member sizes, inside climbing ladder, formed leg and diagonal members available from stock.

### GRIFFITH LIBERTY TOWER MFG. CO.

**AM; FM; Microwave; CATV Towers.** All welded construction — tubular steel, no angles, less wind resistance; guy points welded in position. Inside ladder on large towers.

# DYNAIR

...the experienced manufacturer of solid-state head-end systems.

Write or call today for more information.



DYNAIR ELECTRONICS, INC. • 6360 FEDERAL BLVD., SAN DIEGO, CALIFORNIA • (714) 582-9211

# Another Andrews Tower CATV First:

## ANDREWS QUICK-ERECT TOWERS

Andrews introduces a completely new concept to CATV with this rugged, revolutionary QUICK-ERECT TOWER! Completely mobile . . . trailer or ground mounted . . . may be erected by five men in four hours. Designed for short term OR long term installation. Fully selectable height.

### CHECK THESE OUTSTANDING FEATURES:

- Microwave towers up to 300', CATV towers up to 410'; ideal for extreme height path surveys.
- Erected in sections for safety and efficiency; sections are automatically locked in place by special safety locks.
- Erected by its own guy lines; remaining guys are pulled into place by rising sections.
- Tower may be raised, locked into place, tensioned and lowered from ground level; no climbing necessary.
- Trailer has its own power unit; trailer-tower is completely self-contained. Room is provided on the trailer to carry transmission lines, reflectors, parabolas or antennas.
- Rugged aluminum, all-welded construction.

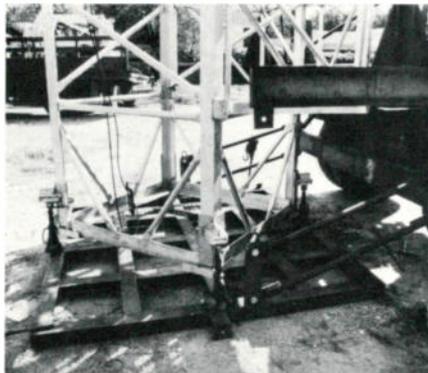
ANDREWS QUICK-ERECT TOWERS are your answer to difficult microwave, CATV head-end or path survey problems, Pacesetter quality . . . Time-saving economy. It's another ANDREWS first in CATV! Inquire today for full specifications on these outstanding towers.

And . . . ANDREWS offers a complete line of CATV towers in addition to QUICK-ERECTS. Triangular or square construction . . . guyed or free-standing . . . custom-built topside platforms. For ANY tower need, you get the MOST for your money from ANDREWS!

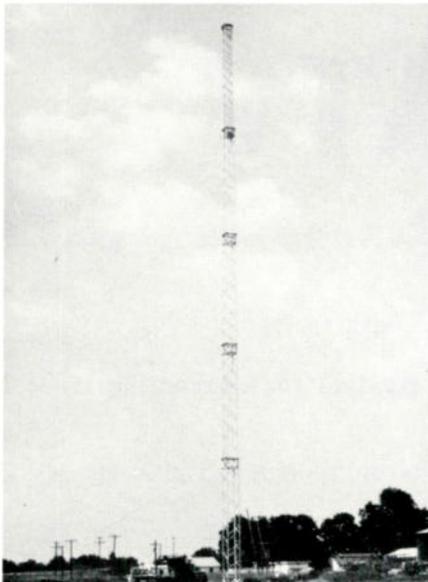
CALL OR WRITE



Stacked sections are pulled upright by tower guy wire. Rising sections pull remaining guys into place. No extra equipment required.



Trailer carries its own base plate. Earth type expansion anchors are used for guys. No concrete is necessary. Reduces erection time to a minimum.



Tower may be erected to any height for maximum microwave performance or path surveys. Completed unit is as permanent as any conventional tower. Your best buy in CATV towers!



# ANDREWS TOWERS, INC.

1420 LAYTON AVENUE • FORT WORTH, TEXAS • 817 TE 1-1222

DESIGNER-MANUFACTURER OF SUPERIOR CATV TOWERS

**BURIED SYSTEMS  
EQUIPMENT SPECIALISTS**  
TELEPHONE-CATV  
**CHANNELL**  
COMMERCIAL CORP.  
620 W. Foothill Blvd. • Glendora, Calif. • (213) 963-1694

**JAMPRO**

Manufactures variety of towers. Contact factory for prices.

**MASTER TOWER CO.**

Towers for CATV applications. Contact manufacturer for quotation.

**Guy Tensioning Device:** A precision instrument which is incorporated into a guy to enable the proper tension to be set. It also provides a means of determining if the guy wires need adjusting after the tower has been in service.

**MICROFLECT COMPANY**

Complete line of self-supporting towers. Roof mounts, stub towers and ground mounted towers. Heights to 300 ft. Catalogs and prices by request.

**ROHN MANUFACTURING CO.**

Manufacturer of tubular and angular communication towers, for CATV and microwave. Services include complete installation of towers. Complete engineering service is provided both for tower installation and for systems. Complete obstruction lighting kits antenna booms, head-end buildings, and passive microwave reflectors also available.

**TCA TOWER CO., INC.**

Towers for CATV, microwave and every other

purpose. Every TCA tower is carefully engineered to exact specifications. TCA engineers are available to assist operators.

**TRI-EX TOWER CORPORATION**

Models T-20, T-26, self-supporting tower to 120 ft.

**UTILITY TOWER CO.**

Designer, manufacturer and erector of CATV, microwave, radio, television & communications towers. Accessories include reflectors and a complete selection of antenna booms.

**HEAD-END BUILDINGS**

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

**ADVANCE INDUSTRIES**

Manufacturers of electronic equipment buildings. Will bid on steel, block or poured concrete construction needs. Also carries complete line of pre-assembled portable buildings with wiring and ventilation installed.

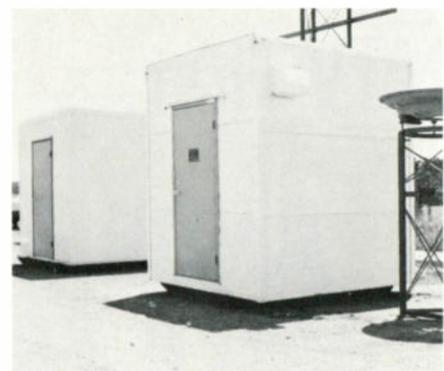
**ARMADILLO MANUFACTURING**

**Fiberglass buildings** for CATV applications. Available from stock or will custom design to any size. Factory installation equipment and foundation service available. Stationary, mobile or pole mounted units. Write for prices.

**BUTLER MANUFACTURING CO.**

**Pre-engineered metal buildings** and building components for head-ends, offices, studios, equipment, storage. Wide choice of building

types and sizes, all pre-engineered for fast completion on site, wide choice of accessories, unlimited design possibilities.



**FORT WORTH TOWER CO., INC.**

**Buildings** for housing head-end or microwave equipment.

**ROHN MANUFACTURING CO.**

**Rohn Type A buildings** are designed especially for communications equipment. Includes 3' x 7' x 1 3/4" steel door with cylinder latch and hasp and staple, two 18" wall louvers with 40 sq. in. of free air capacity each, and a complete "aluminized" steel roof. All outside fasteners are of stainless steel to resist corrosion.

**STEFFEN BODY CO.**

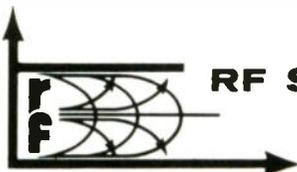
**Perma-Porta** permanent but portable steel buildings: come in five standard factory sizes from 8' x 8' x 8' high to 8' x 16' x 8' high. Other sizes available to fit special needs. Units have special undercoating for weather protection; heavy steel door is weather-stripped.

30 FT. PARABOLA

for

**CATV**

- Heavy duty 30 foot Antenna with high gain, low VSWR, and low side lobes.
- Excellent front to back ratios.
- Controllable null position for eliminating interference.
- Multiple channel or single channel pick up.
- Usable in Tropo Scatter Systems.



**RF SYSTEMS INC.**

155 KING ST.  
COHASSET, MASS. 02025  
PHONE (617) 383-1200





**we design  
and build  
and equip  
and service  
CATV  
systems  
anywhere  
in the world.**



Need a CATV system designed? Ameco does it for you—fast. Our skilled engineers can design your system to make profits for you.

Need to build a CATV system? Ameco does that for you, too—and builds it to last. Ameco's construction people are experts. They've built more than 7,500 miles of CATV plant. That's experience you can count on.

Need CATV equipment? Ameco has it—a complete line! The cable television industry pacesetter has solid-state equipment for every CATV operation from the antenna

to your customer's home. And, it's guaranteed reliable.

Need your system serviced? Ameco does it—anywhere. Expert CATV sales engineers travel the nation in unique "Roadrunner" vehicles to service your emergency equipment or technological needs.

Good to know, isn't it, that you can rely on Ameco, the industry pacesetter, to provide anything you need to build, rebuild, expand, repair or plan your CATV system. We're ready to go to work for you on any CATV job, any-time anywhere. Call 602-262-5500 . . . today!



**ameco**

P.O. Box 13741, Phoenix, Arizona 85002

HEAD-END ELECTRONIC EQUIPMENT

**CABLE TELEVISION REVIEW**

The Weekly News Service of  
TV & Communications Magazine

NOVEMBER 14, 1966

**NEW YORK CITY HAS NON-FRANCHISED CATV**

**First New Offering "Telephone Cable TV" Via Bell Leaseback**

Walter Nigley, president of Con-Tel, Inc., a subsidiary of Bell Telephone Co., New York City CATV firm—told the Review last week that his firm is currently operating a "trial run" cable television system serving 10 square blocks of Manhattan. The area served, Central Park South, stretches from 120th to 125th Street and from 30th to Broadway. Nigley reported that the cable television service is being provided in Manhattan under an exclusive leaseback arrangement with New York Telephone Co., a wholly owned AT&T subsidiary. Empire City Network Co., Ltd. owns the conduits and handles the AT&T underwritten communications in New York City. It is these conduits which are being used to string the cable through which the television signals will be relayed to Con-Tel. Nigley stated that, as in most franchise CATV operations, Con-Tel owns the head-end and terminal distribution facilities and New York Telephone owns the underground lines. He went on to point out that arrangements began with the AT&T affiliate early this year, but the system has been energized for only a short while now.

It is well known that Empire City Network Co. vigorously opposed the Board of Estimate's decision to allow the franchised CATV operators—Marketing Information Services, TeleFrontTwo and CATV Enterprises—access to its conduits. This contribution occurred in late January. Subsequent to that, the AT&T subsidiary attempted to obtain a revision of the rules and regulations maintenance and access to the conduits. The proposed revisions would, in the opinion of many, have established AT&T as the arbiter over who would be allowed to use the ducts. The three franchise holders in New York City opposed Empire City Network's revision recommendations, and they were not accepted.

Con-Tel in recent weeks has mailed letters to building owners and tenants in the pilot area. The subscription form which accompanied the letters is undergoing its two reviews. First, the form refers to the service being provided by Con-Tel and New York Telephone as "telephone cable TV." The prior structure referred to in the subscription form also merits attention. The cost is described as "far less than any independent underground cable system." Specifically, Con-Tel proposes to charge \$1.50 per month plus \$15.00 installation charge. This compares

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**Cable Television Review  
is for Executive material.  
Informative.**

**WRITE FOR LOW GROUP SUBSCRIPTION RATES.**

# HEAD-END ELECTRONIC EQUIPMENT

The following section includes product listings for electronic components with applications in CATV head-end operations. (Microwave equipment is listed in a separate section of this Directory.) Listings marked with an asterisk (\*) indicate that new information was not supplied by the manufacturer for that listing.

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## ANTENNA BALUNS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### ANTENNA PRODUCTS COMPANY

Antenna baluns: HF baluns (receiving and high power) Impedances to customer requirements.

### BENCO

Antenna balun, Model ACMT. Matching type for any TV channel VHF or UHF. Has insertion loss of less than 1/2 db; 300 ohms input and 75 ohms out. Accurately cut to channel specified.

### BLONDER-TONGUE LABS, INC.

CMB-92U UHF matching transformer. Quality indoor/outdoor balun for matching 75 to 300-ohm impedance (or the reverse) at UHF-TV fre-



quencies. Housed in a weatherproof cast aluminum case 6 3/8 x 2 1/4 x 3 1/4". Maximum insertion loss is 0.8 db. Connectors: Type BTF 75-ohm jack (mates with BTF male connectors — not supplied), and 300-ohm terminals. Patented, stripless system ensures positive contact for all types of 300-ohm cable. Provision for power feedthrough. Can be mounted on mast, wall, etc.

# JERROLD

## FIRST IN CATV

## HEAD-END EQUIPMENT

### CHANNEL COMMANDER

### PROGRAM COMMANDER

CATV Systems Division  
**JERROLD ELECTRONICS CORPORATION**  
 401 Walnut St., Phila., Pa.

CATV Equipment & Services

## TELE-SIGNAL ELECTRONICS LTD.

BPX antenna balun: Completely weatherproof, this matching transformer and bandpass filter provides direct connection to 300 ohm VHF antennas with 75 ohm F connectors out. Insertion loss 15 db. Specify channel when ordering.

## SINGLE CHANNEL PRE-AMPLIFIERS

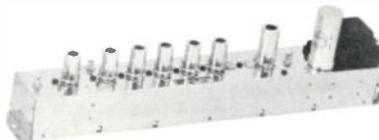
See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### AMECO, INC.

AP series RF preamplifiers. Output 0.6 V rms on low VHF channel; 0.5 V rms on high VHF channel. Gain, 30 db minimum. Noise figure, low VHF channel 5 db; high VHF channel 8 db. Power consumption 20 watts, remote supply Specify channel required.

### BENCO

Model PAA, single channel AGC preamplifier. Has 65 db gain when AGC is disabled and a noise figure of 4 db (lo-band), 6 db (hi-band)



maximum. 4.5 mc flat response within 0.25 db. 75 ohms; self-contained power supply. 117 volt operation. Available for channels 2 through 13 plus FM.

Low noise AGC pre-amp, Model PA-LN. 66 db gain (with AGC disabled); noise figure of 3 db (lo-band) and 4 db (hi-band). Self-contained power supply. Frequency response is 4.5 mc flat within 0.75 db.

### BLONDER-TONGUE

Single channel preamplifier, Model CMA, Low-noise solid state single channel preamplifier. Available in CMA-FM for all FM channels. Flat band pass plus low VSWR input. Gain of 22 db minimum, 2 through 13; bandpass 6 mc plus or minus 3/8 db; noise figure (2 through 6) better than 3.8 db, and better than 5.5 db for 7 through 13. Provides both 75 and 300 ohm

input connectors plus transistor circuitry which results in low power drain. Also incorporates a special filter circuit to minimize overload susceptibility. CATV: \$44.00 (ch. 2-6 plus FM); \$49.00 (ch. 7-13).

### C-COR ELECTRONICS

Model 2101 VHF Cascode preamplifier — Ultra low noise amplifier with 40 db gain for 6 megacycle bandwidth. Flat response with 3 db noise figure channel 2 through 6 and 4.5 db noise figure on channel 7 through 13. 75 ohms impedance with UHF connectors standard. Other impedance and connectors on request. Weatherproof housing 117 V — 50-60 cycle operation. Price \$295.00.

Model 1101 — same as 2101 with rack mounting. Price \$295.00.

Model 2101 CP — same as 2101 but cable powered. Price \$295.00. Use with 24 PS-2 supply \$49.50.

UHF Cavity Pre-amplifier. Low noise ceramic tube type #6299 for single channel operations.

Model 2113: Noise figure 5.5 db ± 1 db, 12 db gain, single stage weatherproof housing. Input of 50, 75 or 300 ohms. Connectors N or UHF standard. Price \$345.00.

Model 2103: Same as above but dual stage, gain of 24 db. Price \$495.00.

Model 1103: Same as 2103, less waterproof cover but for rack mount. Price \$495.00.

Model 3103: Same as 2103 but chassis only, no covers. BNC Connectors. Price \$350.00.

UHF Cavity Pre-amplifiers — Ultra low noise ceramic tube for single channel operation.

Model 2112: Noise figure 6.5 db ± 1 db, 10 db gain, single stage, weatherproof housing. Impedance of 50, 75 or 300 ohm. Connectors N or UHF standard. Price \$295.00.

Model 2102: Same as above but dual stage gain of 20 db. Price \$395.00.

Model 1102: Same as 2102 less waterproof cover, but rack mount. Price \$395.00.

Model 3102: Same as 2102 — BNC Connectors — but chassis only, no cover. Price \$350.00.

### ENTRON, INC.

Single channel preamplifier, Model DRPB. Weatherproof amplifier designed for head-end service. Gain: 30 db. Noise figure: 6.5 db, low band; 7.5 db, high band. Maximum output level: plus 54 dbmv. Will operate from 115 vac or can be remote powered by using RPS-B power supply. Price: \$75.00.

### JERROLD ELECTRONICS

Single-channel preamplifier "channel champ" Model TPR. Designed for use at head-end. Takes

# SKL

## NEW, ADVANCED CIRCUITS

maximum advantage of signal strength at antenna array, and compensates for down-lead losses, without degrading system noise figure. Available in two types—low-band (ch. 2-6) with one transistor and high-band (ch. 7-13) with two transistors. Both units have: 6 MHz bandwidth, flat within 0.5 db; hi-Q preselectors; gain of 18 db min. (low band) and 20 db min. (high band); noise figure of 4 db max. (low band) and 5.5 db max. (high band); and output (at 0.5 db sync compression) of 40 dbmv (low band) and 50 dbmv (high band). Price \$165.00.

**Single-channel preamplifier, Model 401A, 406A and 501 A.P.** Model 401A is equipped with an iridite finished weatherproof cabinet and is operated from a remote 24 vac power supply (Model 405P). Model 406A is equipped with a light gauge, perforated steel housing and is designed for continuous indoor service. 406A also contains its own internal power supply powered by 28 vdc. Can be mounted in down unit containing a Model 401A pre-amp and a Model 405P power supply. Gain: 28 db minimum. Flat response. Noise figure: 5 db, low band; 8 db high band. Output: .6 v rms, low VHF channel; .5 v rms, high VHF channel. 300 or 75 ohm input and 75 ohm output. (Weatherproof housing available for Model 406 complete with hardware for outdoor antenna mounting). Prices: 401-A, \$46.17; 406-A, \$46.17; 405-P, \$25.41; 501-AP (401-A w/405-P) \$65.67.

### LINDSAY ELECTRONICS

**Head-end amplifier model (AP5C)** single channel, mast mounting, solid state. Low noise 3.5 db, 18 db gain. Using the latest transistor types and circuits. High signal capability to prevent overloading. Also available in 300 ohm units.

### SPENCER-KENNEDY LABS

**Single-channel preamplifier, Model 450C.** Operates from 105 vac to 125 vac. Frequency range any standard 6 mhz VHF channel. Gain: 35 db, low band; 35 db, high band. Noise figure, 6 db, low band; 9 db, high band. Rack, cabinet or bench mounting. Gain is controlled automatically when used with 451C control amplifier.

**Single-channel preamplifier, Model 271.** Gain: 16 db minimum on low or high channels. Cable powered by 28 vdc. Can be mounted in down lead from antenna to head-end equipment. Output: 36 dbmv at 1% intermodulation distortion. **Model 451C** Single-channel control amplifier with ALC. Bandwidth 6 Mz, low band gain 35

db, high-band gain 28 db. Maximum output +46 dbmv; low-band N.F. 6 db, high-band N.F.



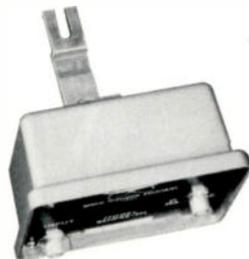
9 db. When controlling an SKL/450C, a  $\pm 20$  db change at input causes only 2 db output change.

## BROADBAND PRE-AMPLIFIERS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### BENCO TELEVISION ASSOCIATES

**Benpre/L, Benpre/H** Solid state mast mounted broadband preamplifier. Gain: Benpre/L 16 db min; Benpre/H 20 db min. Requires 24 V AC power supply (Benco models TPS-6 or TPS-1)



Units have low noise figure, low distortion, high output handling; universal mounting bracket supplied. 54-110 MHz (Benpre/L) 174-216 MHz (Benpre/H).

### BLONDER-TONGUE

**Low noise, mast-mounted amplifier, Model AB-3.** Provides 25 db minimum gain on all VHF channels plus FM. Choice of 300 ohm or 75 ohm output. Stripless terminals for 300 ohm twin-lead; solderless "quick-disconnect" terminals for 75 ohm co-ax. Amplifier uses low noise frame-grid tubes. Complete with remote power supply. CATV: \$82.00.

**Mast-mounted broadband preamplifiers, Model CMA-U.** Low-noise, solid-state broadband preamplifiers cover entire band. Response of preamplifiers flat plus or minus 1/4 db across band. Input is 300 ohms, output 75 ohms (type F connector). Sensitivity: 100 uv (average) for

TASO grade 3 picture. Available with optional 75-ohm inputs. CMA-U-14-59 (Ch. 14-59). CATV: \$37.00 CMA-53-83 (Ch. 53-83) CATV: \$37.00.

### DAVCO ELECTRONICS

**FM antenna preamplifier, Model DRPB-FM.** Covers the entire FM band, 88 to 108 MHz. Gain is 14 db. Operates from either 117 VAC or 19 VAC.

### LINDSAY ELECTRONICS

**Head-end amplifier model (AP/75),** mast mounting, solid state, low noise 3.5 db, 18 db gain on all channels. Using latest transistor types and circuits. High signal capability to prevent over loading. Also available (AP/300).

**Head-end amplifier model (APFM),** mast mounting, solid state, FM band amplifier, 88 MHz to 108 MHz low noise, 18 db gain. Also available in 300 ohm units.

### MICRO-LINK SYSTEMS

**Models ADL40, ADL60, ADH40, ADH60** Micro-Link broad band amplifiers for use at the head-end. High band or low band or both. 40 db or 60 db variable gain.

## STRIP AMPLIFIERS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### AMECO, INC.

**Solid-state strip amplifier, Model ASA and ASA-FM.** Operates single channels 2 through 13 plus FM at head-end. Has 50 db gain; 66 db maximum out. 25 db AGC action and temperature compensated. 75 ohm. Rack mount.

### BENCO TELEVISION ASSOCIATES

**SPM** Single channel and FM universal amplifier. Gain: 40 db; (28 db FM); manual gain control, self contained power supply, bridging output. Specify TV channel or FM.

### BLONDER-TONGUE LABS

**Model MCSc** High gain single-channel amplifier is automatic in operation. Because it is AGC-controlled, the MCSc provides a uniform output even though input signals vary. Built-in mixing outputs eliminate the need for separate mixers. Gain: MCSc 2-6, 45 db min.; MCSc 7-13, 35 db min.; MCSc-FM, 32 db min. Bandpass: MCSc 2-13, 6 MHz  $\pm 1/2$  db; MCSc-FM, 20 MHz  $\pm 1$  db. Maximum output: 1.4 V (63 dbmv) LB, 1.0 V (60 dbmv) HB. AGC: Factory set for 0.7 V output with input of at least 3900 V on channels 2 thru 6 and 12,500 V on channels 7 thru 13. AGC level control may be set for any desired output between 0.45 and max. output

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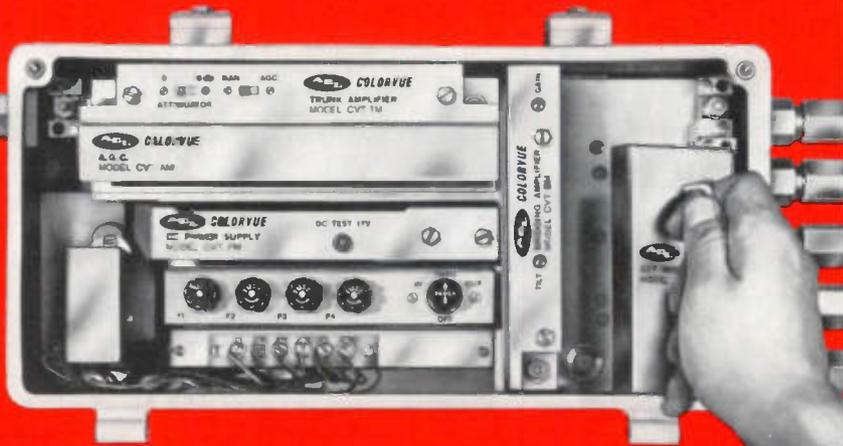
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ANTENNA EVALUATION LAB.



ASSEMBLY AREA



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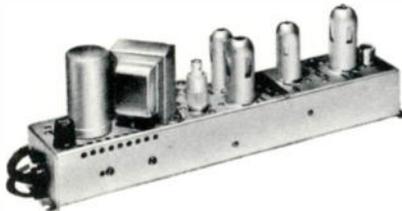
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Correspondence: Post Office Box 552, Lansdale, Pennsylvania 19446

# SKL

## 7220 CO-CHANNEL FILTER

(except MGS-FM, which has no AGC). Gain control range: 18 db min. manual; 20 db min. automatic (except MCS-FM). Impedance: 75-ohm input & bridged output, 'UHF' jacks (mate with



Blonder-Tongue P-11T and P-59T solderless plugs—not supplied). Noise figure: MCSc Ch. 2-6, 5 db; MCSc Ch. 7-13, 6.5 db.

### C-COR ELECTRONICS

**VHF Strip Amplifiers Model CJ.** These single channel TV amplifiers are available at any VHF channel frequency or FM band. Channel 2—6 amplifiers have a typical gain of 50 db with a 50 dbmv output. Channel 7-13, 38 db at channel 9 and 34 db at channel 13 with an output of 53 dbmv. FM coverage offers a gain of 30 db with an output of 52 dbmv. Typical noise is 6 db on low channels and 12 db on high. VSWR of 1.75:1 on input and output are typical with "loop thru" features of the outputs. Powered at 117 V — 60 cycle with self contained power supply. Price \$169.00.

### DAVCO ELECTRONICS CORP.

Distributor for all Entron single channel amplifiers. Write for detailed information.

### ENTRON, INC.

**Single channel head-end amplifier, Model APL-D.** Low band VHF amplifier with 7 db noise figure. Utilizes ALC circuit to maintain output within



1 db with input variation of 20 db. Gain: 60 db. Maximum output level: plus 54 dbmv. Output level range: plus 40 to plus 54 dbmv (picture carrier). Sound carrier adjustable 0 to 25 db below picture carrier. Price: \$189.50.

**Single channel head-end amplifier, Model APH-D.** High band VHF amplifier utilizing 10,000 hour tubes. Gain 60 db (max.). Noise figure 7

db. Output level control: manual and ALC switch. External power supply. Entron Model PSR3. Mounts any position. Price: \$199.50.

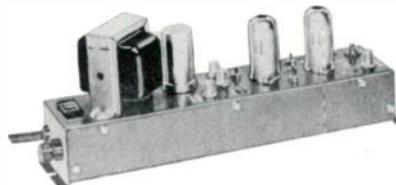
**AP-F FM band head-end amplifier,** used where FM signals of nearly equal amplitude are available. Where FM signals are unequal, use HQF-26 filter to equalize. AP-F features high gain, high output, full 20 MHz bandwidth, and built-in mixing network and silicon rectifier. 19" rack mount. Price \$100.

### SPENCER-KENNEDY LABS, INC.

**222B Broadband Output Amplifier:** Ideal as head-end output amplifier or as trunk amplifier. Gain 25 db at 216 mc, response  $\pm 0.5$  db, sloped 3 db or 6 db (switched). Low cross-modulation and noise figure.

### VIKING INDUSTRIES, INC.

**Model 945 single channel amplifier,** for any 6 mc TV channel or 20 mc FM band. Unit features matched, bridging outputs; optional re-



mote power supply; optional AGC; high gain with 17 db of gain control; low noise cascade circuitry. Minimum gain channels 2-6 is 47 db; channels 7-12 is 34 db. Price on request.

## CONTROL UNITS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### ANACONDA ASTRODATA CO.

**Head-End Control Center, Model 701:** Pilot generator operates at 220Mc with 16 channel combining network, system equalizer, power inserter, monitoring facilities, master level control and metering facilities. It has provision for system sweeping, system noise test and high impedance output test point. Equalization 22 db full tilt. Optional 18, 22, 25 db half tilt; 18 db full tilt. XTAL controlled, level stabilized pilot generator of any frequency in the range of 50 to 220 mc is optional. Power 117VAC or 36VAC.

### BENCO TELEVISION ASSOCIATES

**AVAC-A (BENAVAC) Single TV-Channel (2-13) selective head-end control unit** providing low-noise preamplification and any channel conversion (if required) with separate audio and video



A.G.C. and carrier level controls. Has automatic substitution carrier (switched by solid state devices) with variable sensitivity and sub. carrier level control. Crystal controlled input and output mixer/oscillators together with separate

audio and video IF's provide the ultimate in adjacent channel rejection. Extremely efficient A.G.C., using horizontal sync. Tip reference gives output stability of  $\pm 1/2$  db for 50 db input signal variation per carrier. All controls accessible from front panel. Recommended output level +54 dbmv with input as low as 100 microvolts. Built-in regulated power supply.

### CAS MANUFACTURING CO.

**Transistorized Channel Control** Receives any VHF TV channel (UHF on special order); Eliminates adjacent channel interference; Automatically adjusts both picture and sound levels; Converts input channel down to IF fre-



quencies and up again to any pre-determined VHF output channel; Crystal controlled double conversion when on channel operation. AFC Controlled down conversion and crystal controlled up conversion on off channel operation. Amplifies signals to 60 dbm levels and provides local origination or standby control carriers on both video and sound. Special external tuner provides for duplication switching of local channels. Also supplies base band video and 4.5 MC IF and audio sound. Features modular construction, regulated power supply, front panel controls, 19" rack mounting.

### DAVCO ELECTRONICS CORP.

**12-Channel functional design head-end.** Custom designed head-end completely controls channels 2-6 and 7-13 plus all the FM channels available and closed circuit weather channel. Regulated primary AC power, electronically regulated DC voltages. Built-in remote power supplies for antenna mounted preamplifiers. Hi-Q and band pass filtering for elimination of adjacent channel interference. Equipment is mounted in slanted bench type racks which are bonded together.

### DYNAIR ELECTRONICS

**Head-end modulator systems.** Up to 12 VHF channels for systems fed by microwave and



local weather channel. Proven color capability. Carrier levels independently controlled. Carrier continuously supplied for system AGC. Crystal multiplied direct to channel to eliminate ex-

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## FIRST IN CATV

## HEAD-END EQUIPMENT CHANNEL COMMANDER PROGRAM COMMANDER

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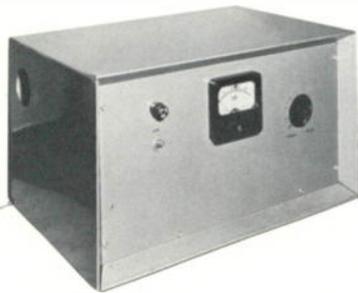
# SKL

## SERIES 7160 LINE SPLITTERS

traneous frequencies. Spare mixer inputs for FM band. Regulated power supplies. Includes cables, filters and mixers.

### JACOBSEN ELECTRONICS

**HP-6 Power Shooter.** High power output amplifier, 4 watts per channel, eliminates the need for amplifiers, other than in the central office for towns up to 5,000 to 6,000 people, when used with low loss cable. Amplifies and mixes channels at high level. Single channel amplification means no failure will lose more than one channel. All other equipment in the system after



this amplifier is passive. Cuts cost of system and practically eliminates maintenance problems on small systems. Trunk lines can be tapped with 50 db taps without requiring expensive double cables, etc. Price \$1200.00.

**HE-99 Pea Shooter.** High power head-end conversion and complete single channel solid-state head-end unit with stabilized output. One watt output drives up to 2 and 1/2 miles of low loss cable on antenna run without additional amplifiers. Virtually trouble free and will operate on standby batteries for long periods in event of power failure at antenna site. Automatic gain control, rigid, 40 db for 2 db output, 30 db for 1 db output variation. Ideal for color, none of the problems involved with demodulation. Converts any VHF channel to any other VHF channel in addition to stabilization and amplification. Complete control of agc and audio level for adjacent channel operation.

### JERROLD ELECTRONICS CORP.

Unitized head-end for completely controlling any VHF channel, Model COM\*. Unit controls signals in such a way that adjacent channels on

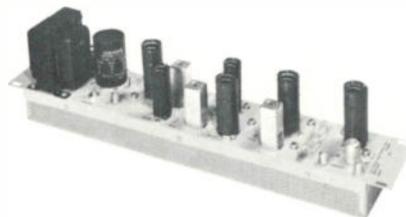
both high and low bands can be fed to a distribution system. Compatible with existing system equipment, the unit may be used to supply an additional VHF channel, to replace obsolete equipment, or as a spare head-end for



any VHF channel. Covers VHF channels 2 to 13. Has IF AGC; automatic frequency control circuitry to keep the tuner "on-the-button"; automatic sound control circuitry to maintain the desired relationship between sound and video carriers. Highly selective IF amplifier incorporates specially-designed traps and filters to eliminate adjacent channel interference. Output of IF amplifier is fed to a crystal-controlled converter for off-channel conversions. When on-channel conversion is desired, the crystal-controlled converter-oscillator is switched out and the tuner oscillator is used. Unit also incorporates a standby carrier oscillator which is energized after a specific time delay to provide a replacement carrier. Has built-in regulating transformer. Stacked multi-channel rack mount provides complete head-end installation at minimum space requirements. Price \$895.00. (Specify channel.)

### TELE-SIGNAL ELECTRONICS LTD.

**FM Channel Governor Model FMG:** This is a sensitive and highly selective crystal controlled dual conversion FM leveler which maintains a constant output regardless of fading of the in-



put signals. Minimum input — 30 dbMV. This is accomplished by special limiting and delayed AGC circuitry. Available for any FM frequency and priced at \$145.00.

**Model FMGD:** This unit is essentially the same as the Model FMG except that the output frequency is crystal controlled at the frequency of your choice. Available for any FM frequency and priced at \$164.00.

## CARRIER GENERATORS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### AMECO, INC.

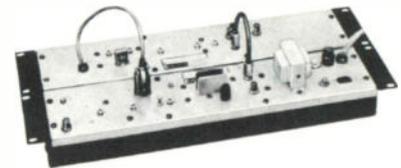
**PCG Pilot Carrier Generator** is a solid-state generator that features low power consumption plus constant level at fixed frequency. Available in standard frequencies of 166.5 and 73.25 mc or frequencies as specified by customer. 117 vac input or 24 vdc.

**RPS-3, RPS-1** rack power supply units RPS-1 and RPS-3 supply plate and filament power for CATV accessories such as FMAT and ATVC converters.

### BLONDER-TONGUE LABS

**Automatic level control, Model 1518.** For use with pilot carrier generator B-T Model 1522 to maintain amplifier output at a constant level (less than 1 db change for a 20 db change in input level). Pilot carrier input level 20 to 40 dbmv. Factory tuned for 73.5 mc pilot carrier; other frequencies on request. CATV: \$210.00.

**Model 1522 Pilot Carrier Generator** generates pilot carrier frequency (must be powered by model 1518 automatic level control). Frequency Range: 72 to 76 MHz, tunable in the field after inserting proper crystal. 73.5 MHz crystal sup-



plied as standard. Frequency Stability:  $\pm 0.005\%$  from  $-20^{\circ}\text{F}$  to  $+140^{\circ}\text{F}$  and 105 to 130 VAC line voltage. Output Level:  $+30$  to  $+50$  dbmv (continuously variable). Recommended output level: 14 db below adjacent picture carriers. Connectors: BTF jacks mate with BTF male connectors—not supplied). Output level: Stable  $\pm 0.75$  db with temperature variations from  $-20^{\circ}\text{F}$  to  $+140^{\circ}\text{F}$  and line voltage variations from 105 to 130 VAC. Output monitor terminal:  $-40$  db. Price \$125.00.

### ENTRON

**G-1 Pilot Carrier Generator:** Insures perfect operation of ALC circuits in solid state trunkline amplifiers. Installs at head-end site following mixer. Trunkline feedthrough — no separate mixing input terminal required. Crystal controlled. Includes output level meter. Price: \$225.00.

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**BUILD  
OR  
REBUILD**

# SKL

## CASCADABILITY

### JERROLD ELECTRONICS CORP.

**Crystal controlled carrier generator, Model CCG-73.5.** Provides constant-level carrier at the system head-end for automatic gain control regulation. Low VSWR. Output constant with plus or minus 11 db for line variations between 90 and 135 volts. Designed for shelf or rack mounting. Plug-in attenuation. Manual gain control. Bridging output. Operating frequency: 73.5 mc. Output: 45 dbmv (65 dbmv on special order). Price \$250.00.

**Carrier generator stand-by unit, Model CGS.** Designed to provide artificial video and sound carriers for a TV distribution system. Crystal controlled carriers. Video carrier modulation control. Accessory function switches. Triggered on and off by horizontal sync pulses only. 30 second, built-in, time delay. Output: above 50 dbmv. Available for channels 2, 4, 6 and sub-channels. Powered by RPS-150B or 150N; WMC-5; RPS-300B or RPS-300N. PNS.

### KAISER-COX CORPORATION

**KCPG Pilot Carrier Generator:** 166.5 MHz transistorized pilot carrier generator. Plus or minus 0.05% stability, +55 dbmr maximum output level, 20 db variable output control, 19" rack panel mtg., 3½" high. Provision for injecting the pilot carrier into the system is provided.

### SPENCER-KENNEDY LABS

**Pilot carrier generator, Model 448.** Used at head-end to provide pilot carrier signal for system level control. Fixed frequencies, 31.75 mc, 34 mc, 74.25 mc, 77 mc, 182.25 mc. Mounts on Model 452 power supply. Variable output from 35 to 40 dbmv. Net \$175.00 (Add \$200.00 for voltage stabilized power supply.)

## CONVERTERS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### AMECO, INC.

**ATVC converters,** low noise, efficient signal gain operation, ¼ db frequency response, 6 mc bandwidth. Bracket-mounting. Optional power supply available. Price \$125.00.

# JERROLD

## FIRST IN CATV

### HEAD-END EQUIPMENT CHANNEL COMMANDER PROGRAM COMMANDER

CATV Systems Division  
JERROLD ELECTRONICS CORPORATION  
401 Walnut St., Phila., Pa.

### BENCO

**VHF to VHF, Model COPM.** Functions as lo or hi to lo converter for MATV. 4.5 mc bandwidth; has self-contained power supply. 75 ohms. Flat response within 0.5 db. 117 volt power.

**VHF to VHF converter, Model CO-2.** Crystal-controlled unit with self-contained power supply. Operates on any VHF television channel and provides flat response (4.5 mc) within 0.5 db. Gain varies between 0 and 6 db.

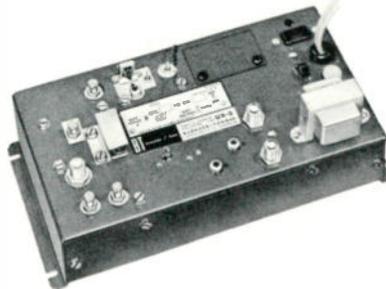
**UHF to VHF converter, Model CO-3.** Crystal controlled unit with 7-9 db noise figure and self-contained power supply. 75 ohms in and out.



Frequency response is 4.5 mc flat within 0.75 db. Gain is 3 db. Power requirements is 117 volts. Incorporates built-in preamplifier with ceramic triode.

### BLONDER-TONGUE

**UX-3 crystal-controlled solid-state UHF-to-VHF amplified converter,** to use where frequency accuracy and freedom from drift are required. Each UX-3 is designed for a specific conversion (example: to convert UHF channel 45 to VHF channel 7, order UX-3 45 to 7). A UX-3 is available for any UHF-to-VHF conversion, except for impossible conversions. Gain: 4-13 db, depending upon conversion. Bandpass: ch. 2-6: 6 MHz  $\pm 1/2$  db; ch. 7-13:  $\pm 3/4$  db. Noise figure: 9-15



db, depending upon conversion. Impedances: 75-ohm input and output; bridging outputs. Connectors: BTF jacks; mate with Blonder-Tongue BTF male connectors (supplied). Price \$165.00.

**VHF low to VHF low converter crystal-controlled, Model MLC.** Converts specified low channels (2-6). Gain: 20 to 40 db depending upon conversion. Stability (oscillator) .005%, 0 to 110 degrees F. 75 ohm input, two mixing 75 ohm outputs. CATV: \$308.00.

**VHF hi to VHF low converter, crystal-controlled, Model MVC.** Converts specified VHF hi channel (7-13) to specified VHF low channel (2-6). Oscillator stability .005%, 0 to 110 degrees F. 75 ohm input and two 75 ohm mixing outputs. CATV: \$265.00.

**UHF to VHF converter, crystal controlled, Model MUC.** Converts specified UHF channel to specified VHF channel. Gain: 15 to 30 db depending upon conversion. Stability .005% over temperature range of 0 to 110 degrees F. 300 ohm input and two 75 ohm mixing outputs. CATV: \$242.00.

**UHF to VHF converter, Model UC-3.** High stability, solid state converter, L-C type oscillator. Built-in regulated power supply. Two 75 ohm mixing outputs. Gain: 4-13 db, depending on conversion. CATV: \$125.00.

### CAS MFG. CO.

**Converter, Model 58-FMC.** Converts 5.8 mc sig-

nal from microwave equipment to standard FM signal. 19" rack mounting and self-contained power supply. Net: \$160.00.

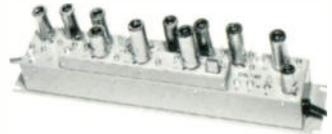
### DAVCO ELECTRONICS CORP.

Distributor of Entron crystal controlled CLH-D low to high converter and CHL-D high to low converter, and UHF converters. Write for specifications.

### ENTRON, INC.

**CV UHF-VHF Converter:** Mast mounted UHF-VHF converter provides best dynamic range and lowest noise figure. Crystal controlled oscillator. Temperature stabilized zener diode regulated power supply. Weatherproof ceramic planer triode. Power fed directly or from remote power transformer. Price: \$725.00.

**High VHF to low VHF converter, Model CHL-D.** Converts any high band channel to any low band channel. Utilizes ALC system referenced to video carrier and a sound carrier level control.



ALC will maintain output within plus 0.5 db for input variations of 10 db. Crystal controlled oscillator. 10,000 hour tubes. Gain: 60 db. Stability: plus or minus .005%. Price \$350.00.

**C Series Double Converter System.** Transmit end—C-100 down until accepts tuner 10.7 MHz IF signal, converts to any pre-selected frequency between 6 and 7 MHz for microwave subcarrier transmission. Receive end—C series up unit converts subcarrier to pre-selected FM channel (1-26) in the 88 to 108 MHz band, to be combined with signals from other converters at head-end site. Price: C series up—\$495.00, C-100 series down—\$450.00.

### JERROLD ELECTRONICS CORP.

**UHF to VHF single channel crystal controlled converters, Model 503 HZ.** Hi-Q, cavity tuned, mast-mounted head and remote tube oscillator for weak signal areas. Features mast-mounted VHF preamplifier (5-7 db gain). Typical noise figure is 10. Price \$245.70.

**Hi-VHF to sub-VHF converter/amplifier Model HSC-713A.** Three-module unit incorporating a regulated power supply. Converts VHF channels (7-13) to sub-channels T7-T13 with a minimum gain of 23 db at sub-channel T-13. Built-in equalizer compensates for 36 db of cable at 48 mc. Minimum full-gain noise figure is 22 db. Second-order beat product is—60 db for 2 channels at 52 dbmv output, referenced to sub-channel T13. Provides for extra-long cable runs with a minimum number of re-amplifiers between head-end and distribution system network. Price \$1195.00.

**VHF to VHF converter, crystal controlled, Model WCON.** Conversion gain from unity to plus 3 db. Stability: .005%. Input and output 75 ohms. Self-contained. Regulated power supply. Most conversions available. PNS.

**Model 504 ST.** All transistorized, for weak signal areas. Either mast or indoor mounting. Same characteristics as 503 HZ. Supplied with 20 vac remote power supply. Price \$294.00.

**Model 503 HY.** Similar to Model 503 HZ; for local signal areas. (Does not include preamplifier.) PNS.

**Model 504 SS.** All Transistorized for local signal areas. Same characteristics as 503 HY. PNS.

### SPENCER-KENNEDY LABS

**Channel converter, Model 466.** VHF to VHF for composite television signal conversion. .3 db maximum gain; flat response within 1.0 db over 6 mc bandwidth. 75 ohms in and out.

# Pruzan Same-Day Service will make money for you.

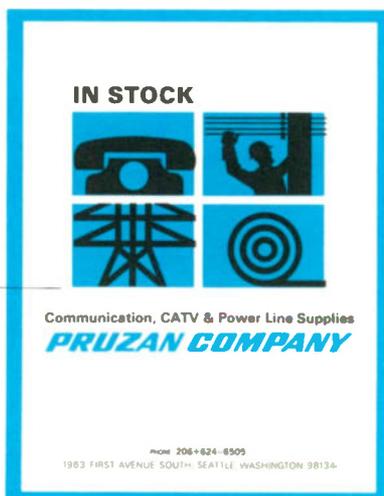


Yes, we said, "make money," not just save you money. Savings are switched on immediately by Pruzan's competitive prices on all items used in CATV construction. You make money with Pruzan's ability to help you on your system design and overall planning. You order only the materials you need (not more)—you receive them when you need them (not late). Your crews won't be held up, whatever their requirements may be. And here's the biggest money maker. Your subscribers will be connected on time—revenues will start immediately.

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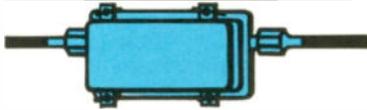
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# What does Pruzan Company supply? What you need to build and maintain a CATV system.



**COAXIAL CABLE**—From Phelps Dodge, developer of Foamtux and Helical Membrane aluminum-sheathed CATV cables, stocked in warehouses strategically located throughout the country. Also, RG-59U, plain and messengered, for your house drops.



**ELECTRONIC EQUIPMENT**—Amplifiers, taps, matching transformers and test equipment manufactured by the industry leaders.



**FITTINGS**—The complete Gilbert Engineering "Diamond G" line of coaxial cable connectors and fittings.



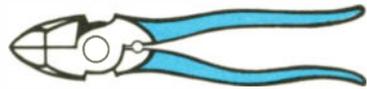
**STRAND**—Galvanized strand and wire available for immediate shipment to any part of the country. Alum-O-Weld and Copperweld strand and wire in stock, also.



**POLE LINE HARDWARE**—The nuts and bolts, clamps and fittings, anchoring and grounding materials required for aerial construction and house drops.



**LASHING WIRE**—The industry standard, .045 stainless steel lashing wire, or any special type you may require.



**TOOLS**—Whatever your men need to do their jobs properly; hand tools, lashers, hoists, ladders, power tools, everything!



**SAFETY EQUIPMENT**—The finest in linemen's equipment, warning signs and equipment, first aid kits, gloves, whatever you need for safe working conditions.



**SPLICING MATERIALS**—Electrical tapes, adhesives, epoxy, resin and silicon compounds, Sigmaform heat-shrinkable splice covers, waterproofing materials of all kinds.



**UNDERGROUND MATERIALS**—Conduit, pedestals, enclosures and underground splicing materials of all types.

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## DEMODULATORS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### AMECO, INC.

**AV-12E** receiver demodulator, designed for use with either of two kinds of plug-in units; type CU crystal controlled for any single VHF channel; or type SU-213, a 12-channel turret type tuner. Price without CU \$270. MCU control unit \$135.

### ASTEROID CORPORATION

**Model 300-X** Video Demodulator. This crystal controlled unit is used to monitor the operation and quality of any particular channel. Monitors passing color, audio, video voltmeter, com-



posite signal and other important features. All solid state, stability, versatility and reliability. First to display picture or waveforms in one unit. Price \$1,400, Model 301-T (Tunable) \$1,480.

### CAS MFG. CO.

**Demodulator**, Modified Conrac AV 12 E. Converts complete TV channel to video and 4.5mc sound. With all-channel tuner. Net \$320.00. With Crystal controlled tuner, Net \$395.00.

### CONRAC DIV.

**Demodulator, AV12E**. Designed for monitoring, video recording or rebroadcasting applications. Supplies composite video and separate audio from "off-the-air" signals. Uses high-gain keyed AGC system to hold the video output constant within plus or minus 1 db over a 60 db change in input signal. Especially suited for reception of NTSC color signals. Video bandwidth is flat within plus or minus 1 db to 4.1 mc.

### DYNAIR ELECTRONICS, INC.

**Model AS-1A** tube-type aural separator, provides method of separating video and 4.5 mc

aural signals used in microwave link systems. 4.5 mc aural gain adjustable -2 to +10 db. Price \$120.00.

### JERROLD ELECTRONICS CORP.

**Demodulator, Model TD**. Designed for CATV head ends; demodulator for TV microwave; off-the-air reception of TV broadcasts. Has all-channel tuner with lock-in oscillator feature (optional). Unit has high-Q co-channel traps. High rejection to adjacent carriers. Automatic or manual gain controls. Noise suppression circuit. Video attenuator in output allows maximum of 21 db of attenuation in 3 db steps. PNS.

## MODULATORS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### AMECO, INC.

**FMAT-1** modulator, provides local or remote control for selection of audio. No separate power supply required. 75 microseconds and pre-emphasis provided.

**AT55-11 Ameco-Tran solid-state 11 modulator**, power consumption 15 wats, output levels are continuously variable. Price \$970.00.

**AT-2 Ameco-Tran modulator**, crystal controlled frequencies, maintains high output RF level for system input.

### ASTEROID CORPORATION

**Model 202** Video Loss Detector. Automatically senses loss of either sound and/or picture. Has contact closure outputs for control triggering.



Time and level adjustable. All Solid State, Crystal controlled, automatic, locally or remotely controlled. Price \$520.00. Model 202 T (TUNABLE 2-13) \$575.00.

### BENCO

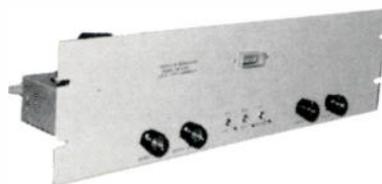
**KCA-FM** processing unit; selective low-noise input (200 kc bandwidth) crystal controlled conversions to 10.7 mc IF and back to FM; 80 db maximum gain.

### BLONDER-TONGUE

**TV sound originator, Audio Master**. Originates TV signal for any specified VHF channel. Provides crystal controlled unmodulated video carrier plus sound carrier which may be modulated by any audio source. Audio carrier is 4.5 mc above video frequency (TV standards). Two 75 ohm mixing outputs. CATV: \$171.00.

### CATEL CATV CO.

**FM modulator and a Stereo Multiplex modulator** for use in CATV systems. Both units are com-



pletely transistorized and crystal controlled with built in modulation meter. Rack mounted with self contained power supply, they are priced at \$250 and \$350.

### CAS MFG. CO.

**Sound modulator, Model M-58**. Produces 5.8 mc, AFC controlled, FM carrier from various audio sources such as tape, tuner, mike, etc. 19" rack mounting and self-contained power supply. Useful for feeding microwave system. Prices from CAS.

**Video modulator, Model TVM**. Input: video and 4.5 mc audio. Output: composite TV channel with sound channel (max. video, 55 dbm; Max. audio, 40 dbm. Output impedance. 75 ohm. 4 tubes and self-contained power supply. Vestigial sideband filter and RF amplifiers. Low band RF output.

**Stereo FM and tape converter**. Consists of two basic units, the FM-107 and 107-FMC. Will handle up to 4 channels. Rack mounted with self-contained power supply.

**FM modulator, Model M-45**. Supplies AFC controlled 4.5 mc, FM carrier. Audio input: Mike, tape, etc. M-45 produces TV sound in conjunction with TVM. 19" rack mounting with self-contained power supply.

**FM modulator, Model M-107**. Supplies AFC controlled 10.7 mc FM carrier. Audio input: Mike, tape, etc. M-107 produces FM sound in conjunction with 107-FMC. Rack mounting with self-contained power supply.

### DAVCO ELECTRONICS CORP.

Distributor of Dynair and Entron modulators. Write for specific information.

### DYNAIR ELECTRONICS

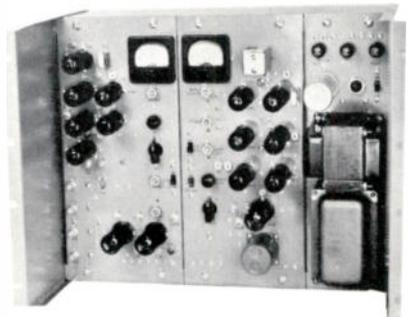
**Head-end modulator systems**. Up to 12 VHF channels for systems fed by microwave and local weather channel. Proven color capability. Carrier levels independently controlled. Carrier continuously supplied for system AGC. Crystal multiplied direct to channel to eliminate extraneous frequencies. Spare mixer inputs for FM band. Regulated power supplies. Includes cables, filters and mixers.

**Model TX-4A** solid-state audio/video modulator. Converts audio and video to standard TV signal on any single TV (VHF) channel. Also available for sub-lowband operation. Price \$850.00.

**Model TX-1B** audio/video modulator. Converts audio and video to standard television signal on any single TV (VHF) channel. Also available for sub-lowband operation. Price \$750.00.

### ENTRON

**Television transmitter, Model TVT-5000**. For use with microwave systems to provide low band modulated video and audio carriers suitable to



feed to a coaxial line. Input to the video section may be from a TV camera or from a broadcast signal which has passed thru a demodulator. Audio input for suitable audio signal. Maximum RF output: 9 volts (video), 6 volts (aural). Output may be fed to a coaxial line for closed-circuit applications also. Ultra-stable RF carriers. Audio input: 600 ohms. Video input: 75 ohms. Price: \$1,320.00.

**FM transmitter, Model FMT-1100**. Accommodates multiplex or monaural audio input. FM RF output. Standard 75 usec. pre-emphasis. Factory aligned to any one of 28 FM channels. Maxi-

# JERROLD

## FIRST IN CATV

### HEAD-END EQUIPMENT CHANNEL COMMANDER PROGRAM COMMANDER

CATV Systems Division  
**JERROLD ELECTRONICS CORPORATION**  
401 Walnut St., Phila., Pa.

For Plus Performance  
SURE GRIP CONNECTOR



by craftsman

mum output level: 0.2 volts. Level control range: 25db. Stereo channel separation: 35 db. Hum and noise: down 55 db at 75 kc deviation. 10,000 hour tubes. Price \$299.50.

**JERROLD ELECTRONICS CORP.**

**Model AFM-2** is designed to provide FM signal (88-10 mc) and RF carrier frequency (specified by system operator.) Audio, or standard 10.7 mc IF from an FM tuner such as Jerrold Model AFT-2000 can be used as source of modulation. With 10.7 mc input, AFM-2 has a min. full gain of 55 dbj (dual output), max. noise and hum at full gain at least 40 db below full of signal, and max. audio distortion at full gain of 1.5%. Price \$215.00.

**Modulator, Model AT.** Designed for hotels, motor courts, hospitals, apartments, schools, etc. Provides on unmodulated crystal controlled video carrier and an FM sound carrier which is held at 4.5 mc separation from the video carrier. Output on any VHF TV channel (specify). Uses any suitable sound source such as AFT-2000 tuner, etc. RF output: up to 55 dbj, each carrier, separately controlled, at 75 ohms, at each of two terminals. Spurious signals: down to 50 db. Built-in power supply. Standard pre-emphasis. \$204.75.

**Video-Audio separator, Model TVA.** Auxiliary unit for the TM unit. Permits sound duplexing when operating the Model TM with microwave equipment. Unit receives the microwave output signal and separates the video and 4.5 mc sound components, restores the sound level to equal that of the video, and supplies both signals to the Model TM. Gain: 20 db. Price \$65.00.

**Industrial television modulator, Model TM.** Provides standard vesigal sideband transmission of any sub-VHF or VHF channel for both black-and-white and NTSC color. Accepts standard 1 v p-p, black negative, video signals from cameras, microwave terminals or demodulator. (See Model TD, demodulator.) 75 ohm video and audio input. Visual carrier stability: .005%. Modulation variable from 0 to 100% (visual). Response: 30 cps to 4 mc, within .5 db. Rack mounting. Regulated power supply. Audio input: 1 v p-p (4.5 mc). Aural carrier modulation capability is plus or minus 25 kc when used with the accessory FM modulator, Model TAM. Output level: 57 db above 1 millivolt across 75 ohms (visual) and 51 db above 1 millivolt across 75 ohms (aural). Prices: TM-2 thru 6, \$590.00; TM-7 thru 13, \$715.00; TM-7 thru TM-T13, \$715.00.

**JERROLD**

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**HEAD-END EQUIPMENT  
CHANNEL COMMANDER  
PROGRAM COMMANDER**

CATV Systems Division  
**JERROLD ELECTRONICS CORPORATION**  
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**FM Modulator, Model TAM.** Auxiliary unit for the TM unit. Converts any audio source into 4.5 mc FM signal. Output level: 3 v p-p across 75 ohms. High input. 75 usec. pre-emphasis. Deviation: plus or minus 25 kc. Price \$195.00.

**TUNERS**

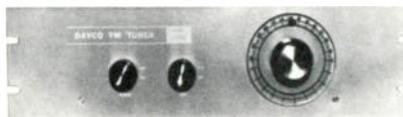
See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

**AMECO, INC.**

**FM350D** FM tuner manufactured by Scott and distributed by Ameco; features multiplex tuner with auto-sensor circuitry and tuning indicator. Rack mount available.

**DAVCO ELECTRONICS CORP.**

**Model 1200 FM tuner.** Rack mounted model 1200 is designed for continuous operation 24 hours a day. Tunable 88 to 108 mc, receiver



may be changed to a fixed frequency crystal controlled receiver. Crystal is custom-made for FM station frequency. Net price: \$74.50.

**Newcomb Models AM-500-875G AM and AFM-750-875G FM.** Rack mounted tuners also carried in stock at Davco. Write for information.

**DYNAIR ELECTRONICS, INC.**

**RX-4A solid-state tuner** for CATV headend systems provides separate video, aural and 4.5 mc aural signals. Also available as a test instrument on headend systems.

**JERROLD ELECTRONICS CORP.**

**AM/FM tuner, Model AFT-2000.** Designed to operate in conjunction with Model AT modulator. FM section has 3.2 uv sensitivity with



frequency response of 15-15,000 cps within 1 db. Incorporates gated beam limited. AM section has 10 kc bandwidth. Self-contained power supply. Price \$197.25.

**SPLITTING & MIXING NETWORKS**

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

**AMECO, INC.**

**Broadband combining networks** Model CN-10, price \$75.00. Model CN-12, price \$85.00. Model CN-16, price \$95.00.

**ANACONDA ASTRODATA CO.**

**Head End-Control Center, Model 701:** 16 channel combining network with Pilot Generator operating at 220Mc, system equalizer, power inserter, monitoring facilities, master level control

and metering facilities. It has provision for system sweeping, system noise test and high impedance output test point. Equalization 22db full tilt. Optional 18, 22, 25 db halt tilt; 18db full tilt. XTAL controlled, level stabilized pilot generator of any frequency in the range of 50 to 220 mc is optional. Power 117VAC or 36VAC.

**Model 815 (2-Way) & 816 (4-Way) Combiner:** Multiple input, single outputs (or visa versa), wide band, passive splitter/combiners providing excellent impedance matching and isolation between lines. It contains an internal power bypass for cable powered CATV systems and is enclosed in a weatherproof housing.

**BENCO**

**Model CM-2-75, all-channel and single channel combining network.** 75 ohm. Insertion loss is 1.5 db (lo-band); 2 db (hi-band). Isolation is 14-20 db.

**Model CM-2-75/FM.** Same as Model CM-2-75 except for FM and all TV channels.

**UNIMIX, combining or splitting network.** To combine or split 3 lo-band and 4 hi-band (non-adjacent) TV channels. Also equalizes with use of LAT attenuators. 75 ohm. 1.5 db maximum insertion loss on any single channel. Can substitute FM for channel 6 on request.

**BLONDER-TONGUE**

**MSVM 75-ohm VHF/Sub-Channel Duplexer** High-performance filter designed to combine or separate sub-channel (DC-48 MHz) and VHF (54-216 MHz) signals may also be used to separate



or duplex audio or AM signals and VHF signals. Bandpass: VHF, 54-216 MHz; sub-channel. DC-48 MHz. Isolation: VHF and DC-47 MHz, 40 db min; 48 MHz, 30 db min. Insertion loss: 0.5 db max., 57-216 MHz and DC-43 MHz; 1.3 db max. @ 54 MHz and 47 MHz; 2.0 db @ 48 MHz. VSWR (both directions): DC-47 MHz, 54-216 MHz, 1.27 max.; 1.50 max. @ 48 MHz.

**MLHM High/Low Band VHF Multiplexer:** The MLHM, (model 3396) is a high/low band VHF signal splitter/mixer. Mixes low-band VHF (including FM) and high-band VHF signals into a single output. Will also separate these signals. Impedance: 75 ohms. Match (at all terminals): 20 db return loss (VSWR, 1.2). Bandpass: "combined" connector, 54-220 MHz; low band, 54-108 MHz; high band, 174-220 MHz. Insertion loss: 0.5 db/band, max. Isolation: 20 db min.

**MX Series—MX2 thru 13.** Bandpass filters pretuned to one of 13 TV channels. Used either separately or with MX mixing bases to form mixers or splitters. 75 ohm input and output. At least 6 db down 9 mc from center of channel. CATV: \$6.40.

**MX-HB** Hi band mixing base mounts up to 4 hi band filters. CATV: \$12.70.

**MX-LB.** Lo band mixing base for mounting MX series filters. Accommodates up to 4 low band filters. Up to two hi band filters can be mixed. CATV: \$12.70.

**MX-FM.** Same type as MX-2-13, pretuned to pass entire FM band. At least 8 db down 12 mc from center of channel. CATV: \$6.40.

**MX-M.** Used to mix or split hi band and low band signals. Can be also used without MX series filters. 20 db minimum isolation between branches. CATV: \$6.90.

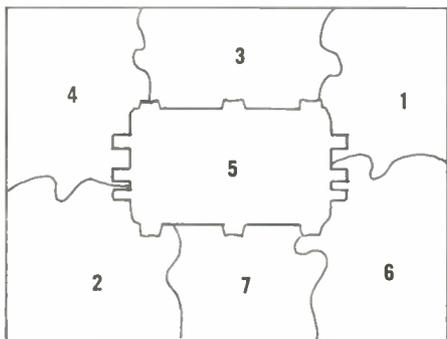
**DAVCO ELECTRONICS CORP.**

Distributor of Entron electronic and passive mixers. Write for literature and specifications.



## Where does Kaiser-Cox fit into your CATV plans?

*Everywhere!*



**KAISER-COX**  
**CATV**

- 1 **Surveys & Estimates** — Feasibility studies, reception surveys, strand maps, pole make-ready studies, system layouts and complete estimates so you will know from the beginning whether your proposed system is practical not only from a technical but also from an economic standpoint.
- 2 **Turnkey System Construction** — Kaiser-Cox will assume full responsibility for the installation of your complete CATV system, right down to the last bolt. The industry's most knowledgeable personnel will relieve you of every detail, including the red-tape and paperwork required by Federal, state and local laws. When it's completed (on time and within budget) we hand you the key and you're in business!
- 3 **Financing** — Kaiser-Cox will work with you on your system financing requirements. Our experienced personnel will help you to procure the best financing possible, custom-tailored for your particular needs.
- 4 **Engineering Assistance** — If you're already in the business, or do not need the complete Turnkey service, we can offer a competent staff of construction supervisors and systems engineers to assist you on a per-job basis. Quotes will be supplied on request.
- 5 **Space-Age Product Technology** — The Kaiser-Cox Phoenician series of CATV amplifiers is the most advanced, most efficient, most copied equipment in the industry today.
- 6 **Research & Development** — A continuing program of product design, testing and field study assures you of the finest most economical products available, end-to-end.
- 7 **Quality Control** — Kaiser-Cox not only conducts exhaustive QC tests on its amplifiers and the separate modules that go into our products — but we also check-out each individual component as it's delivered to us — before it is installed in the equipment! Our standards exceed military specifications because your profits are geared to reliability of service.

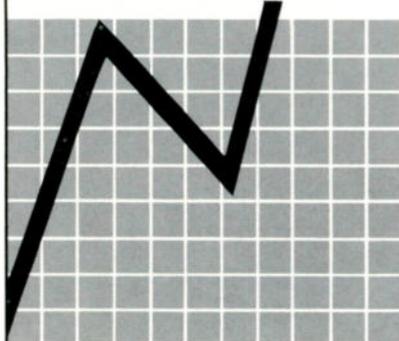
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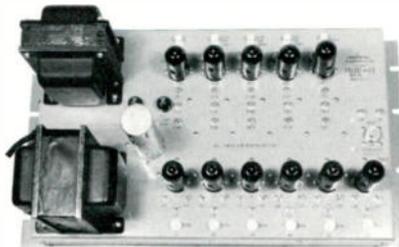


### ENTRON

**Electronic low band mixer, Model MUE-5.** Mixes 5 low band channels. Nominal gain of 9 db. 75 ohm input and output. Maximum output level of 1.0 v per channel. Fits standard 19" rack. Output test points for FSM and TV monitor. Price: \$225.00.

**Electronic high band mixer, Model MUH-4.** Mixes low band signals fed into low VHF input from a suitable low band mixer such as the MUE-5 with 2 FM signals coming into FM outputs of the MUH-4. Low band and FM signals are combined passively with the electronically mixed high band in one composite output. Insertion loss: 2.5 db, low band; 15 db, FM band. Gain: 6 db (high band). Output level each high band channel: plus 57 dbmv. Price: \$200.00.

**Electronic all-band mixer, Model MUE-11-A.** Mixes 1 FM, 4 high band and 5 low band channels. Gain, low band and high band; 6 db (2 db FM). FSM jack and TV monitor test jack.



10,000 hour tubes. Frequency response: plus or minus 0.5 db. Price: \$360.00.

### JERROLD ELECTRONICS CORP.

**Mixing networks, Models AMN-Lo and AMN-Hi.** Low loss mixing network (AMN-Lo) for low VHF channels. Will combine up to three non-adjacent channels from 75 ohm inputs into a single 75 ohm output. AMN-Hi is designed for mixing high TV channels. Low loss and will combine up to four non-adjacent channels from 75 ohm inputs into a single 75 ohm output. PNS.

**Wide-band frequency mixer-splitter, Model FCO-47.** Low loss unit for mixing or separating frequencies in the 0 to 47 mc range from those in the 54 to 220 mc range. Unit features 30 db minimum rejection between these bands with insertion loss of 1 db. 75 ohm impedance. Price \$25.00.

**Cross-over network, LHS-76.** Used to split or mix VHF hi-lo bands. Insertion loss less than .6 db. Band pass; 0 to 110 mc and 170 to 216 mc. Cut-off; 140 IM. 75 ohm impedance. Price \$12.50.

### SPENCER-KENNEDY LABS

**869 combining network,** combines all 12 VHF channels and two pilots into common trunk. High return loss, high isolation between inputs, flat frequency response. Contact manufacturer for information.

### TELE-SIGNAL ELECTRONICS LTD.

**INJ/75 Signal Injector:** Designed to inject a specified television channel into an existing all-band system. A bandstop filter in the all band input attenuates unwanted signals on the same frequency as the injected channel. Specify channel. Price \$6.90.

## TRAP & FILTERS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### AMECO, INC.

**Filters models BP-2 and BP-2R.** Cutoff frequency or frequencies must be specified when ordering. Fittings are UHF or F-61 type.

**High Q trap, Model HQ-2.** Provides 40 db rejection at any frequency from 50 to 220 mc. 1 db insertion loss; 75 ohms. Connectors are UHF of F-61.

### BENCO

**Bridged T trap, Model Hi-Q-75.** Filter network to suppress unwanted TV carriers. Provides minimum of 60 db attenuation of trapped carrier. 75 ohms; 3.5 db (max.) insertion loss.

**Filter Network, Model AN-2-75.** Will combine or separate hi and lo-bands or by-pass lo-bands at hi-band amplifiers. Minimum rejection of stop band is 30 db. 75 ohms. Indoor type.

**Filter Network, Model AN-2-75 SUB.** Will combine or separate TV channels and sub-channels; where sub-channels have to be fed in reverse direction to head-end. Lo pass 3-45 mc; high-pass 54-220 mc. 41 db isolation of stop band. For indoor mounting. 75 ohms.

**Single channel rejection filter, Model BR-75.** Rejects on specified channel 20 db. Use for non-adjacent channel installations. 75 ohms. Insertion loss is 1.5 db maximum. For pole or surface mounting.

**Band pass filter, Model BPF-B.** For lo and high channels. Multi-stage Hi-Q filter plus 2 Hi-Q bridged T traps. Permits in excess of 60 db rejection. Loss for low channel is 4.5 db; 6 db for high.

### BLONDER-TONGUE

**MWT-2.** Low band FM trap. Can be tuned to attenuate any frequency from 54 thru 108 mc. Less than 0.25 db loss. CATV: \$39.00.

**MWT-3.** Hi band trap. Can be tuned to attenuate any frequency from 174 thru 216 mc. Less than 0.25 db loss. CATV: \$39.00.

**RF power-line filter, Model MLFb.** 2 AC outlets for 3 prong plugs. RF isolation greater than 60 db at VHF and UHF frequencies. Rated at 5 amperes. CATV: \$12.15.

### BPF Bandpass Filter

Single-channel filter which contains high-Q 5-stage bandpass filter and two phase-cancellation traps. Traps are normally adjusted to lower adjacent sound and upper adjacent picture carriers, but provisions have been made for touchup in the field. A BPF is available for each VHF channel. Bandpass: BPF 2-6, approx. 5.3 MHz  $\pm$  3/4 db; BPF 7-13, approx. 5.0 MHz  $\pm$  1 db. Attenuation of trapped carriers (cw): 60 db. Adjacent channel rejection with standard traps, BPF 2-6: lower adjacent picture (not trapped); 80 db typical; sound (with trap), 60 db typical (cw); upper adjacent picture (with trap), 60 db typical (cw); sound (not trapped), 75 db typical. Adjacent channel rejection with standard traps, BPF 7-13: lower adjacent picture (not trapped), 38 db typical; sound (with trap), 60 db typical (cw); upper adjacent picture (with trap), 60 db typical (cw); sound (not trapped), 32 db typical. Minimum insertion loss within passband: BPF. Price: \$100.00.

### DAVCO ELECTRONICS CORP.

Distributor of Entron models DBR-26 and HQ. Information and prices sent on request.

## ENTRON

**Tunable filter, Model DBR-26.** Provides two 40 db reject bands, 3.5 mc wide on each side of a channel. Each notch is tuneable over the complete range. As a single notch filter, typical adjustment provides a 25 db, 6 mc notch; a 75



db, 1 mc notch or a 600 kc notch width having 90 db minimum attenuation. Price: \$175.00.

**1000 watt load center, Model LPB-10.** Six rugged outlets. Excellent power line filtering. Shielded to reduce radiation; fully magnetic circuit breaker. Overload/off indicator light visible from front and side. Price: \$42.50.

**Tunable filter, Model HQ.** Provides a means of improving edge-of-band response of broad-band filters or amplifiers. Used to eliminate narrow band co-channel interference caused by spurious signals or beats without affecting picture quality. Phase and attenuation characteristics held to close tolerances. Price: \$70.00.

## JERROLD ELECTRONICS CORP.

**High "Q" bridged "T" traps, Models TLB-1, TFM-1 and THB-1.** Minimum attenuations: 60 db to undesired carriers. Insertion loss: 1 db to desired signals. Tuning range TLB-1, 59.75 to 83.75 mc; TFM-1, 88 to 108 mc; THB-1, 197.75 to 211.25 mc 75 ohm impedance. F-61 fittings. Price \$38.55.

## SPENCER-KENNEDY LABS

**496.** Channel pass filter. Insertion loss: 2.5 db. Rejection of unwanted signals: 40 db. minimum (6 mc from band edge). Flat within 2 db. Wall or rack mounting.

**492A.** Rejection trap. Over 45 db rejection of unwanted carrier. Both pix and sound traps available for all VHF channels. Insertion loss: less than 1 db.

## TELE-SIGNAL ELECTRONICS

**Hi Q/75:** High Q trap engineered for adjacent channel use, this high Q trap provides up to 60 db of attenuation on a specified frequency. Insertion loss less than 15 db at 1.5 mc off. F61 type connectors. Price: \$15.00.

**BSF/75:** Bond-stop filter which provides a flat 30 db attenuation across a 6 mc bandwidth. Not for adjacent high band use. F61 connectors. Specify channel. Price: \$6.90.

## HEAD-END POWER SUPPLIES

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

## BENCO

**TPS-6** Power supply for up to 6 Benpre preamplifiers. Capable of supplying 6 preamplifiers with



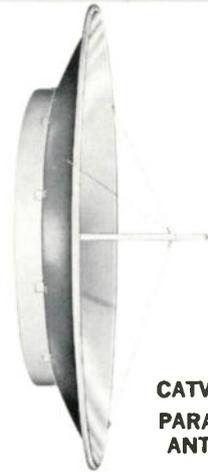
24 VAC. 200 M.A. (max.) each. Individual metered current control and fuse for each output.

CATV Equipment & Services

Gabriel Electronics, for many years — and still — the nation's leading designer and producer of microwave communications antennas for Heavy Duty Common Carrier Systems, now offers a complete line of parabolic antennas and passive reflectors to the CATV industry. Designed for CATV . . . economically priced for CATV!

Gabriel antennas have been engineered specifically for CATV where the basic requirement is for economy with reliability and performance. Electrical performance meets all applicable 6, 11 and 12 GHz requirements . . . and mechanical performance meets or exceeds all applicable E.I.A. standards.

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**TPS-1** Variable output power supply for one Benpre preamplifier; 24 VAC, 175 M.A. max. output.

**BLONDER-TONGUE**

**Power supply, Model 1514.** Supplies -18 volts a 9 ma to power one CMA (or CMA-U) preamplifier or equivalent. Power is duplexed on signal downloads. Uses 75 ohm type connectors. CATV: \$20.00.

**Power supply, Model 1515.** Supplies -20 volts, 100 ma total line and load regulated, for 3 CMA (or CMA-U) preamplifiers, or equivalent. Power is duplexed on signal downloads. Uses 75 ohm type F connectors. CATV: \$80.00.

**Power supply, Model 1516.** Supplies -20 volts, 200 ma total, line and load regulated, for six CMA (or CMA-U) preamplifiers or equivalent. Power is duplexed on signal downloads. Uses 75 ohm type F connectors. CATV: \$192.00.

**DAVCO ELECTRONICS CORP.**

Distributor of Entron model LPB-5 and LPB 10 line filters. Send for specifications and price.

**ENTRON**

**AC line filter, Model LPB-10.** Has 6 AC power outlets. Removes unwanted power line interference and prevents RF feedback from amplifier to power line. Ruggedly constructed. Write for full details. Price: \$42.50.

**JERROLD ELECTRONICS CORP.**

**Model PPS-8A** provides a regulated 24-vac power supply for up to 8 Model TPR preamplifiers. Mounts in standard 19" relay rack. Price: \$155.55.

**Model 405-P** provides a regulated 24-vac power supply for either one Model 401-A or one



Model TPR preamplifier. Shelf or wall-mount. Price: \$25.41.

**RF power line filter, Model ACF-1.** Has 4 AC power outlets. RF attenuation: 60 db minimum, 50 to 250 mc. Maximum load: 1 kw total on all four outlets. Price: \$16.00.

**Model PEP-1000** is a power entrance panel containing an rf filter, 15-amp circuit breaker, and six grounding plug outlets. Price: \$42.50.

**SPENCER-KENNEDY LABS**

**280B Power Supply:** Regulated DC supply for powering up to four SKL/271 Antenna Channel



**Preamplifiers.** Connects directly to download **294 Multiple Power Feed.** Connects to 280B Power Supply and derives four DC outputs for



powering four 271 Antenna Channel Preamplifiers via download cables.

**VIKING INDUSTRIES, INC.**

**Model 949 remote power supply** for single strip amplifiers, is specifically designed for 12 VAC



duplexing on RF cable. Unit features switch calibrated in 25-foot steps of RG-59/U cable for lengths up to 100 feet. Price on request.

**Model 958 RF power filter** is designed to provide

10 ampre service while effectively eliminating RF from AC power lines over the 20-220 mc frequency range. Completely enclosed low-pass filter attenuates RF leakage or spurious line radiation by over 60 db. Four 2-prong outlets; base slots for mounting. Price: \$12.00.

**NON-DUPLICATION SWITCHERS**

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

**ELECTRONIC SYSTEMS DEVELOPMENT**

**TeleSwitch TS 7:** a non-duplication switcher that programs an entire week, 24 hours a day, in 15 minute segments, and provides continual performance and power outage verification at a glance automatically. Timing accuracy: 0.2 second. TeleSwitch can be programmed by anyone by means of "flip-tab" wheels. Flip a tab and you switch out a channel for 15 minutes, for a day, two days, or a week. You can tell at a glance what programs are switched for a full week in advance. Standard 19" rack, 19 1/4" high. Price: \$850.00.

**INTERNATIONAL GOOD MUSIC INC.**

**TELMAS Non-Duplication Switcher:** A modular device permitting automatic switching between a distant channel and a local channel which must be protected. Several models available, each with the number of channels needed for a specific installation. May switch between either 2 channels or any of 3 channels, on 1/2 hour or 1/4 hour intervals. Time base is either 60 Hz AC line, or battery operated clock as option. Remote control system optional. Module provides dry contact for switching. Modular add-on design permits expansion at any time. 19" rack unit mounts on slides. Price: \$1195 up.

**JERROLD ELECTRONICS**

**Program Commander Model PC-6.** Preselected, automatic switching of programs is provided by Jerrold Model PC-6 Program Commander.

Permits pre-setting the programming of six different output events to occur at any half-hour or hour during a one-week period with the switching repeating each week, at the same time, until the program is changed.

The basic model PC-6 provides switching action for each output event which can be adapted to fit various requirements. The unit provides +24 volts dc for activation of external relays for video or rf switching. Internal relay contact provides for B+ (Power Switching) to either of two amplifiers.

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Pictured is the full line of solid-state, all-band amplifiers (8 in all) offered in the great new Kaiser-Cox Phoenician Series. Its modular circuit design permits you to plug-in whatever is needed . . . from trunkline amplifier to 2 and 4-output bridging amplifiers to combinations of both, with or without automatic gain control and tilt. Also, standardized fittings are used throughout the series. This interchangeability saves you money on parts inventory, today . . . saves you money as you convert for expansion, tomorrow!

# A Total CATV Concept: design, engineering, package NOVACOR AMPLIFIERS



Like all C-COR amplifiers, the NOVACOR CATV line is built to last . . . and to perform at maximum efficiency. NOVACOR Bridging and Trunk amplifiers are modular in design, incorporate significantly different, and vastly improved circuitry . . . and deliver 10 db more output than any other CATV amplifier.

#### BRIDGING AMPLIFIERS

- Cast aluminum housing guarantees maximum weather and RF seal, reliability and performance.
- 10 db more output than other CATV amplifiers
- Systems-proven
- Modular in design
- New exclusive circuitry
- Direct feed and directional coupler feed

#### TRUNK AMPLIFIERS

- 10 db more output than other CATV amplifiers
- Low noise figure . . . 8 db
- Fully ALC'd
- Choice of 3 models for efficient cascading contributes to reduced investment cost
- Temperature compensated
- Cable powered

Before you build or rebuild, call or write C-COR.



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#### TAP UNITS

NOVACOR Tap Units, a hybrid design for flattest response, are housed in a cast aluminum case, and come with pedestal mountings (TU) or messenger mountings (TM). These units feature true impedance match on service drops.

#### SPLITTERS

All NOVACOR Splitters are weather sealed with epoxy for long lasting, trouble-free performance. They feature a universal mounting for messenger or surface by use of a throw-away stud and messenger clamp assembly.

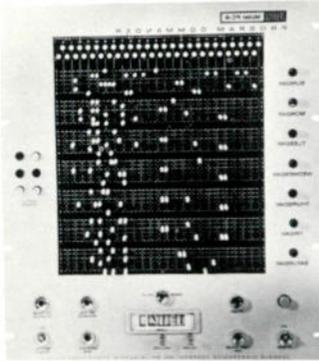
#### POWER SUPPLY

The PS-30 Power Supply is housed in a weather-proof aluminum case. Power feed and distribution is made through the connectors on the bottom of the case.

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TV  
Systems  
by **craftsman**



Insertion or removal of a program pin provides change of program output. Pilot lamps provide checking of program output status for any given time during the week. Price: \$2,175.00.

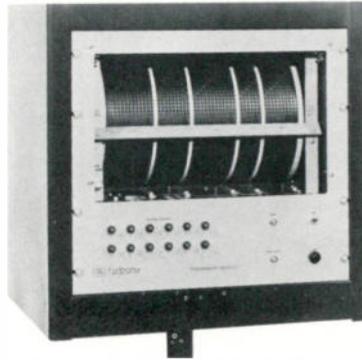


**IF Switcher, Model IFS:** Designed to implement commands from the Program Commander, model IFS is compatible with any programming equipment with a plus 24 volt dc output. Unit uses six single-pole, double-throw coaxial relays. Price: \$495.00.

**Divide Pin Model DP-6:** Used with Program Commander. Price: \$1.35.

### TELEMATION, INC.

**TMP-205 non-duplication switcher:** Automatic programmer-switcher that can simultaneously program up to 24 input channels and 12 output



channels for deletion or restoration to any selected minute throughout the week. A full week's television schedule, including event time and switching functions, can be programmed and stored in a rotating drum, using inexpensive rubber plugs to accomplish programming. Magnetic memory prevents release of switches during power line fluctuations or emergency editing. Optional automatic stand-by power insures timing accuracy even during a power failure. Simple visual readout of all programming events indicates status. Electro-optional system in the program mechanism completely avoids metallic contact. Price: \$2795.

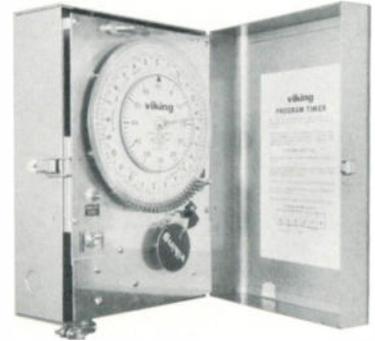
### VIKING

**5906 Progomat** is a CATV program timer designed to provide precise switching operations at pre-determined intervals over a 24 hour period.

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Up to 288 switching operations may be performed at any 5 minute interval of a 24 hour schedule. The timer signal cycles a latching delay actuated single pole double throw switch which may be utilized to initiate other switching functions. Small brass spring clips are easily inserted in numbered slots on the program dial. These clips select the times when the signal is to occur, while the actual operation is ac-



curately controlled by a set of cams operating micro switches. Unit is synchronous motor driven for split second accuracy. All adjustments are made on front of timer. Can remotely control wire system.

## FROM HEAD END TO MATCHING TRANSFORMER **BENCO HAS IT!**

Reliable, quality CATV equipment? Benco has it! Fast delivery? Benco now has it! Yes—standard items from stock. United States service? Now established at 724 Bugbee Street, Jacksonville. Yes, Benco has it all, and there's more to come.

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### CANADA: BENCO TELEVISION ASSOCIATES

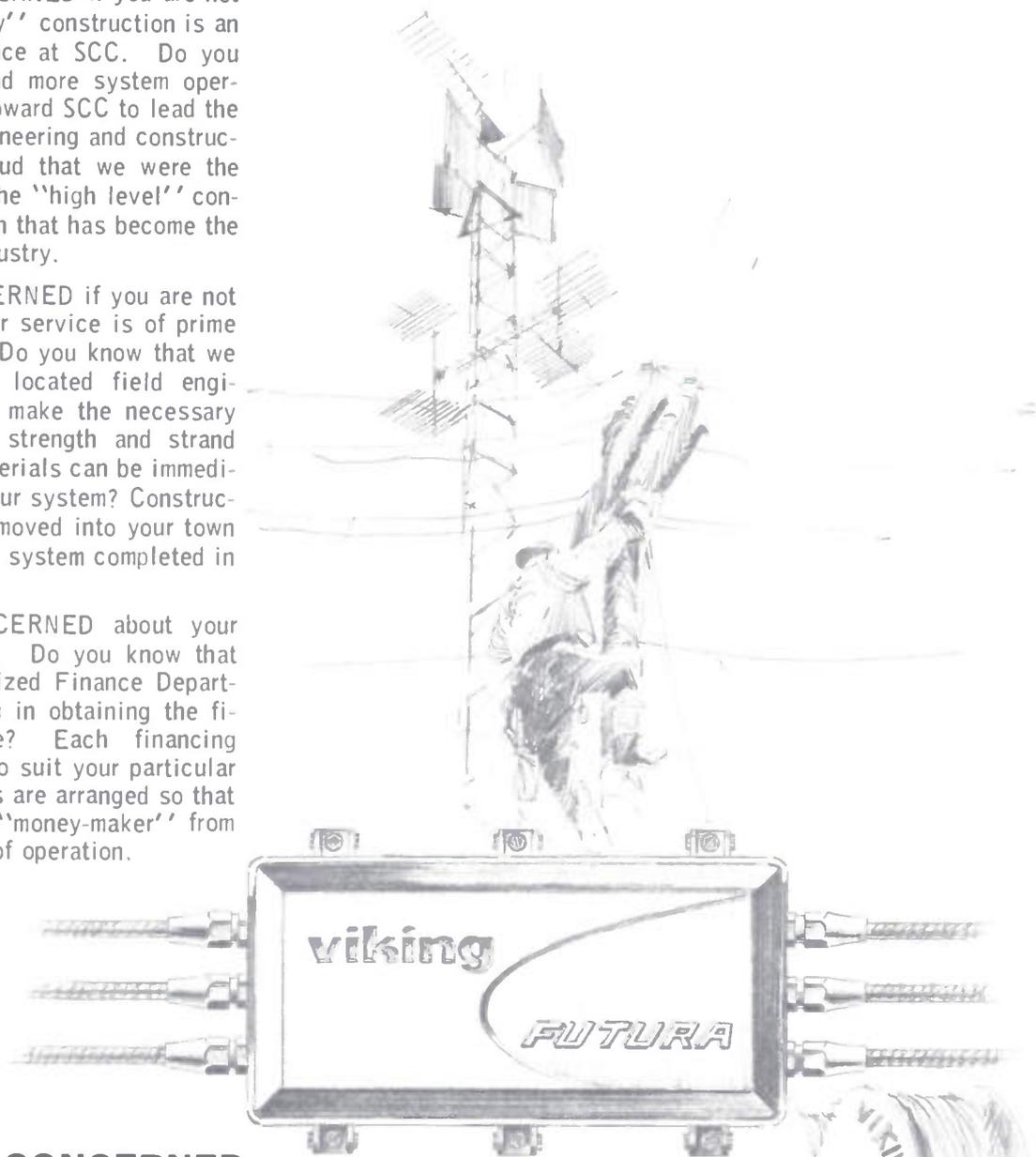
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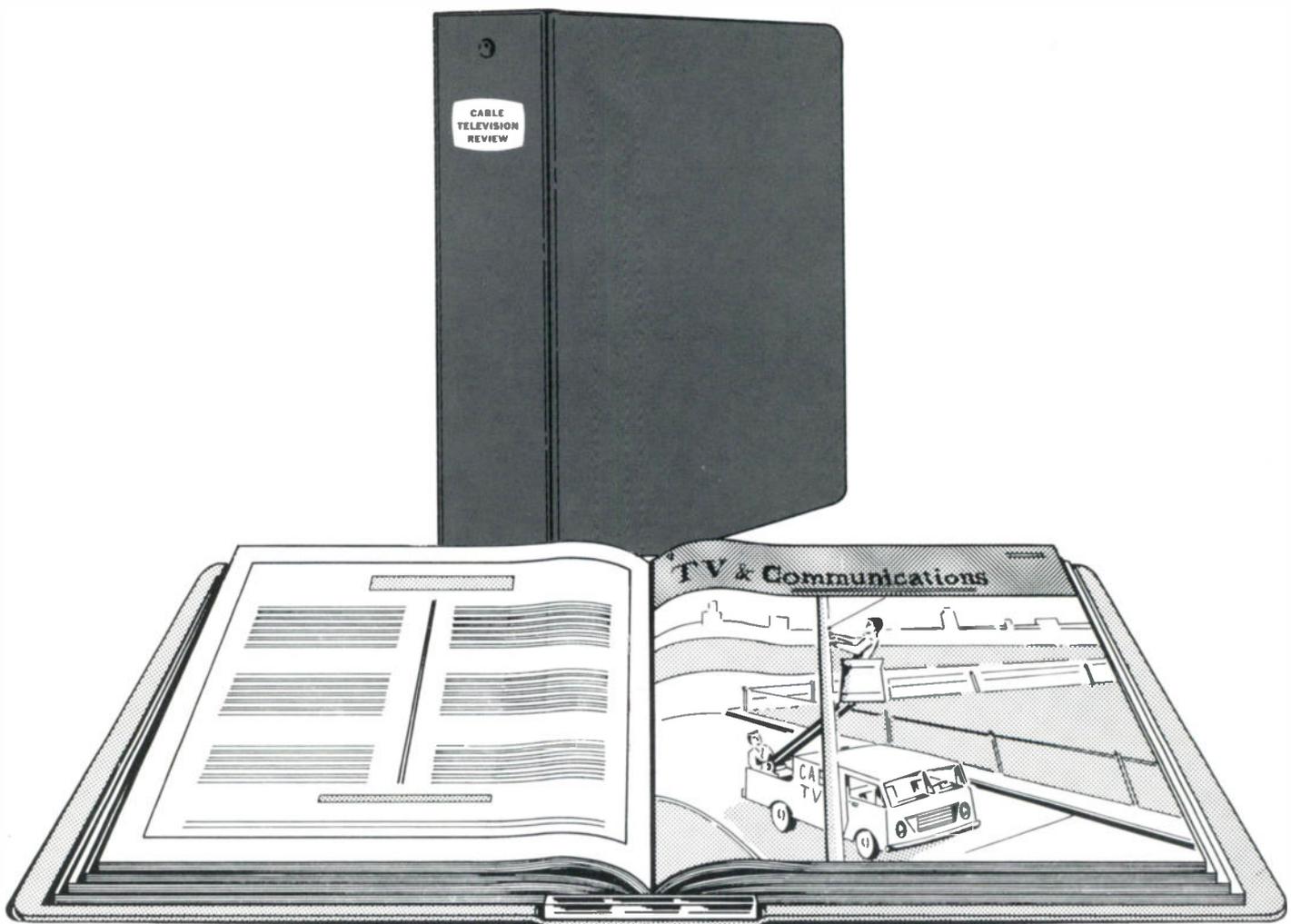
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# DISTRIBUTION EQUIPMENT

The following section includes product listings for electronic components used in CATV distribution plants. (Transmission lines, connectors and fittings are listed in a separate section of this Directory.) Listings marked with an asterisk (\*) indicate that new information was not supplied by the manufacturer for that listing.

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## AGC UNITS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### BENCO

BB-ALC automatic level control. External unit for use with Benco models BB-500 and BB-900



broadband amplifiers. Holds output within 1 db for 10 db input change.

### BLONDER-TONGUE

Automatic gain control, Model MAC-FM. For use with any broadband VHF/FM amplifier having more than 16 db gain and producing an output between 0.6 volts and 2.5 volts per band. It will maintain the output at a constant level (less than 1 db change in output level for a 10 db change in input). In addition to providing AGC, the MAC-FM can deliver up to 10 db additional gain. CATV: \$155.00.

Courier solid-state pilot carrier AGC-controlled trunkline amplifier. The Courier is a low-noise high-output broadband trunkline amplifier. Its



variable gain and tilt controls enable accommodation of all commonly used types and lengths of cable. The pilot carrier system en-

ables accurate control of system gain, despite wide temperature variations. Internal jumpers permit duplexed powering of the unit from either end, as well as power feed-thru or stop. Bandpass: 50-220 MHz  $\pm 1/3$  db. Noise figure: 9 db. Tilt control range: 0-8 db continuous (cable length at channel 13); 21 db fixed, switchable. Gain: 29 db min., at full gain setting. Operating gain: 27 db at 70°F. Gain control range: MAN position, 0-18 db continuous; AGC position—0, 4, 8 db switch. AGC stiffness: within AGC range, a  $\pm 4$  db input change will give a  $\pm 0.4$  db (maximum) output change (stiffness ratio 10 db minimum). Price: \$360.00.

### JERROLD ELECTRONICS CORP.

Automatic gain control, Model AGC-213. Designed to operate with Super Cascader, Model SCA-213. Gain control voltage is derived from constant carrier located at the head-end site. Unit stabilizes and maintains sign levels throughout the system to correct minor variations in system levels due to tube aging, temperature changes etc. Provides only 1/2 db variation in output level with input change of 5 db. Has input level control and AGC level control. Price: \$125.00.

Model TAGC-213 is designed specifically for use with solid-state trunk line amplifiers Model TML-1, from which it obtains a nominal 24 vac operating voltage. The unit receives its pilot carrier signal of 73.5 mc from a crystal-controlled carrier generator (Model CCG-73.5) at the head-end and automatically compensates for carrier level fluctuations over a range of 8 db from +5 db to -3 db by keeping output level variations constant within  $\pm 0.5$  db. The power



bridging circuit is capable of passing a-c and d-c for powering bridging amplifiers Model TBA-1 and line extender amplifiers Model TLE-1. A built-in regulated power supply transforms the 20-30 vac input to -17 volts db for operating the solid-state circuitry. The unit is fully shielded in a metal housing and shipped with mounting brackets for installation in 19" relay racks. Normal system requirements are for one TAGC-213

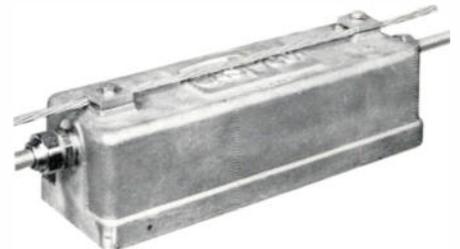
recommended at every third amplifier location, preferably at the master power supply location. Price: \$165.00.

## LOWBAND TRUNK AMPLIFIERS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### CAS MFG. CO.

TR-108 line powered 28 db silicon transistor line amplifier, low noise and practical output capa-



bility of 40 db with at least 6 db reserve. Heavy duty all-weather cast aluminum housing. Price on request.

### JERROLD ELECTRONICS CORP.

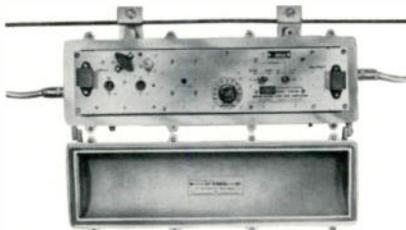
Low band amplifier, Model AOC-26B. Has automatic overload control. Covers channels 2-6 and FM. 75 ohm input and output. Gain: 32 db at Channel 6. Output: 46 dbj for 1 AOC-26B at IML of -57 db. Noise figure: 9 db. Manual gain control adjustable over 10 db range. Plug-in pads for additional gain reduction. Can be used in-line for line-bridging applications. Built-in power supply. Uses P.I.P. or B.T.C. pads. Price \$245.00.

Solid-state amplifier Model TISA-510 is designed for high cascading in long-haul transportation of low and sub-channel signals. The amplifier features 12-channel capability, a frequency range from 5 to 95 mc, a minimum full gain of 35 db at 95 mc, output capability of 48 dmo for each of 12 channels, second order beat down 55 db at 60 dbmo output, and a maxi-

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mum noise figure 9 db at full gain. Cable-powered through either its input or output terminal, the amplifier has AC bypass circuitry. Designed as a plug-in module for its cast metal housing to facilitate installation and maintenance.



Housings are supplied having such apertures as are necessary to accommodate the type of fittings required for the cable type used in the system. Price \$605.00.

**Starline SLA-Series unitized transportation-trunk stations:** Models SLA-610, SLA-611, SLA-612. These Starline unitized stations provide completely solid-state, 12-channel, long-haul transportation of low and sub-channel television signals in the 5 to 95 MHz band. The internal power supply of the new Starline units is adjustable to 15 volts, either plus or minus 1/2 volt, and fullwave bridging rectification is provided. Other features include plug-in cable tilt equalization boards, manual gain control, readily accessible test points, and the air-tight, radiation-proof universal mounting Starline cast-aluminum station housing. Price: SLA-610, \$630.00, SLA-611, \$740.00, SLA-612, \$795.00.

**Models SLA-610VI, SLA-611VI, SLA-612VI:** These models are completely similar to models SLA-610, 611, and 612 except that the housings are made of cast-iron and the stations are usually used in underground installations.

#### KAISER-COX CATV

**KCAL** low-band AGC trunkline amplifier, transistorized, 54-108 MHz, 30 db @ ch 6 maximum gain, 11 db max. noise figure. Die cast aluminum housing.

**KCML** low-band MGC trunkline amplifier, transistorized 54-108 MHz, 30 db @ ch. 6 maximum gain, 11 db max. noise figure. Die cast aluminum housing.

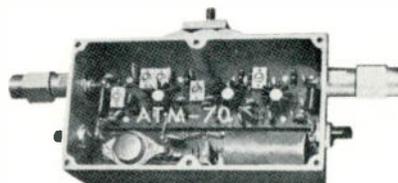
## ALLBAND TRUNK AMPLIFIERS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

#### AMECO, INC.

**PSM "Pacesetter"** all-band mainline amplifier with tapped primary transformer, high gain, high response. Weather-resistant housing is installed prior to activating system; Unitized Circuit Assembly is plugged in. 28 db max. gain; 22 db operating gain with recommended operating output level of 32 dbmv. Universal housing that accepts all 5 "Pacesetter" Unitized Circuit Assemblies. Plug-in UCA basket that is to facilitate change-out in case of failure due factory aligned and incorporates power supply to power surges.

**Transistorized trunkline amplifier, Model ATM-70.** High level, cascadeable amplifier with cast aluminum housing. Low noise, temperature stable, for frequency range 50-220 mc. Input



impedance is 75 ohm; output is tapered. In-line strand mount design. Connectors of 1/2", 3/4", "AM" and "F". Weather tight.

**ATA-70 mainline amplifier,** temperature compensated, all-band, solid-state unit of Ameco 70 series. Unit combines AGC amplifier section. High gain and AGC circuit efficiency permits AGC spacing at every third amplifier in system. Uses composite AGC. Model ATA-70P uses pilot carrier for AGC. Price \$475.00.

**ATM-65 main trunk amplifier,** all-band solid-state unit of Ameco 65 series. Temperature compensated; maximum gain of 30 db and provides 6 db of gain range. Cable powered, cascadeable. Price \$295.00.

**ATA-65 mainline amplifier,** combines AGC amplifier with high gain low noise RF amplifier. Temperature compensated AGC unit used at every third amplifier position. Uses composite AGC. Also available in ATA-65P, pilot carrier AGC.

#### ANACONDA ASTRODATA CO.

Model 830 (single output) & 831 (dual output)

XDR Trunkline Amplifiers. High output capability and low noise figure results in extended dynamic range (XDR) offering new cascadeability capability. Amplifiers are precision factory aligned for 22 db of cable; when used with Anaconda Astrodata AGC amplifiers, no further adjustment in the field due to cable length variation is required. Gain and tilt controls are accessible. Each amplifier is AC cable powered. Full wave rectifier, lightning protector, open loop temperature compensation and cable equalization are built-in. Hinged cover plate and single bolt closing provides equal pressure distribution to entire sealing area which make the unit weather and radiation proof. All housings are die cast aluminum, nickel plated with baked epoxy paint finish on all exterior surfaces.

**Model 848 (single output) & 849 (dual output)** XDR Trunkline AGC Amplifiers: The AGC Amplifier features fully automatic circuitry for an automatic CATV system. Gain, temperature, tilt and level controls are fully automatic. The closed loop system uses a 220 MHz pilot carrier which senses and corrects any deviation in system level. The amplifier is precision factory aligned, eliminating field adjustment for 18 to 26 db cable spacing. The output capability and low noise figure result in extended dynamic range (XDR). Used with the Models 830 or 831 Trunkline Amplifiers, an automatic CATV system could be achieved. A power inserter full wave rectifier and lightning protector are built into the amplifier. Temperature compensation and cable equalization are designed into the amplifier. Hinged cover plate and single bolt closing provides equal pressure distribution to entire sealing area which make the unit weatherproof. All housings are die cast aluminum, completely nickel plated, with baked epoxy paint finish on all exterior surfaces.

#### BENCO

**BB-900 (Master)** trunkline repeater amplifier; gain low-band and FM 36 db, high-band 43 db. low noise (6 db) input. High cascadeability. Frequency range 20-108 mcs, 174-216 mcs.

**M-10** Solid-state, high output split-band repeater amplifier. Highly cascadeable; extremely low in-



termodulation and low noise figure result in a quality factor of 110 db. Output capability allows system updating by replacing tube amps without major system changes. Has built-in

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"Signaleer" provides single channel amplification with solid-state stability for color or monochrome. Automatic Gain Control action maintains signal out-

put constant within  $\pm 0.5$  db even with variation of up to  $\pm 15$  db!

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equalizers and gain controls. Permits cable spacings from 22 to 38 db (at Ch. 13). Has provision for external thermatic gain — tilt or ALC. 117 V AC required.

**AGC line amplifier, Model CA-A.** Unit provides 60 db (with AGC disabled) gain. Available for VHF-TV channels 2 thru 13, VHF-Sub channels and FM-Band. Response is 4.5 mc flat within 0.25 db; output is plus 50 dbmv with 20 amplifiers cascaded. Has self-contained power supply.

**BLONDER-TONGUE**

**Transporter solid state high-output broadband trunkline amplifier:** The unit features variable gain and tilt controls which accommodate the unit to all types and lengths of cables normally used with trunkline amplifiers. Internal jumpers permit power supply via the input or output connector, as well as providing power feed-thru or power stop. The Transporter incorporates a regulated power supply that can handle from 18-30V, 60 Hz. The Transporter is housed in a rugged, cast aluminum case suitable for messenger mounting. Bandpass: 50-220 MHz  $\pm 1/4$



db. Noise figure: 13 db (maximum at 220 MHz). Gain 24 db minimum. Operating gain: 22 db. Gain control range: 0-9 db, continuous. Tilt control range: 2 continuous ranges (0-6, 12-24 db) —for cable length, measured in db loss; factory aligned thru 22 db of cable (loss @ 216 MHz). Maximum output (1 amplifier): 51 dbmv for —57 db crossmodulation (12-channel operation). Recommended 12-Channel system output level: 34 dbmv. Priced \$285.00.

Line amplifier, Model MLA-C. Provides at least

40 db gain on all VHF channels. Separate gain controls for channels 7-13 and 2-6. Separate tilt controls. Maximum output (across 75 ohms) 2.0



volts per band for less than 1% cross-modulation. 3.5 volts per band for less than 3% cross-modulation. CATV: \$93.00.

**Line amplifier, Model MLA-FM.** Similar to MLA-C, except covers entire FM band. Gain ch 2 FM: 33 db min.; ch. 7-13: 40 db min. CATV: \$103.00.

**CAS MFG. CO.**

**TRA-217 line powered 24 db silicon transistor line amplifier.** Low noise and practical output

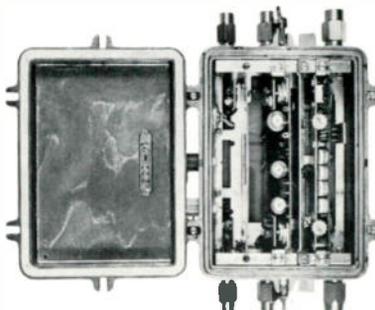


capability of 40 db with at least 6 db reserve. Heavy duty all-weather cast aluminum housing. Price on request.

**Trunkline amplifier, Model TRA-220S.** Wide bandwidth, cable powered, flat stable response, separate controls for low tilt, mid-band, high tilt, over-all tilt, gain, 3 position pad. Easy access to controls, cascable to 10 amplifiers without AGC. Strand mounting, weatherproof housing. List: \$285.00.

**CASCADE ELECTRONICS LTD.**

**CETA-1/25 Trunk Line Amplifier** is one of four individual amplifiers which make up the Cascade series of trunk equipment. All four models are housed in a universal cast aluminum hous-



ing which is water and weather-proof. The various amplifiers may be assembled into this universal housing merely by inserting the correct combination of circuit modules. As a trunk amplifier, the Model CETA-1/25 has the ability to be quickly converted to a Trunk/Bridging Combination Amplifier (Model CETC-1/25), merely by inserting the bridging distribution circuit module, and the individual circuit breakers for each bridger output. Noise figures: Low band, 8 db maximum; High band, 10 db, maximum. The CETA-1/25 has a maximum gain capability of 55 dbmv, with a recommended operating gain of 25 db. The gain control range of 8 db is tilt compensated. This amplifier may be cable powered, or power introduced to the

cable system at the particular location of the amplifier through a built-in power inserter connector. The Cascade Trunk Line Amplifier (Model CETA-1/25) and the Trunk/Bridging Combination Amplifier (Model CETC-1/25) also have a built-in Temperature Level Control which automatically adjusts the gain control level with temperature changes which cause variations in cable attenuation. The percentage of compensation may be adjusted. Price \$350.00.

**C-COR ELECTRONICS**

**Model TA 40,** solid state 40 db gain, full ALC trunk amplifier capable of 46 dbmv output at channel 12 with maximum cascability to 16 amplifiers. This amplifier offers a manual gain



control range of 0-4 db and ALC of  $\pm 4.0$  db at 216 MHz and  $\pm 2.0$  at 54 MHz, both measured at 70°F. The ALC control tightness displays output changes of less than  $\pm 0.5$  db for input changes of  $\pm 3$  db. Bandpass is 54 - 216 MHz  $\pm 0.25$  db with a max. noise figure of 8 db at channel 13 and 10 db max. at channel 2. Return loss is 16 db with input and output impedance at 75 ohms. Housed in an aluminum cast case the module is removable leaving housing and connectors in the plant. Cable connection is of the center seizure type.

**Model TA 34,** solid state, 34 db gain, full ALC trunk amplifier capable of 43 dbmv output at channel 12 with max. cascability of 32 amplifiers. This amplifier offers a manual gain control range of 0-4 db and ALC of  $\pm 3.0$  at 216 MHz and  $\pm 1.5$  at 54 MHz, both measured at 70°F. The ALC control tightness displays an output change of less than  $\pm 0.5$  db for input changes of  $\pm 3.0$  db. Bandpass is 54 - 216 MHz  $\pm 0.25$  db with a max. noise figure of 8 db at channel 13 and 10 db max. at channel 2. Return loss is 16 db with input and output impedance at 75 ohms. Mechanical spec. same as TA 40.

**Model TA 28** solid state 28 db gain, full trunk amplifier capable of 40 dbmv output at Channel 12 with max. cascability to 64 amplifiers. The amplifier offers a manual gain control range of 0-4 db and ALC of  $\pm 3.0$  db at 216 Mc and  $\pm 1.5$  db at 54 MHz, both measured at 70°F. The ALC control tightness offers output changes of less than  $\pm 0.5$  db for an input change of  $\pm 3.0$  db. Bandpass is 54 - 216 MHz  $\pm 0.25$  db with a noise figure of 10 db. Return loss is 16 db with input and output impedance at 75 ohms. Mechanical specs. same as TA-40.

**DAVCO ELECTRONICS CORP.**

Distributor of Entron amplifiers. Write for detailed information on both tube and transistor types.

**ENTRON**

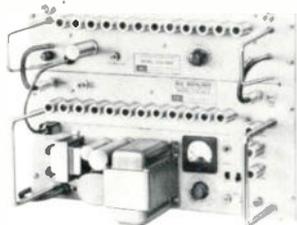
**R-4 Repeater Amplifier:** Solid state strand mounted repeater 28 db gain, operates from 28V, has automatic tilt control and automatic level control. ALC action derived from 73.5 MHz and 225 MHz pilot carrier (see model G-1 in section 4E). Price: \$445.00.

**R-3T Repeater Amplifier:** Solid state strand mounted repeater with tilt corrected automatic level control covers with low VHF, FM, intermediate and high VHF bands. ALC action derives from 73.5 MHz pilot carrier (see model G-1 in section 4E). Choice of fittings, isolating transformer, full wave reflector electronics regulation. Price: \$400.00.

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## JERROLD ELECTRONICS CORP.

**Model LSA-410 AB** comprises two twelve-tube, two-stage distributed amplifiers connected in push-pull. The power covers a band width from 6 to 90 mc and features the suppression of second order distortion components (down 62



db). A built-in metered test circuit permits checking all tubes and supply voltages during operation. Amplifier gain is 35 db maximum at 90 mc. AGC circuitry in the unit requires a carrier generator (Model CCG-73.5) at the head-end. The noise figure is 7 db at full gain. Especially suited for long-haul where second order distortion components are a problem. Price \$720.00.

**All-band main trunk line amplifier, Model TML-1.** All transistorized, provides unsurpassed cascadeability, extraordinary stability and long-term trouble-free performance. Significant characteristics include: bandwidth of 54-216 mc with plus or minus 0.25 db flatness; gain of 22 db; max. output capability (at -57 db cross-mod.) of 44 dbj (per ch. for 9 ch.) and 43 dbj (per ch. for 12 ch.); recommended operational characteristics (9 ch.), input of 5 dbj (lo-band) and 8 dbj (hi-band) (12 ch. operational inputs and outputs are 1 db less); and noise figure of 10 db max.



(c. 2 full gain) and 11 db. max. (ch. 13 full gain). The TML-1 includes two switchable cable equalizer sections and a 3-transistor internal power supply. Price \$335.00.

**All-band amplifier, Model 2300-A.** Designed for service in apartment buildings, hotels, schools and similar installations. Self-contained power supply. Low and high band gain controls with 14 db range. Low band equalization provision. Output: .3 v (50 dbj). 70 ohm input and output impedance. Flat response. Covers all VHF channels plus FM. Gain: 39 db, low band; 40 db, high band. Price \$113.08.

**RF amplifier, Model SCA-213.** Covers 6 to 220 mc. Plug-in equalization. Flat response. Regulating transformer. Gain: 28 db at 216 mc. Output: 42 dbj (maximum) per channel for 12 channels at cross modulation distortion of 0.14%. Manual gain control has 8 db range. Noise figure: 9 db, low band; 10 db, high band. Self-contained power supply. Price \$275.00.

## KAISER-COX CORP.

**KGAA All-band trunk amplifier** with 166.5 MHz pilot carrier AGC, 27 db @ ch. 13 maximum gain (22 db spacing), 10 db maximum noise figure @ ch. 13. Die cast aluminum housing. +50 dbmv maximum output (12 channels @ half tilt) with -57 db cross modulation. 18 to 30 volt RMS cable power regulation.

**KGMA All-band trunk amplifier** with manual gain control, 27 db @ ch. 13 maximum gain (22 db spacing). 10 db maximum noise figure @ ch. 13, die cast aluminum housing. +50 dbmv maximum output (12 channels @ half tilt) with -57 db cross modulation. 18 to 30 volt RMS cable power regulation.

**KGAB-2 All-band combination AGC trunk amplifier** and two-output bridging amplifier. 27 db @ ch. 13 maximum gain on trunk, 33 db @ ch. 13 maximum gain on bridger. +50 dbmv max. (12 channels) on trunk and +43 dbmv max. on bridger maximum output for -57 db cross modulation.

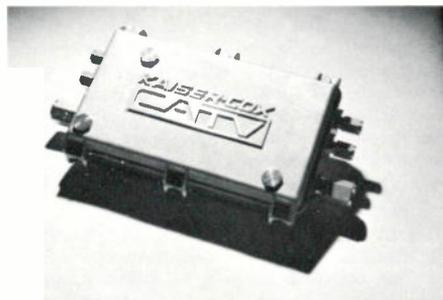
**KGAB-4 All-band combination AGC trunk amplifier** and four-way bridging amplifier. 27 db @ ch. 13 maximum gain on trunk (22 db spacing), 30 db gain on bridger. +50 dbmv max. (12 channels) on trunk and +40 dbmv max. on bridging amplifier maximum output for -57 db cross modulation.

**KGMB-2 All-band combination MGC trunk amplifier** and two-way bridging amplifier. 27 db @ ch. 13 maximum gain on trunk (22 db spacing), 33 db gain on bridger. +50 dbmv (12 channels) on trunk and +43 dbmv maximum output on bridger for -57 db cross modulation.

**KGMB-4 All-band combination MGC trunk amplifier** and four-way bridging amplifier, 27 db @ ch. 13 maximum gain on trunk (22 db spacing), 30 db max. gain on bridger. +50 dbmv (12 channels) on trunk and +43 dbmv maximum output on bridger for -57 db cross modulation.

**KCAA AGC trunk amplifier, 54-215 mcs.** compensates for cable attenuation change in 75 db of cable over 60 degrees temperature range. Modular construction; hermetically-sealed cast aluminum housing. 30 db @ ch. 13 maximum gain (25 db spacing). Price on request.

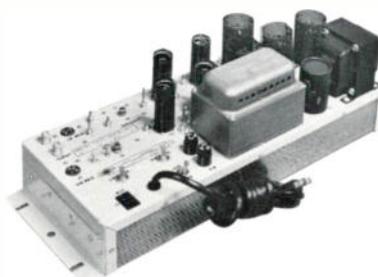
**KCMA MGC trunk amplifier, with manual gain and tilt controls; 54-216 mcs.** Modular construction.



Hermetically-sealed cast aluminum housing. 30 db @ ch. 13 maximum gain (25 db spacing).

## TELE-SIGNAL ELECTRONICS LTD.

**Model BH213-H** This is a two-band (54-108 mc and 174-216 mc) high level, trunkline amplifier



capable of carrying 12 VHF channels plus the full FM band. Superlative engineering and careful quality control provide you with an amplifier capable of extremely long cascaded runs at +48 db level and 40 db spacing. Tenthousand hour tubes with gold plated pins are an example of the quality componets used throughout to help cut your maintenance costs. To eliminate snow caused by aging tubes, a transistor input stage is used. ALC unit optional and extra. Noise figure is 10 db. Low band gain 36 db, high band 47 db. CATV price: \$304.25.

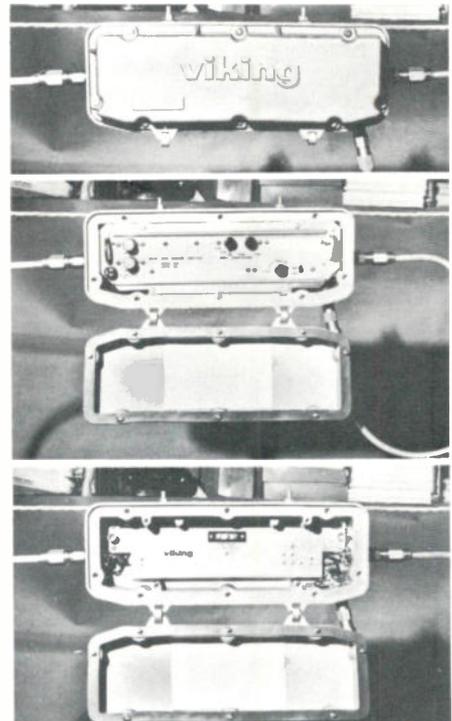
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**Model BH713-H** Same quality and specifications as Model BH213-H except that frequency range is 174-216 mc only. CATV price: \$229.00.

## VIKING INDUSTRIES INC.

**Model 574 mainline AGC amplifier;** solid-state unit provides 32 db full gain and output capability of 50 dbmv for 12 channel system. Modular construction. Switch allows either manual or AGC operation, and control with 10 db continuous range may be set for output level in either operation. All controls are accessible when



swing-down cover is open. Separate low-band and high-band plug-in pads are incorporated. Four position cable equalizer switch compensates from 0 to 30 db of cable in 10 db steps, and a fine tilt control for 10 db of cable equalizes for any amount of cable within the amplifier's gain setting. Unit is remotely powered with 17-30 VAC from either input or output and is set by a link adjustment.

**Model 940 broadband amplifier** provides 40 db gain, minimum; tube type has manual gain con-



trol to -20 db. Tilt controls, low-band 6 db, high-band 5 db. Maximum output is 64 dbmv per band for less than 1% cross modulation. Power requirements, 45 watts, 117 VAC.

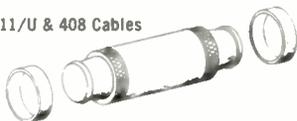
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Model 950 broadband trunk line amplifier provides 36 db gain minimum. Noise figure is 4.5 db low-band, 7.5 db high-band. Gain control of



-18 db minimum; external tilt control 3 db low-band, 4.5 db high-band. Power requirements 43 watts, 117 VAC. Price on request from manufacturer.

### TRUNK & BRIDGING COMBINATION AMPLIFIERS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

#### AMECO, INC.

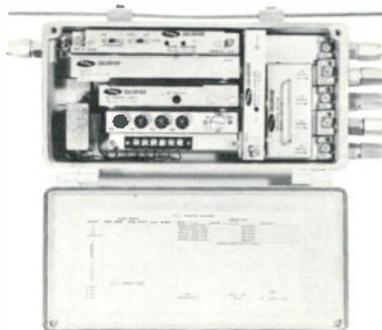
PSMB "Pacesetter" Mainline/Bridger combination permits feeder lines from normal trunkline amplifier positions. Unit requires 20-36 vac power with tapped transformer adjusted for maximum efficiency. 28 db maximum gain; 22 db operating gain; 32 dbmv operating output level. Powering plug that permits through powering, input powering or output powering (this feature is common to all "Pacesetter's").

ATMB-65 combination trunk line and bridging amplifier, combines the ATM main trunk amplifier and the ATB 65 bridger. All-band, solid-state units used where bridger feeds directly from mainline amplifier location. The ATMB-65 is fully transistorized and designed to provide correct equalization for cable losses over frequency range from 50-220 mc when cascaded at typical spacings of 22 to 28 db at 216 mc.

ATMB-70 combines ATM-70 trunk line amplifier and ATB-70 bridger. Solid-state, all-band unit of Ameco 70 series, for use where bridger feeds directly from trunk amplifier location.

#### AMERICAN ELECTRONIC LABS

COLORVUE CVT SERIES Solid-State Trunk-line Amplifier series with 48DBMV output per channel for 12 channels. 26 db trunk amp. gain for 12 channels, low noise, low VSWR flat re-



sponse. Modular interchangeability — One basic base plate and housing assembly can be built

into thirteen trunk and/or bridging variations. Price: \$360-\$555.00

#### ANACONDA ASTRODATA CO.

Model 852 (single output) & 853 (dual output) XDR Trunkline Bridger Amplifiers. The mainline section is identical in its extended dynamic range (XDR) to the Model 830 Trunkline Amplifier. The bridger section receives its signals from the mainline amplifier output via a directional tap and provides four high level outputs for connection to the distribution system. A single bridger position can provide service to more than 1100 subscribers. When used in a sub-system with the Model 840 or 841 Distribution Amplifiers. Bridger amplifier has a power inserter which is capable of powering 24 distribution amplifiers and associated mainline amplifiers. Open loop gain control temperature compensation and cable equalization are built-in. Hinged cover plate and single bolt closing provides equal pressure distribution to entire sealing area which make the unit weatherproof and radiation proof. All housings are die cast aluminum, completely nickel plated, with baked epoxy paint finish on all exterior surfaces.

Model 856 (single output) \*857 (dual output) XDR Trunkline AGC Bridger Amplifiers. The mainline section is identical in its extended dynamic range (XDR) to the Model 848 AGC



Trunkline Amplifier. The bridger section receives its signal from the main amplifier output via a directional coupler, and provides four high level outputs for connection to the distribution system. The amplifier is precision factory aligned for an integrated system with the Model 830 Trunkline Amplifier & Distribution amplifier. However, gain and tilt controls are provided for special application.

A bridger amplifier has a power inserter which is capable of powering 24 distribution amplifiers and associated mainline amplifiers. Temperature compensation and cable equalization are designed into the amplifier. Hinged cover plate and single bolt closing provides equal pressure distribution to entire sealing area which make the unit weatherproof and radiation proof. All housings are die cast aluminum, completely nickel plated, with baked epoxy paint finish on all exterior surfaces.

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**CAS MFG. CO.**

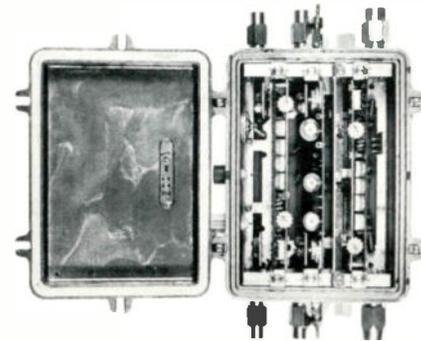
Combination trunk and distribution amplifier, Model TRA-220D. Same outstanding features as TRA-220S trunk line amplifier, plus high-level,



built-in distribution amplifier. The down-swing door on the aluminum housing allows easy access to controls and adjustments. This unit and the TRA-220S features exceptionally high output capability, equal to or exceeding most good tube units. The TRA-220D can be used with all cables and requires no fittings. List: \$375.00.

**CASCADE ELECTRONICS LTD.**

CETC-1/25 Trunk/bridging combination amplifier provides excellent trunk line output as well as feeder line output at a point in the cable



system where a bridging amplifier feeds directly from the trunk line amplifier location. The Trunk Line Amplifier section is the same as in the Cascade Trunk Line Amplifier, Model CETA 1/25, and carries the same specifications. The Bridging distribution circuit module is merely

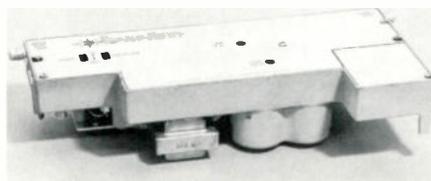
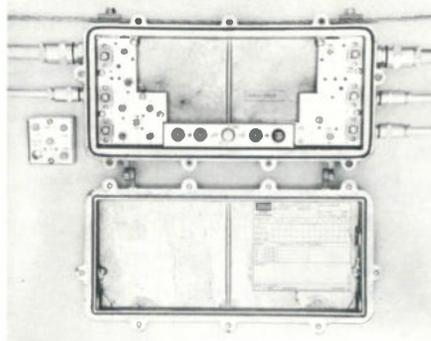
inserted into the universal Cascade trunk series housing in combination with the trunk line amplifier circuit module. Maximum gain is 28 db trunk, 12 db bridger. Recommended operational gain is 25 db for the trunk section and 10 db for the bridging section. This combination Trunk/Bridging Amplifier provides the advantage of Cascade's Temperature Level Gain Control of the Trunk Amplifier Model CETA-1/25, plus a high output signal to four feeder lines. Each feeder connection is protected by a plug-in circuit breaker against power surges. Maximum noise figures are: 8 db Trunk, 10 db for the bridging amplifier. Price \$495.00.

**JERROLD ELECTRONICS CORP.**

Starline unitized main-trunk stations. Each of the five Starline unitized main-trunk station (Models SA-1A thru 5A) is cable-powered and provides for a specific electronic function. Each station comprises three elements, (a basic housing, one of two connector chassis types, and one of five station plug-in units, integrated into



one functional package. The basic station housing comprises a cast-aluminum body and a hinged cover. A double gasket between the body and hinged cover provides an air-tight, radiation-proof seal when the cover is closed. The housing is designed to accept VSF-type fittings. Apart from trunk line input and output



apertures, the housing has four feeder-line exits for use at bridging locations, with plugs provided for unused apertures. In addition, the housing has three apertures, sealed with wire-secured plugs, to give access while the housing is closed, to trunk input and output, and bridging test fittings. One of two connector chassis types is integrated with each basic housing. One of these types is used with all unitized stations serving feeder lines (Models SA-1A, SA-2A, and SA-5A.) The other is used with those stations not serving feeder lines (Models SA-3A and SA-4A.) Starline main-trunk amplifiers in stations SA-1A, 2A, 3A, and 4A feature an output capability of 48 dbmv per channel for twelve channels, a minimum gain of 26 db, a

response flatness  $\pm 0.25$  db, hum modulation down 60 db, and a maximum noise figure at full gain of 8 db at ch. 2 and 11 db at ch. 13. Manual gain and tilt controls as well as switchable fixed pads are provided.

The plug-in unit for Model SA-1A provides a fully-loaded station. The device is an all-band trunk-line and bridging amplifier with AGC circuitry. The bridging amplifier output is connected to the "feeder-maker" receptacle on the connector chassis. When the proper "feeder-maker" model is plugged into the receptacle, from one to four feeder line outputs are created. It is supplied complete with housing and connector chassis as Starline Model SA-1A. Price \$635.00.

The plug-in unit for Model SA-2A provides a main trunk and bridging amplifier station. The bridging amplifier output is connected to the "feeder-maker" receptacle on the connector chassis. When the proper "feeder-maker" model is plugged into the receptacle, from one to four feeder line outputs are created. It is supplied complete with housing and connector chassis as Starline Model SA-2A. Price \$540.00.

The plug-in unit for Model SA-3A provides a main trunk amplifier and AGC station plug-in unit. The unit is supplied complete with housing and connector chassis as Starline Model SA-3A. Price \$485.00.

The plug-in unit for Model SA-4A provides an all-band trunk-line amplifier. It is an improved version of Jerrold model TML-1 and is supplied complete with housing and connector chassis as Starline Model SA-4A. Price \$390.00.

Plug-in unit for Model SA-5A is described under bridging amps.

**KAISER-COX CATV**

KCAB-4 combination all-band AGC trunkline amplifier and 4-output bridging amplifier. Modular construction; hermetically-sealed cast alu-



minum housing; compensates for attenuation change in 75 db of cable due to 60 degree temperature variation. 30 db @ ch. 13 maximum gain (25 db spacing). Price on request.

KCMB-4 combination all-band MGC trunkline amplifier and 4-output bridging amplifier. Modular construction; hermetically-sealed cast aluminum housing. 30 db @ ch. 13 maximum gain (25 db spacing). Price on request.

KCAB-2 combination all-band AGC trunkline amplifier and 2-output bridging amplifier. 30 db @ ch. 13 maximum gain (25 db spacing). Price on request.

KCMB-2 combination all-band MGC trunkline amplifier and 2-output bridging amplifier. 30 db @ ch. 13 maximum gain, (25 db spacing). Price on request.

**SPENCER-KENNEDY LABS**

SKL ColorBurst/7000 Series of modular trunk and bridging amplifiers for wide-band cable television distribution systems. The various components of the SKL/7000 line are listed below.

Model 7100 Aerial Housing — Accommodates any one of five different amplifier types. Six openings accept connectorless cable fittings; sealed ports for access to input and output monitors. Airtight, waterproof, radiation-proof. Mounts on messenger.

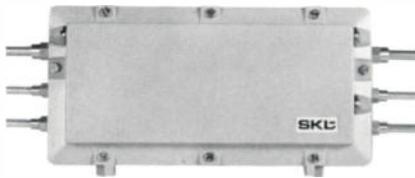
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 CATV Systems Division  
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 401 Walnut St., Phila., Pa.

**Model 7104 Base Chassis for Trunk Amplifiers**— This unit bolts securely into the housing and has two terminals to which the coaxial cables connect. A simple plug-in device allows up to 5 amperes of AC cable power to feed from the input, or the output, or through.

**Model 7120 Trunk Amplifier** — This is the basic trunk amplifier unit of the series. It plugs into the 7104 Base Chassis and is secured with two screws for quick insertion or replacement. Gain and tilt controls and slide switches for input pad and equalizer are readily accessible. Complete with regulated DC power supply. Min. gain 26 db, output capability 48 dbmv per Channel for 12 channels, response flatness,  $\pm .25$  db, N.F. 8 db Ch. 2, 11 db Ch. 13.

**Model 7125 Trunk Amplifier with ALC** — Similar to 7120 and also plugs into the 7104 Base Chassis, but includes an ALC section required at intervals. Tilt control and input pad and equalizer slide switches accessible as above. In addition, a slide switch sets the amplifier for ALC or MANUAL operation. In either case, the level control adjusts the output of the amplifier.

**Model 7106 Base Chassis for Bridging Amplifiers** — This unit is used whenever a bridging amplifier is needed. It bolts securely into the housing and is equipped with six terminal connectors. Two of these accept the main trunk input and output coaxial cables; the other four are outputs to distribution lines. The base chassis accepts any one of five plug-in line splitters. The distribution outputs are individually fused for 2A of AC cable power, while a



plug-in device allows up to 5A of trunk AC cable power to feed from the input, or the output, or through.

**Model 7130 Trunk Amplifier with Bridging Amplifier** — This unit plugs into the 7106 Base Chassis, contains a trunk amplifier similar to the 7120 and a bridging amplifier whose input is internally coupled to the trunk amplifier output. When the 7130 is plugged into the 7106, the output of the bridging amplifier connects to the plug-in line splitters which derive the distribution outputs. Both trunk and bridging amplifiers are provided with gain and tilt controls. Complete with regulated DC power supply.

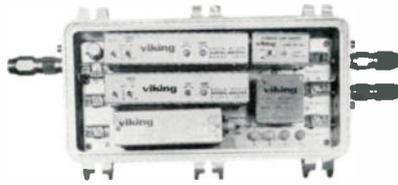
**Model 7135 Trunk Amplifier with ALC and Bridging Amplifier** — This unit is similar to the 7130 described above, except that the trunk amplifier is equipped with ALC. As in the 7125, a slide switch sets the trunk amplifier for ALC or MANUAL operation and the level control adjusts its output. The bridging amplifier has its own gain and tilt controls, as in the 7130. Complete with regulated DC power supply.

**Model 7140 Intermediate Bridging Amplifier** — This amplifier is used between main trunk amplifier stations at locations where distribution lines are needed. It plugs into a 7106 Base Chassis which provides for line-splitting, as described above. Model 7140 is equipped with gain and tilt controls and an internal regulated DC power supply. Min. gain is 33 db, response flatness  $\pm 0.5$  db, 48 dbmv output capability before splitting.

#### VIKING INDUSTRIES INC.

**Futura Series amplifiers:** an all-band, 12-channel system may be built with signal-to-noise ratio

in excess of 40 db with more than 50 amplifiers. The interchangeable housing design allows



units to be removed and replaced at will. Units may be messenger or pole mounted.

## LOWBAND BRIDGING AMPLIFIERS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

#### JERROLD ELECTRONICS CORP.

**Line-bridging distribution amplifier, Model UBC-26B.** Covers low band plus FM. Gain: 30 db minimum. Flat response. Maximum output: 47 dbmv for 5-channel operation. Less than 0.3 or 1% distortion, single unit. Noise figure: 9 db or less. 3 db manual gain control range and plug-in pads (either P.I.P. or B.T.C. series). 75 ohm input and output impedance. Self-contained power supply. Can be used for line-bridging or cascading. Price \$150.00.

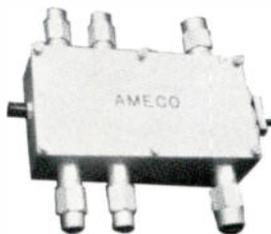
**Line-bridging distribution amplifier, Model MDA-4.** Covers channels 2 thru 6. Response flat within 2 db. Gain: 4 db. 75 ohm input and output impedance. Less than .5 db insertion loss. Gain control obtained by use of capacitive plug-in pad in the input circuit. Output .3 v/channel for 5 channels (maximum). Self-contained power supply. Price \$70.00.

## ALLBAND BRIDGING AMPLIFIERS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

#### AMECO, INC.

**Solid state bridging amplifier, Model ATB-70.** Four outputs, 50 to 220 mc. 75 ohms. Weather tight unit with 15 db gain. Insertion loss is



$\frac{1}{2}$  db. Inline strand mounting for outdoor use, receives up to  $\frac{3}{4}$ " connectors on trunk, up to  $\frac{1}{2}$ " on bridging outputs. With manual gain control, tilt compensating 5-15 db.

PSB "Pacesetter" bridger PSB fits universal housing where mainline amplification is not required. Permits up to four feeder lines to branch from

trunk. 25 db maximum gain; 20 db operating gain; 32 dbmv operating output level. Built-in surge protection plus self-terminating test points (these features are common to all Ameco "Pacesetter" amplifiers.)

**Transistorized bridging amplifier Model ATB-75.** Four bridging outputs, with average 20 db gain. Operates 50-220 mc. 75 ohm. Outdoor type for inline strand mounting; has insertion loss of  $\frac{1}{2}$  db.

**ATB-65 all-band, solid-state bridging amplifier** provides four bridging outputs. Designed for longer systems — features increased signal-to-noise ratio.

ATB-65-5 similar to ATB-65, features four stage silicon transistor circuit with means of alignment of frequency response and cable equalization.

#### AMERICAN ELECTRONIC LABS

**CVT-RB Solid-State intermediate bridging amplifier** establishes feeder lines between trunk amplifier locations. Designed to operate in attenuation range of 5 to 20 db away from trunk amplifier location. Provides 35 db of gain and  $\pm 48$  dbmv output for 12 channels: High output at low cross-modulation, excellent VSWR, high gain, low noise. Modular construction offers flexibility and ease of service.

#### ANACONDA ASTRODATA CO.

**Model B60 Intermediate Bridger Amplifier** (single output) is designed to operate between two trunkline amplifiers. The amplifier has a wide range of operational gain and tilt control. It may be connected anywhere within 6 to 16 db of cable spacing, from the preceding amplifier. Bridger coupling is via a directional coupler with low insertion loss and good impedance matching. The four output bridger has good isolation and high output capability. A single bridger position can provide service to more than 1100 subscribers when used in a sub-system with the Model 840 or 841 Distribution Amplifier. Each amplifier is AC cable powered and has a full wave rectifier, lightning protector, open loop gain control, temperature compensation and cable equalization built-in. Hinged cover plate and single bolt closing provides equal pressure distribution to entire sealing area which make the unit weather and radiation proof. All housing are die cast Aluminum, completely nickel plated, with baked epoxy paint finish on all exterior surfaces.

#### BLONDER-TONGUE

**Dispatcher I and II Solid-state broadband bridging amplifiers.** Dispatcher I is used at locations removed by 0 to 6 db of cable from the output of a trunkline amplifier. Dispatcher II is used at locations removed by 6 to 14 db of cable from the output of a trunkline amplifier. Dispatcher I provides 16 db gain to each of four feeder lines; Dispatcher II provides 26 db to each of four feeder lines. Each output is AC-fused for safety. Internal jumpers provide the option of powering the unit from either

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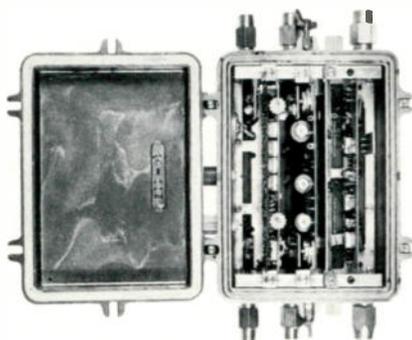
end, and of allowing power feed-thru for cascaded units. Bandpass: 50-220 MHz  $\pm 1/3$  db. Tilt control range: 1, 0-6 db (cable length); 11, 8-14 db (cable length). Gain: 1, 16 db; 11, 26 db minimum, to each of 4 outputs. Gain control range: 0-18 db, continuous. Maximum output: 45 dbmv for -57 db crossmodulation, at each of 4 outlets. Recommended 12-channel system output level: 43 dbmv (40 dbmv if followed by line extender). Line insertion loss:  $3/4$  db, max. Isolation between outputs: 16 db, min. VSWR: Input, 1.2 (20 db return loss); output, 1.38 (16 db return loss).

**CAS MFG. CO.**

TRA-224 silicon transistor, high-level bridging amplifier; 4 outputs, 30-220 mc; price on request.

**CASCADE ELECTRONICS LTD.**

CEBA-1/27 The CEBA-1/27 High Gain Bridger is designed to provide up to four feeder line connections from the main trunk line of the cable system. It may be spaced from 9 db to 17 db of cable from the trunk line amplifier. Each output is protected by a circuit breaker plug-in board with self-resetting capacity for protection against power surges. The power supply is of the full wave Cascade design, which provides a more efficient source of amplifier power. The unit employs a two-stage pre-



amplifier in combination with the bridging distribution amplifier circuit, and achieves a maximum gain of 30 db, with a recommended operating gain of 27 db. Maximum noise figures are 19 db low band and 21 db high band, and

are corrected for the directional coupler within the amplifier. The true amplifier noise figures are 9 db low band and 11 db high band. Price \$395.00.

CEBA-1/19 Low Gain Bridging Amplifier designed to provide up to four feeder line connection from the main trunk line of the cable system. It may be spaced from 0 to 9 db of cable from the trunk line amplifier. Each output is protected by a circuit breaker plug in board with self-resetting capacity for protection against power surges. The bridging amplifier power supply circuit module is a full wave design, which provides a more efficient source of amplifier power. The CEBA-1/19 Low Gain Bridging Amplifier employs a one-stage preamplifier in combination with the bridging distribution amplifier, and achieves a maximum gain of 21 db, with a recommended operational gain of 19 db. Maximum noise figures are 19 db low band and 21 db high band, and are corrected for the directional coupler within the amplifier. The true amplifier noise figures are 9 db low band and 11 db high band. Price \$385.00.

**C-COR ELECTRONICS**

BA-4 Bridging Amplifier, solid-state 54-216 MHz  $\pm 0.5$  db. Output 12 channel one amplifier. 50 dbmv each of 4 port with overall amplifier gain of 36 db for direct feed from trunk amp. Gain control 4 db continuous with pads avail-



able. Tilt control range 0 to 5 db Channel 2 to 13. Return loss 16 db all ports with isolation 25 db between ports. Temperature range -40° to 140°F, cable powered. Housed in aluminum casting, weather sealed and RF gasketed, accommodations for center conductor seizure.

BA-4-12 Bridging Amplifier, same as BA-4 but with internal coupler for direct insertion into the trunk without external device.

BA-4-20 Same as above with 20 db coupler.

BA-2 Bridging Amplifier, solid state same as BA-4 only with two output port each with an output of 53 dbmv.

BA-2-12 Bridging Amplifier, same as BA-2 but with 12 db coupler.

BA-2-20 Bridging Amplifier same as BA-2 but with 20 db coupler.

**DAVCO ELECTRONICS CORP.**

Distributor for all types of both low and high

output, tube and transistor type bridging amplifiers.

**ENTRON, INC.**

High-low distribution amplifier, Model LHD-404R. One input, four outputs. Gain: 42 db on low band; 46 db on high band. Maximum output high band plus 53 dbmv; low band plus 49 dbmv. Noise figure, 9. Plus or minus 2 db tilt control. Gain control range, 0 to 18 db, 4 db continuously, 75 ohms. 10,000 hour tubes and highly reliable compactrons. Mounts on four rubber bumpers. Plug-in attenuator. Price: \$375.

B-1 Bridging Amplifier: A fully transistorized, cable powered bridge covering low and high VHF, FM intermediate band. Strand mount at any point to provide on to four distribution



lines for subscriber connections. 37 dbmv to each of four outputs with 20 db of gain. Built in directional coupler, removeable amplifier section. Regulated internal power supply 28 or 60 volts. Feed power to any or all outputs to cable power extender amplifiers. Price: \$189.50.

**JERROLD ELECTRONICS CORP.**

Starline Model SA-5A is an intermediate bridging station used on the main-trunk of a distribution system. The plug-in unit is an intermediate bridging amplifier providing a low-loss feed-thru for signals from the trunk-line amplifier preceding it, together with bridging amplification. The bridging amplifier output is connected to the "feeder maker" receptacle on the connector chassis. When the proper "feeder maker" model is plugged into the receptacle, from one to four feeder line outputs are created. The amplifier provides a minimum 33 db full gain, has a response flatness  $\pm 0.5$  db, and has manual gain and tilt controls. Shipped complete with air-tight, radiation proof housing and connector chassis as Model SA-5A. Price \$345.00.

Intermediate bridging amplifier, Model TBA-2, All-transistorized, provides feeder lines between



two TML-1 Main Trunkline Amplifiers. Significant characteristics include: bandwidth of 54-216

**8 GREAT WAYS KAISER-COX CATV EQUIPMENT MAKES MONEY FOR YOU**



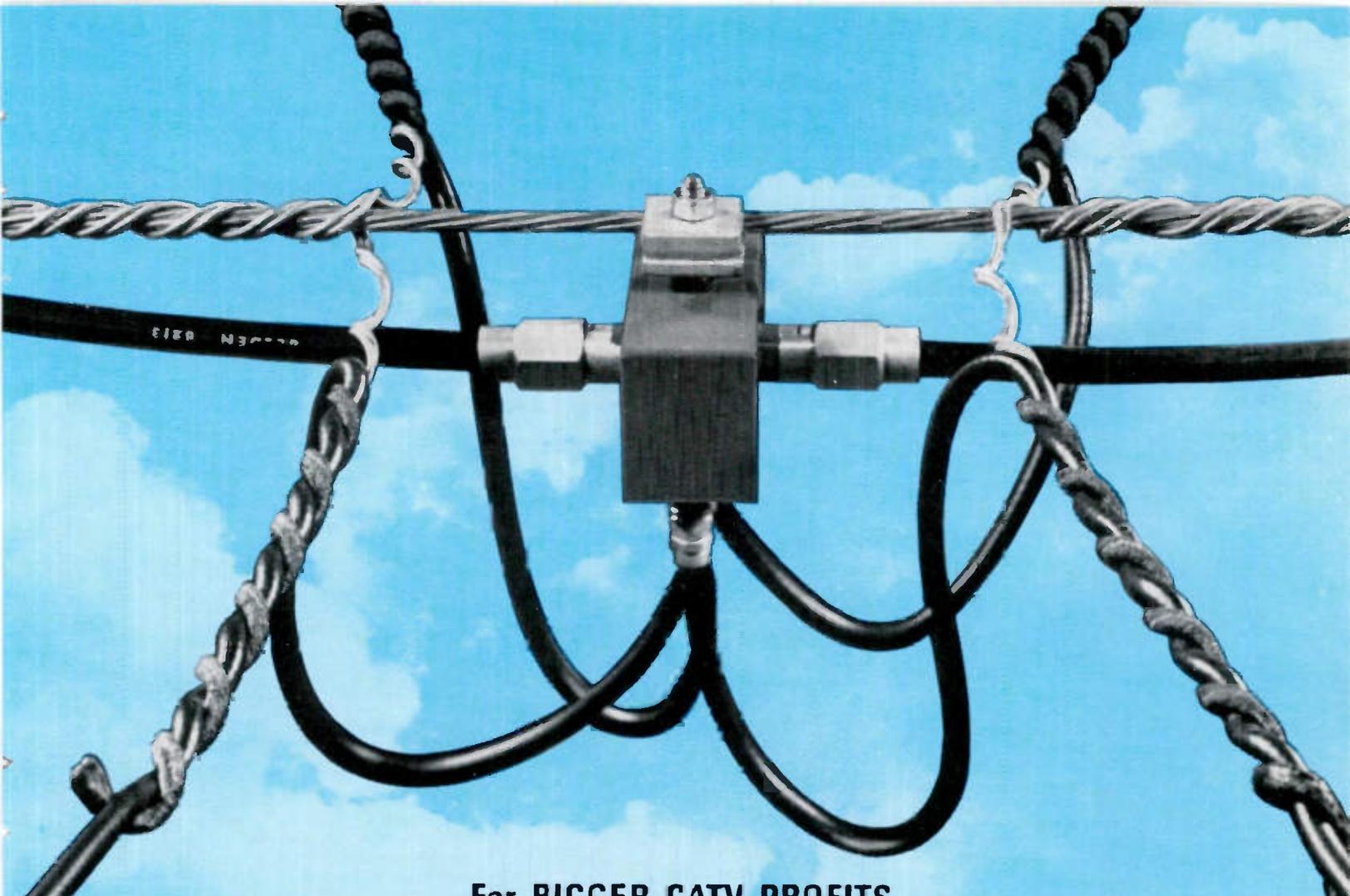
The Phoenician Series



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Pictured is the full line of solid-state, all-band amplifiers (8 in all) offered in the great new Kaiser-Cox Phoenician Series. Its modular circuit design permits you to plug-in whatever is needed . . . from trunkline amplifier to 2 and 4-output bridging amplifiers to combinations of both, with or without automatic gain control and tilt. Also, standardized fittings are used throughout the series. This interchangeability saves you money on parts inventory, today . . . saves you money as you convert for expansion, tomorrow!



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**LIGHTEST WEIGHT.** One-piece unit, wrap-on helical design.

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**COMPLETELY DEPENDABLE PERFORMANCE.** Maintains full RBS of RG 59/U coaxial cable, assures safe support with no crushing or kinking.

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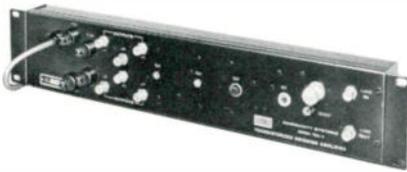
TUCKER, GEORGIA

# SKL

## 7400 POWER SUPPLY

mc with plus or minus 0.5 db flatness; gain (min. full) of 20-26 db (each of two outputs); max. output capability (at -57 db cross-mod.) of 43 dbmv (per ch. for 9 ch. using block tilt) and 42 dbmv (per channel for 12 ch. using block tilt); and recommended operational characteristics (9 ch.) input of 23-17 dbmv at ch. 13, and output of 40 dbmv (lo-band) and 43 dbmv (hi-band). (12 ch. operational inputs and outputs are 1 db less.) Price \$245.00.

**Bridging amplifier, Model TBA-1.** All transistorized, establishes four feeder lines at main trunkline amplifier locations. Significant characteristics include:



bandwidth of 54-216 mc with plus or minus 0.5 db flatness; gain of 11 db; max. output capability (at -57 db cross mod.) of 41 dbmv at each of 4 outputs (per ch. for 9 ch.) and 40 dbmv at each of 4 outputs (per ch. for 12 ch.); and recommended operational characteristics (9 ch.), input of 27 dbmv (lo-band) and 30 dbmv (hi-band), and output of 38 dbmv (lo-band) and 41 dbmv (hi-band). (12 ch. operational inputs and outputs are 1 db less.) Price \$195.00.

**High output distribution amplifier, Model SDA-4.** Covers all VHF channels, plus FM. Low-loss bridging input (under 1 db). Rack mounting with self-contained power supply. Gain: 14 db (four outlets). Flat response. Maximum output: 44 dbmv per channel for 12 channels 4 outlets. 75 ohm input and output impedance. Separate high and low band gain controls with 4 db range. Price \$165.00.

**All-band bridging distribution amplifier, Model BDA-213.** Covers all VHF channels plus FM. Matched-line bridging or single-ended input. Two-way output. Insertion loss: 1 db maximum, 5 db gain control range and 1.5 db tilt control range. Plug-in pads. Gain: 18 db minimum, low band and 25 db minimum, high band. Amplifier contains two separate amplifier strips for low band and high band fed from self-contained power supply. Output 44 dbmv (maximum) both low and high band. 75 ohm input and output impedance. Price \$165.00.

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### KAISER-COX CATV

**KCBR-2** 2-output bridging amplifier; 22 db gain. May be located between trunkline amplifiers (up to 12 db) with full output (+43 dbmv) on feeders. Modular construction; hermetically-sealed cast aluminum housing. Price on request.

**KCBR-4** output bridging amplifier; 22 db gain; all band; may be used at any location (up to half-way down stream) with full output on each of four feeders. Modular construction; hermetically-sealed cast aluminum housing. Price on request.

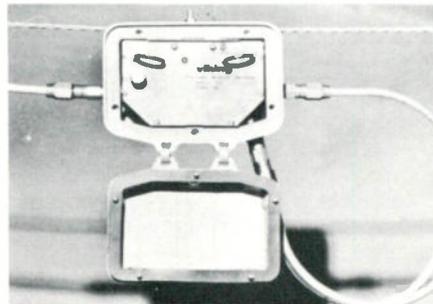
### SPENCER-KENNEDY LABS

**262** High-Level Distribution Amplifier: High-gain (50 db min., Ch. 13), wide-band distribution amplifier, +58 dbmv output level, low cross-modulation. Min. slope 8 db (54-216 mc), 6 db tilt range, and 10 db gain control. Provides 900 ma cable power for line extension amplifiers. Pole mounted with bracket (supplied.)

**SKL-7140** Intermediate Bridging Amplifier. See under "Trunk and Bridging Combination Amplifiers".

### VIKING INDUSTRIES INC.

**Model 576** bridging amplifier, available with either 2 or 4 outputs; designed for use at main-line amplifier locations where signal level is relatively high. Unit's 15 db gain supplies 40 dbmv at each of four outputs for a 12-channel system. Continuous tilt control and plug-in pad adjustments are accessible when swing-down cover is open. Outputs are individually fused for



powering line extenders — fuses are externally accessible. Unit is remote powered with 17-30 VAC, and is protected from lightning and line surges.

**Model intermediate bridging amplifier;** solid-state unit available with 2 or 4 outputs, provides 24 db gain, supplying 44 dbmv output at each of four outputs for 12 channel system. Continuous tilt and gain controls, test point and power adjustment links are accessible when swing-down cover is open. Outputs are individually fused for powering line extenders. Fuses are externally accessible. Unit is remote powered with 17-30 VAC and is protected from lightning and line surges.

## LOWBAND FEEDERLINE AMPLIFIERS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### JERROLD ELECTRONICS CORP.

**Line extension amplifier, Model WLA-88.** Covers channels 2 thru 6. Minimum gain of 23 db on Channel 6 and 17 db on Channel 2. Maximum undistorted output: .1 v rms for three channel operation. Voltage regulating transformer and built-in power line filter. Cabinet is weather-proof with iridite finish. Quick mount back plate and twist lock AC disconnect plug. Price \$98.50.

### CAS MFG. CO.

**TR-105** line extender amplifier; line powered 25 db silicon transistor unit. 30-110 mc. Specify .412



aluminum, UHF, or "F" connectors. Price on request.

**TR-105-2** line extender amplifier; as above but with dual outputs. Price on request.

### KAISER-COX CATV

**KCLL** line extender amplifier. Low-band, transistorized, cable powered. High output for feeder lines. Full-wave regulated DC power supply, in sealed housing. Price on request.

## ALLBAND FEEDERLINE AMPLIFIERS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### AMECO, INC.

**PSE** Ameco's "Pacesetter" Extender Amplifier. PSE is a high gain amplifier that can be used to extend feeder lines or boost signal to reach customers at the end of the line. 20 db maximum gain; 15 db operating gain; 38 dbmv recommended operating output level.

**MLE-1** Midget Line Extender amplifier for feeder line use. Unit features advanced surge protection plus low power high signal to noise ratio. Compact, epoxy sealed case houses single silicon transistor circuitry for fixed gain amplification.

**ATE-70** transistorized line extender amplifier, of Ameco 70 series. Unit provides necessary gain for extension of remote feeder lines exceeding normal lengths. Price \$125.00.

**Transistorized all-band line extender, Model ATM-20C-HS.** Max. gain, 20 db. Max. output, 45 db. Noise figure, 10 db, measured at 220 mc. Tilt control, 10 db. Gain-tilt control is tilt



compensated. AC/DC cable powered. Regulated power supply. 75 ohm impedance. Cascadeable, 10 units at 30 db, Strand in-line mounting. 26 db variable input pad and internal gain control, 10 db range, available. Price: \$84.95.

### AMERICAN ELECTRONIC LABS

**CVT-1E** Solid-State line extender amplifier allows longer feeder lines and more subscribers from one line. Provides 25 db of gain and  $\pm 45$  dbmv output for 12 channels. Has high gain and high output with low noise and extremely flat response, excellent VSWR.

### ANACONDA ASTRODATA CO.

**Model 840** (single output) & 841 (dual output) distribution amplifiers. Increased output capability, permits high level distribution, and allows up to six distribution amplifiers to be cas-

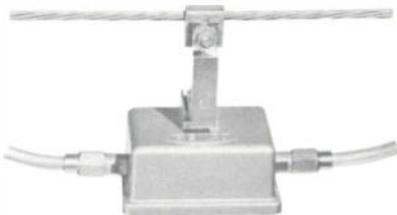
caded. This, together with the ability to serve up to 40 subscribers per amplifier, results in greater system economy. The amplifier is factory aligned for 16 db of cable and 10 direc-



tional taps. Tilt and gain controls are included to compensate for variations in distribution systems. Both models feature a built-in directional tap with four isolated outputs for direct connection to house drops. Model 841 contains, in addition, an output splitter with two identical isolated, high-level outputs for connection to distribution cables. All housings are die cast aluminum, completely nickel plated, with baked epoxy paint finish on all exterior surfaces. Components are all mounted on high quality circuit boards.

### BENCO TELEVISION ASSOCIATES

**Benfeed-26** Temperature compensated feeder line (or short trunkline) amplifier. Manual adjustable gain and tilt controls. Min. gain 26 db



at Ch. 13. Flatness  $\pm 1/4$  db. No visible cross modulation (12 channel loading) at +46 dbmv (Ch. 13P). Noise figure 11 db. Variable duty cycle pulse type switching power supply for maximum efficiency and minimum current drain. Does not require AGC control. Silicon transistors throughout. For in-line mounting.

**Benex-22** Solid state line extension amplifier, 22 db gain. Aligned for 22 db cable attenuation; operational output +40 dbmv (12 channels + FM); 17 to 30 VAC cable powered.

**Model BB-500.** Multi-purpose, high output broadband amplifier designed for distribution in CATV and large MATV systems and for limited cascading applications. Has provision for external ALC (Benco model BB-ALC) Noise figure: Lo-band/FM 7 db; Hi-band 6 db. Separate gain controls (16 db ranges). Covers 54-100 mc and 174-216 mc. Gain Lo-band/FM: 40 db; Hi-band 50 db. 19" relay rack mounting; all tuning slugs accessible from front deck. Typical operating output level (with 4 hi-channels): +58 dbmv (ch. 13 picture carrier).

### BLONDER-TONGUE

**TRUNKETTE** line extender amplifier, solid-state; 50-220 mc; 5 db. min. gain control range; 18 db min. gain at 216 mc. Cable powered. Sturdy cast aluminum housing, fully weather-proofed. Strand mounting. CATV: \$67.50.

**TRANSTENDER** Line extender amplifier solid-state one transistor design. Cable powered; response is tilted to follow cable slope; 50-220 mc. Noise figure 13 db at 216 mc; gain 10 db nominal at 216 mc. Cast aluminum housing for strand or pole mounting. CATV: \$24.50.

### CAS MFG. CO.

**TRA-215-2** line extender amplifier, line powered; 30-220 mc, silicon transistor construction, 16 db gain; dual outputs; specify .412 aluminum, UHF or "F" connectors. Price on request.

**TRA-215A** transistorized line extender amplifier; 20 db gain; 30-220 mc. specify .412 aluminum, UHF or "F" connectors. Price on request.

### CASCADE ELECTRONICS LTD.

**CELE-1/20** Line extender amplifier with a minimum output capability of 49 dbmv, the CELE-



1/20 has a maximum gain figure of 22 db, and a recommended spacing or operational gain of 20 db. This recommended operational gain includes up to 10 db of flat loss. Gain control range is tilt compensated, 8 db continuous. Both the RF circuit and the power supply circuit are of the Cascade printed circuit module design, which permits instant insertion or removal. The housing is a cast aluminum weather-and water-proof. Price \$119.50.

### C-COR ELECTRONICS

**Model EA-25-1** Line extender amplifier, solid-state. With a bandpass 54-216 MHz  $\pm 0.5$  db this amplifier is for 12 channel operation; one amplifier has a maximum of 45 dbmv output. Recommended for operation at 22 db gain or less at channel 13. The max. noise figure at channel 13 (max. gain) is 12 db. The gain range is 13 db with a 9 db pad. Minimum gain measured flat input at channel 13 would be 25 db. Impedance is 75 ohms in and out with a return loss of 16 db. Housed in an aluminum casting with accommodations for center conductor seizure, this unit is weather-



tight and RF Shielded. Operating temperature range is -40° -140°F with cable power supplied on a feed through or "break" option. Test point on internal.

**Model EA-25-2** is identical to above but with dual output each at 41 db/outlet.

**Model EA-25U** Identical to EA-25-1 with ports opening downward for pedestal mounting.

### DAVCO ELECTRONICS CORP.

Distributor of all-band line extender amplifiers. Details on request.

### ENTRON, INC.

**Line extender amplifier, Model E-2B.** Remote transistorized unit similar to E-2 except has matched input-output. Price \$110.00.

**Model E-2** high gain, high output, remote pow-

# SKL

## COLORBURST

ered, strand mounted. Operates 50 to 220 MHz has 32 db gain. Fittings are ER-301 type. Powered by 60 vac at 0.16 amps. Price \$105.00.

**Model E-3** same as E-2 except powered by 28 vac at .24 amps. Price \$115.00.

### JERROLD ELECTRONICS CORP.

**Model SX-1A** is a line extender amplifier used on Starline system feeder lines. Gain 24 db min., high output, flat response, variable gain and tilt controls, and a plug-in pad for fixed gain control. Cable-powered with optional AC bypass. Price \$98.75.

**Line extender amplifier, Model TLE-1.** All transistorized, extends feeder run and enables clear pictures even at end of feeder. Significant characteristics include: bandwidth of 54-216 mc



with plus or minus 1.5 db flatness (aligned thru 18 db of cable at ch. 13); gain of 18 db; max. output capability (at -57 db cross-mod.) of 33 dbj per ch. for 12 ch.; and recommended operational characteristics (9 ch.) for one TLE-1, input (ref. ch. 13) of 16 dbmv; and output of 31 dbmv (lo-band) and 34 dbmv (hi-band). The TLE-1 includes printed circuitry and built-in constant current/constant voltage regulation. Price \$85.00.

**Starline Satellite** line extender model SLE-1: 25 db minimum gain, 44 dbmv output per channel for 12 channels at -57 db cross modulation



with 5 db block tilt. Regulated power supply, cable powered, with optional ac bypass. External RF test points. Features plug-in module construction and uses plug-in pads for 3 db step gain control. Also has variable gain control with 3 db range. Variable tilt control compensates

## JERROLD

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**SYSTEMS**

**STARLINE**

CATV Systems Division  
**JERROLD ELECTRONICS CORPORATION**  
 401 Walnut St., Phila., Pa.

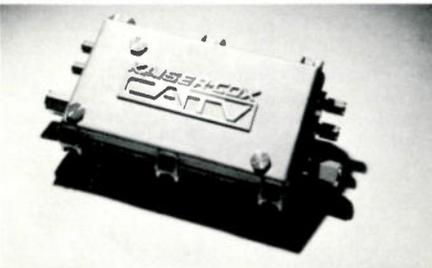
**BURIED SYSTEMS  
EQUIPMENT SPECIALISTS**  
TELEPHONE-CATV  
**CHANNELL**  
COMMERCIAL CORP.  
620 W. Foothill Blvd. • Glendora, Calif. • (213) 963-1694

for 12 to 20 db of cable. Airtight, radiation-proof starline-type housing. Price \$124.50.

**TLE-2:** new T-line solid-state line extender amplifier with 25 db gain and 37 dbmv output. Plug-in equalization. Price \$90.00.

#### KAISER-COX CATV

**KCLE distribution line amplifier, 54-216 mc.** Universal fittings, hermetically-sealed cast aluminum



housing. Matched output (VSWR, 1.3:1), provides high-level output for feeder or distribution line.

#### SPENCER-KENNEDY LABS

**SKL/7300** Wide-band line extension amplifier used in SKL Colorburst/7000 systems. Minimum gain 24 db, response  $\pm 1$  db, minimum output level 42 dbmv. Variable and fixed 6 db (each) gain adjustable, wide tilt range. N.F. 12 db at ch. 13. Cable-powered, with in or thru options.

#### TELE-SIGNAL ELECTRONICS LTD.

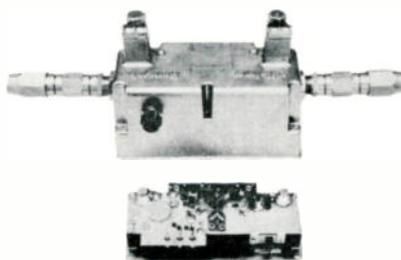
**TA 40 distribution amplifier, 54-108, 174-216 mc.** Unit designed for use in buildings or areas requiring large number of outlets. 40 db gain; 10 db gain control range. +50 db max. output level. Price \$99.50.

**TA 30 distribution amplifier, broad band, solid-state unit** designed for use in buildings and areas requiring large number of outlets. Provisions for plug-in input pad or equalization plug. 30 db gain; 6 db low-band gain range; +40 db maximum output level. Price \$37.50.

**Model TA-50** Latest techniques and semi-conductors used to achieve unusual performance. Intended for use in branch line and subscriber saturation locations. Low band gain 43 db; High band 48 db. Maximum output +60 dbmv; Gain control range 10 db; Noise figure 10 db; 19" rack mount, 7" panel. CATV price \$349.00.

#### VIKING INDUSTRIES INC.

**Model 568 "Mustang II"** solid-state line extender amplifier featuring "push-pull" connections and modular construction. Gain is 22 db at channel 13 and 11.5 db at channel 2. Separate tilt and gain controls compensate for 12 to 22



db of cable. An internal 6 db switch reduces gain by 6 db and increases input capability by similar amount for applications where additional taps may be added later. Regulated power supply handles any AC voltage from 17 to 30 VAC, remotely supplied from 24 VAC source. Unit has die-cast case.

**Model 955 broadband feedler line amplifier;** provides 25 db gain minimum. Tube type unit has separate gain control for each band; requires 20 watts power, 117 VAC.

**Mustang II** solid-state line extender for underground cabinet or pedestal mounting. Model 5000 inline amplifier with push-pull modular construction. 24 vac cable powered with internal regulation; 3 diffused silicon planer expatinal RF transistors; special lightning and surge protection. Separate gain and tilt controls; die cast case with Vik-O-Process plating. Gain is 22 db minimum at ch. 13; 11.5 db minimum at ch. 2. Noise figure is 7.5 db plus or minus 1 db. Price \$82.75.

### POWER SUPPLIES

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

#### AMECO, INC.

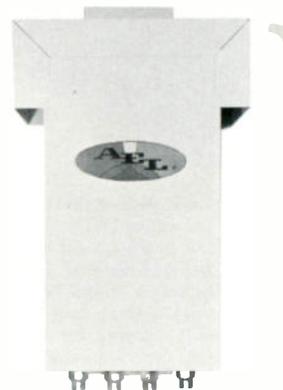
**Heavy duty power supply, Model ATPS-3.** Uses 115 vac source. Provides 35 vac output at 4.5 amperers. Features spike suppression, 2% regulation on output for  $\pm 10\%$  change at input. Unit is fused and has insertion loss of  $\frac{1}{2}$  db maximum. It can be used for remote powering with AMECO RI-1.

**ATPS-26 AC power supply** used to remote cable power transistorized line extender amplifiers. In direct 115 VAC power locations, line extend-

er amplifier can be mounted in the housing with the power supply. Capable of constant output with input voltage variations of 100-125 VAC.

#### AMERICAN ELECTRONIC LABS

**CVPR-61 & CVPR-412** Regulated AC Power Supply feeds 28 volts ac  $\pm 0.6$  V with varying load between 0 and 12 amperes into coaxial lines for remote powering of CATV amplifiers. Contains two fully independent outputs completely isolated. Convection cooled to provide



ample free air circulation particularly necessary in areas of high ambient temperatures. Easy quick-mount brackets. Cover is removable without dismantling the supply from fixed position for ease in servicing. Built in lightning and surge protection. Neon indicator for visible checking "power on" from ground level, chimney design and over-sized heat sink maintain low operating temperatures from maximum reliability. Price, CVPR-61 \$162.00; CVPR-412 \$180.00.

**CVPN-61 & CVPN-412** Non-regulated A.C. Power Supply feeds 28 Volts A.C.  $\pm 0.6$  V with varying load currents up to 10 amperes into coaxial lines for remote powering of CATV Amplifiers. Contains two fully independent outputs completely isolated. Convection cooled to provide ample free air circulation particularly necessary in areas of high ambient temperatures. Weather proof housing with quick mount bracket. Cover is removable without disconnecting the Supply from fixed position for ease in servicing. Built-in lightning and surge protection. Neon indicator for visibly checking "power on" from ground level, chimney design and oversized heat sink plates maintain low operating temperatures for maximum reliability. Price, CVPN-61 \$106; CVPN-412 \$124.

#### ANACONDA ASTRODATA CO.

**Model 801 and 802** Power Supplies, used for cable powering CATV systems, provide 36 VAC with a regulation of 1%. The Model 802, if used at a bridger location, could supply 24 dis-

## 8 GREAT WAYS KAISER-COX CATV EQUIPMENT MAKES

**MONEY**

## FOR YOU



The Phoenician Series



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**KAISER-COX CORPORATION**  
P.O. Box 9728 / Phoenix, Arizona 85020 / Ph. (602) 944-4411

Pictured is the full line of solid-state, all-band amplifiers (8 in all) offered in the great new Kaiser-Cox Phoenician Series. Its modular circuit design permits you to plug-in whatever is needed . . . from trunkline amplifier to 2 and 4-output bridging amplifiers to combinations of both, with or without automatic gain control and tilt. Also, standardized fittings are used throughout the series. This interchangeability saves you money on parts inventory, today . . . saves you money as you convert for expansion, tomorrow!



Here are 4 prime reasons why  
**COMMUNICATION SYSTEMS CORP.**  
is your best choice for  
**CATV turnkey construction:**

**1. Engineering**

CSC utilizes its own professional engineering department to serve you better. Complete integration of system design and construction assures efficiency in building, highest system performance. CSC specializes in total CATV system design and construction . . . understands your problems . . . knows how to solve them. State-of-the-art design concepts are employed to give you the most for your investment.

**2. Construction**

CSC backs every project with nationwide experience in CATV system construction, including both aerial and underground techniques. Only full-time, permanent personnel—people that know CATV—form CSC's crews. Surveyors . . . linemen . . . technicians . . . all are craftsmen whose only standard is to give you maximum quality. Veteran experience guides every step of construction.

**3. Independence**

Benefit from the unique services of an independent contractor. No direct ties with equipment manufacturers or suppliers assures selection of equipment based on maximum return for your investment. CSC is completely objective in this vital function. Selection is made for your system's requirements . . . done with your unique problems in mind. CSC works full-time with you as well as for you.

**4. Extra Service**

CSC handles the entire system design and construction project for you. Every detail is planned to remove the worry from your shoulders. This includes all liaison with telephone and power companies to determine pole line arrangements. Total CATV experience guarantees superior workmanship in every phase of construction, done by people who enjoy working for you.

Let CSC handle your turnkey project  
we'll make your problems our problems.



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**COMPLETE SYSTEM CAPABILITY**

Plus Performance Products  
For Advanced  
TV  
Systems  
by craftsman



tribution amplifiers and the associated trunkline amplifiers; it is rated at 6.5 amps. The Model 801 is similar with a current rating of 0.7 amps. Built-in malfunction indicating is visible from ground. A lightning protector, 110 VAC service outlet, off-on switch, metering jack. RF filtering are all built-in. Primary and secondary voltages are in phase. Pole, cross-arm or pedestal mounting.

### BENCO TELEVISION ASSOCIATES

LPS Universal power supply for cable powered Line Extension amplifiers (Benex, Benfeed or similar) 30 VAC, 1.5 Amp output. Mounts to panel or flat surface connector types F-61.

### BLONDER-TONGUE

Model URPS-30-1 power supply, designed to feed many amplifiers. Capacity is 1 ampere at 30 VAC. Unit features a fully isolated power transformer and protected against overload with a 4-amp. fuse in the transformer secondary. In addition, a 50-volt Thyrector protects associated amplifiers from voltage surges. Strand-mounting cast aluminum housing is fully weather-proofed. Output 30 VAC plus or minus 2% at 117 volt input. CATV: \$64.50.

BRPS-30-12 regulated power supply is pole or surface-mounted; designed for insertion into the line at any convenient point. Powered from a 95-130 V, 60 Hz source, it will provide power for two 30 volt, 6 ampere loads, or any other loads providing a total drain of up to 12 amperes (on both half-cycles). It has provisions for feeding power in either or both directions. RF signals pass unhindered through the unit, and are well-isolated from the AC line. The unit features a fully-isolated power transformer, and is protected against voltage surges with a 50-volt Thyrector. Two auxiliary AC outlets are also provided. The unit is housed in a ventilated metal housing. VSWR: input and output, 1.2 max. (20 db return loss). Output voltage: 30 VAC  $\pm$  2% at 117 VAC. Output current: 12A, max. on positive and negative half-cycles.

### CAS MFG. CO.

Power supplies, PW-2000 and PW-6000. (2 amp. & 6 amp.) are equipped with automatic reset overload protection. Price available from manufacturer.

PW-2000-4, identical to PW-2000 except unit has four outputs.

PWR-6000 24 VAC constant voltage power supply with automatic reset overload protector. 6 amps. Price on request.



MALARKEY, TAYLOR & ASSOCIATES

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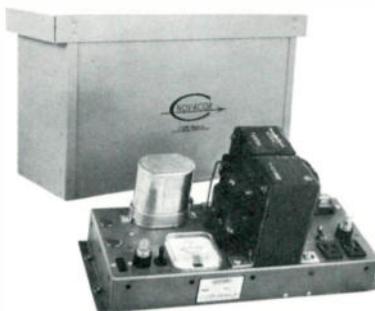
1101 - 17th Street, N. W. • Washington, D. C.  
Phone: Area Code 202 • 223-2345

### CASCADE ELECTRONICS LTD.

CEPS-2/5, CEPS-2/10 Power Supply. The CEPS-2 is a sine wave power supply with a maximum capacity of 270 VA (CEPS-2/10) or 135 VA (CEPS-2/5). A built-in power duplexing filter circuit allows AC power to be added to the CATV cable with very low RF signal loss (less than 1/4 db). Two 75 ohm UHF type connectors are provided as standard fittings, but .412, .500 or .750 aluminum type connectors are available for direct cable attachment. A switch adjacent to each connector provides power directivity by powering either one or both connectors. RF filtering is built into the 117 volt primary circuit and voltage surge suppression is provided in the output circuit. An expanded scale AC current meter monitors the output current only as long as the current check switch is held in the "on" position, thus promoting long meter life. Silent operation is inherent in sine wave transformer design which makes it readily usable, even in multiple dwelling installations where a low noise level is desirable. A lifting bracket is built into the unit. Model CEPS-2/5, is rated at 5 amps @ 27 VAC. Model CEPS-2/10 is rated at 10 amps @ 27 VAC. Price, CEPS-2/5, \$109.50; CEPS-2/10, \$119.50.

### C-COR ELECTRONICS

Model PS-30 is a 12 amp 30 VAC regulated power supply. Regulating  $\pm$  2% for a 10% variation in input voltage this model provides excellent cable powering when used in conjunction with the PS-1 power energizer. Protected from lightning, power surges and over-



load this unit can be mounted on pole locations where power source is most convenient. The supply itself is easily removable from the aluminum, all-weather housing.

### ENTRON, INC.

Regulated power supply, Model PSR-3. Output 160 vdc at 800 ma. maximum regulated. 6.3 vac at 20 A. maximum unregulated. Minimum load 0 ma., regulation plus or minus 3%. Takes 8 3/4" of rack space in 19" standard rack. Tubes: (1) 5651, (4) 6080, (1) 5654. Price \$260.00.



RPT Series remote power transformer, feeds 30 vac to RPU power insertion unit. Pole mounted wherever 115 vac is available. Regulated output, Circuit breaker for lightning and power surge. Price \$125.00.

### JERROLD ELECTRONICS CORP.

Model CPS-4 24-volt power supply for line extender amplifiers in up to four separate feeder lines. Price \$45.50.

Model RPS-15 is a 30v, 6-amp power supply

used with TML-series amplifiers or other cable-powered transistorized equipment. Price \$45.00.

Model RPS-30 is a 30v, 12-amp power supply used to supply as many as (3) TML-1 (3) TBA-1, (3) TBA-2, and (48) TLE-1 amplifiers in a TML solid-state system. The 30-vac output is constant plus or minus 1% for line voltage between 95 and 130-vac and held within 2% for bad variations between 4 and 12 amps. Price \$136.20.

Model RPS-30T is similar to Model RPS-30 but is used to supply Model TISA-510 amplifiers. Price \$145.00.

Model SPS-12 is a Starline power supply for powering up to six completely-loaded stations on the main trunk of a Starline system. Mounts

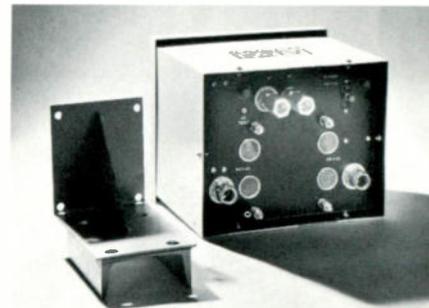


on pole or cross-arm. Power (30 volts ac, 12 amperes) is normally placed on the trunk-line to the power supply but may also be fed to a remotely-located trunk line via cable and a Model SPJ-2 power combiner. Price \$185.00.

### KAISER-COX CATV

KCPN non-regulated powering unit; 26 VAC cable power supply in W.P. housing, complete with circuit breaker. Price on request.

KCPR regulated powering unit; 30 VAC power



supply complete with circuit breaker, W.P. housing. Price on request.

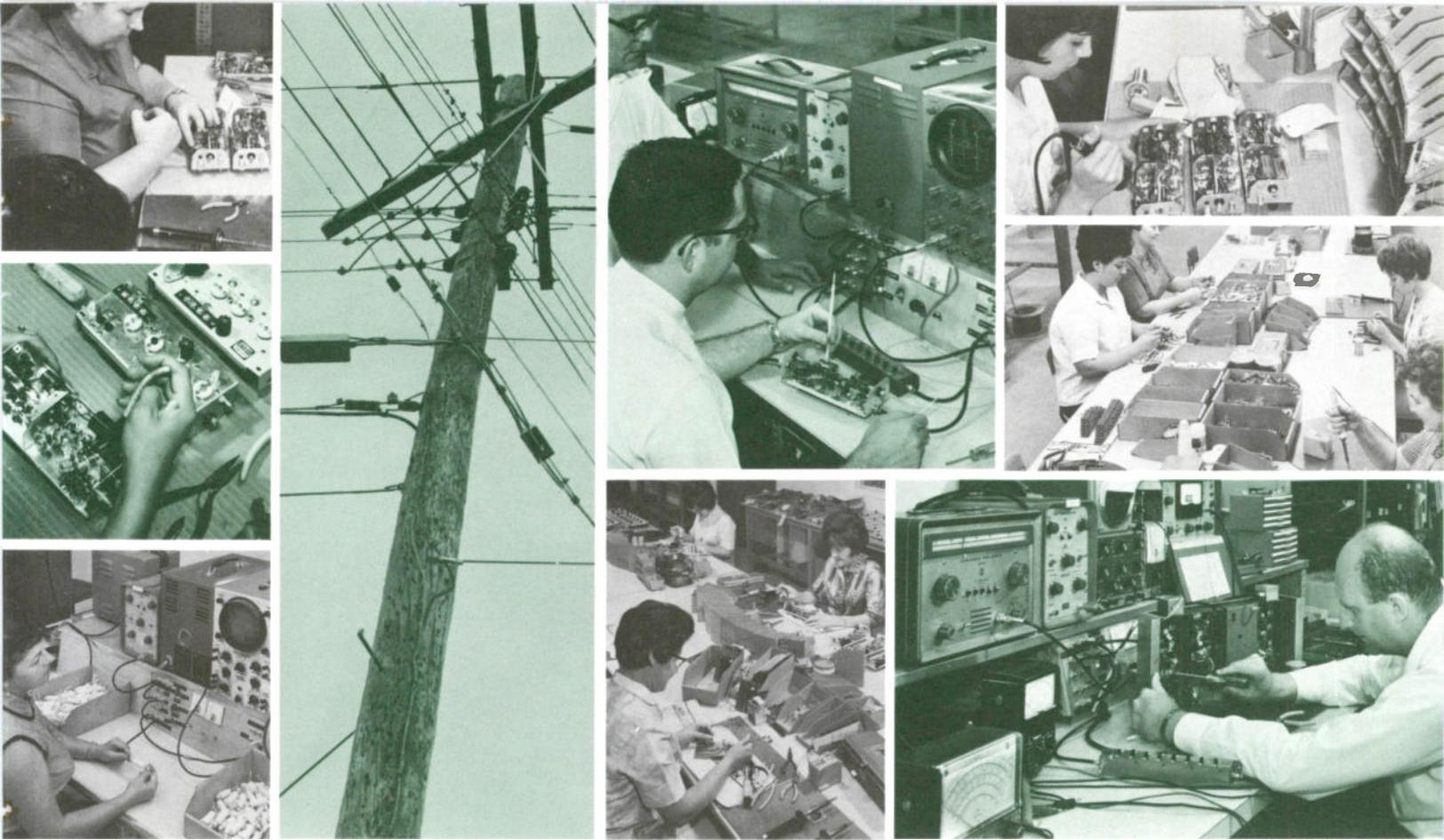
### SPENCER-KENNEDY LABS

SKL/7400 Regulated AC power supply delivering 12A. at 30V. for cable-powering SKL COLORBURST/7000 trunk, bridging and extension amplifiers. Mounts on pole or cross-arm. Equipped with connectorless cable fittings for direct connection to the coaxial cable.

### VIKING INDUSTRIES INC.

Model 561 remote power supply is designed to duplex 24 or 30 VAC onto cable systems. It supplies remote power for any combination of transistor amplifiers up to maximum of 2 amperes. Unit has built-in re-set circuit breaker, RF filter providing 60 db attenuation from power lines, and switch for selection of 24 or 30 volt output. Unit has weatherproof housing for pole or cabinet mounting.

Model 563 remote power supply is specifically designed for seven model 562 amplifiers or one model 560 or 565 amplifier. Unit has cast aluminum, weatherproof housing for pole, strand or indoor mounting. Maximum output is .21 amperes. Unit is available with 75 ohm SM-101



# CAS CATV CAPABILITIES

*CAS combines experience in product development and manufacturing, system design and turn-key construction with money-saving prices for your best CATV buy!*

**B**ack in 1951, when cable television was in its infancy, the operation to later become CAS Manufacturing Company was wiring Mineral Wells, Texas, for CATV—house by house, street by street.

Equipment for the young CATV industry was either non-existent or in short supply, so CAS depended heavily on amplifiers designed primarily for apartment house master antenna applications and whatever cable and accessory equipment it could lay its hands on. Most of the amplifiers were replaced in 1954 by tube-type amplifiers of CAS's own design, the C2-6 broadband unit which delivered all low-band channels. The new amplifier performed so well that it was offered for sale nationally and CAS officially entered the CATV equipment manufacturing business.



## Pioneered solid-state amplifiers

A scant four years later in 1958, CAS perfected the transistorized TR amplifier series—one of the very first solid-state amplifiers. This new series, with the inherent temperature and reliability characteristics available only from transistor circuits, replaced virtually all the conventional tube-type units in the Mineral Wells system, making it one of the first CATV systems in the country to rely almost exclusively on solid-state amplifiers.

In 1963, using much equipment of its own manufacture, CAS constructed a 300-mile system in Austin, Texas. Manufacturing demands were heavy to furnish equipment for a system that in less than a year signed over 3,000 subscribers.

## CAS depends on its experience

Today, CAS Manufacturing Company combines the same quest for new product development, the same rigorous reliability demands and the same manufacturing skills to offer you dependable CATV equipment at competitive prices.

In addition, CAS system design and turn-key construction capabilities continue to prove a prudent investment for the system operator who realizes that CAS CATV systems are designed and built for profitable operation.

# CATV Products

**Complete line of CAS transistorized equipment now makes possible all solid-state systems . . . head-end to TV set!**

## NEW! Industry's first Transistorized Head-end System

**T**his CAS Channel Control is the CATV industry's first completely transistorized head-end system—a major breakthrough in solid-state equipment.

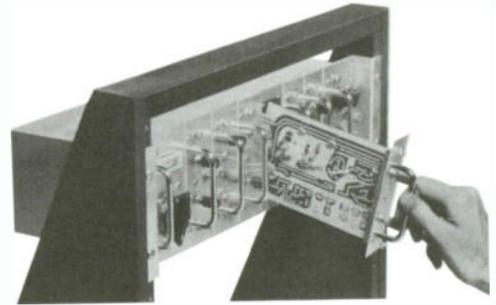
The advantages of plug-in modular circuit boards make possible reduced overall size, ease of replacement and maintenance. It can be mounted on a standard 19-inch rack.

### Offers standby modulation capabilities

It features full channel conversion, transmission of video and sound information, AGC and sound limiting with provision for standby modulation. A standby video and sound modulator gives the system local origination or emergency alert capabilities on any or all channels.

### Competitively priced

This new CAS transistorized head-end system is competitively priced, and in addition to performing functions of better known conventional tube-type systems, offers the reliability benefits of full transistorization and the versatility of a standby origination capability.



## CATV Transistorized Line Extenders

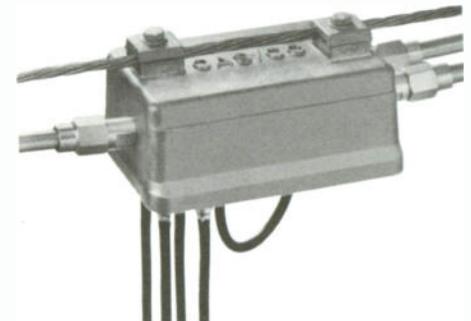


Design versatility of CAS all and low-band transistorized line extenders makes them adaptable to fill a wide range of CATV applications.

TR-105 series (low band) let you select a standard line extender for use in feeder lines; an extender with dual feeder outputs; or, an extender for amplification to a line tap to be used to feed a multiple outlet building.

The TRA-215 series (all band) and

*You can cut your installation costs by 66% with the TRA-215-2 transistorized line extender with CS-1 cover splitter!*



It provides four subscriber drops, does the work of three separate conventional units . . . extender, splitter and four-outlet tap. Since it requires only three connectors, you have **57% fewer possible trouble spots** to help keep your maintenance bills low.





M. D. McGuire and the reliable CAS TRA-217 amplifier.

## Let CAS stop your amplifier problems!

*More than 500 CAS amplifiers in Abilene, Texas, CATV system operate for 18 months with almost no service problems. That's more than 3,500,000 amplifier hours of virtually trouble-free operation.*

How's that for reliability? CAS performance-proved TRA-217 solid-state amplifiers are unaffected by lightning surges, transistor or other circuit failures . . . reduce subscriber downtime and keep component maintenance to a minimum.

*"Less than 10 service calls"*

Here's what Mr. M. D. McGuire, chief engineer of TV Cable of Abilene, Inc., says:

"We now have more than 500 CAS TRA-217 amplifiers in our system. Most of them have been in use since November 1964. After all that service we have had less than 10 service calls attributed directly to these units. The CAS amplifiers continue to deliver signals with no deterioration and require a minimum of technical attention."

## NEW! High output Combination Amplifier

The TRA-230 is a completely transistorized combination trunk, AGC and distribution amplifier featuring extremely high output capabilities.

### Maximum versatility

Simple module plug-in replacement makes possible these single and combination applications — (1) trunk amplifier, (2) trunk amplifier with AGC, (3) trunk, AGC and distribution amplifier, or (4) distribution or bridging amplifier.

In addition to the advantages of modular plug-in for ease of replacement, full wave rectification and a built-in trouble light are provided. It is housed in a die-cast, weatherproof aluminum housing with universal mounting features. Special fittings compensate for cable contraction or expansion.

A unique single latch bolt assures positive locking and eliminates the problems inherent in conventional multiple screw locking systems.



## NEW! CAS Multi-outlet Backmatched Transformer mounts in existing block, DRASTICALLY REDUCES INSTALLATION COSTS for four drops!



This radically new multi-outlet backmatched transformer makes possible as many as four outlets from a single existing block without cutting the transmission cable.

Designated the "milk-cow," it is a direct screw-in replacement for 3/8-inch isolation units on all standard pressure tap blocks. Two (MC-2) or four

(MC-4) outlet models are available.

### Reduces installation costs

Installation costs are reduced since it is not necessary to cut transmission cables. The four-outlet unit offers equipment cost savings alone of approximately 50% when compared with the unit prices of four separate conventional pressure taps.

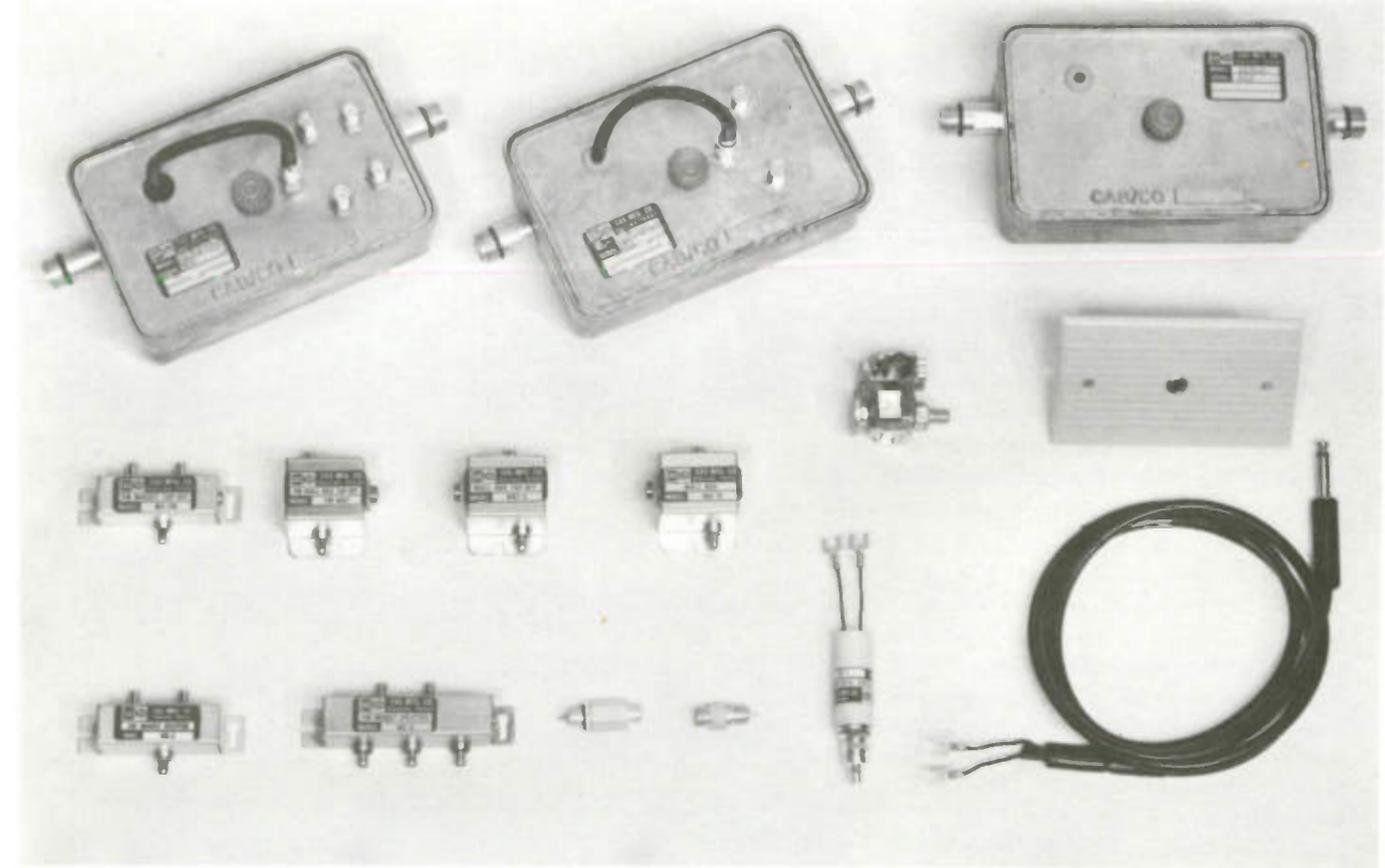
## Directional In-line Multiple Taps



CAS directional in-line multiple taps mount directly on the messenger strand. They are available in three basic units to provide tap isolation from 0 to 30 db. The ILT-830 is variable in isolation from 8 to 30 db; the

ILT-3 is for use near the end of the line; and, the ILT-0 is an end-of-the-line tap providing line termination.

Each is available in a choice of single, two or four drops.

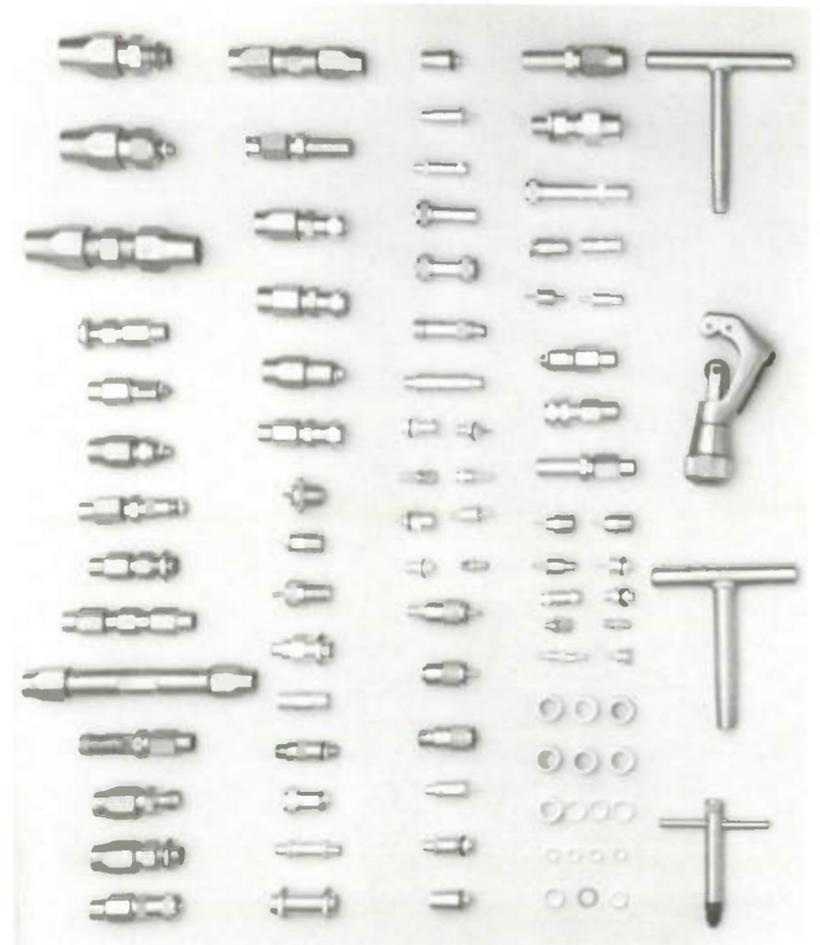


**Choose from a full line of Subscriber Taps, Transformers and Indoor Accessories!** In-line taps and cover splitters, pressure taps, backmatched taps, set matching transformers, wall plates and boxes, splitters and tap-offs.

**You can depend on CAS for all your Fittings, Connectors and Accessories!**

Check your CAS catalog for complete descriptions of the full line of transistorized CATV equipment and accessories:

- solid-state all and low-band amplifiers
- power supplies for transistorized equipment
- live weather instrument packages
- transistorized TV and FM head-end systems
- fittings and accessories
- ruggedized antennas
- aluminum and flexible cable



**ORDER DIRECT from CAS . . . it's the most economical, easiest and fastest way to buy all your CATV equipment and accessories!**

**Direct orders save you money**

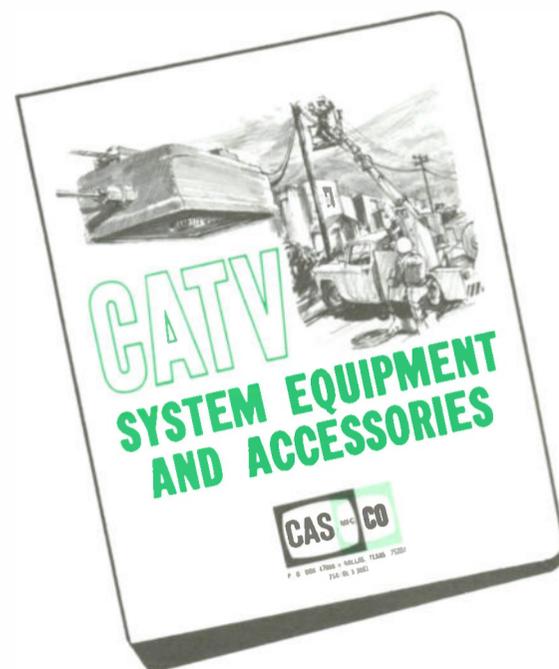
CAS low overhead direct selling means lower prices for you! Since CAS maintains no national sales force, savings are passed on to you. And, if you qualify, you may save even more by buying at Special System Operator Prices!

**Direct orders are easier for you**

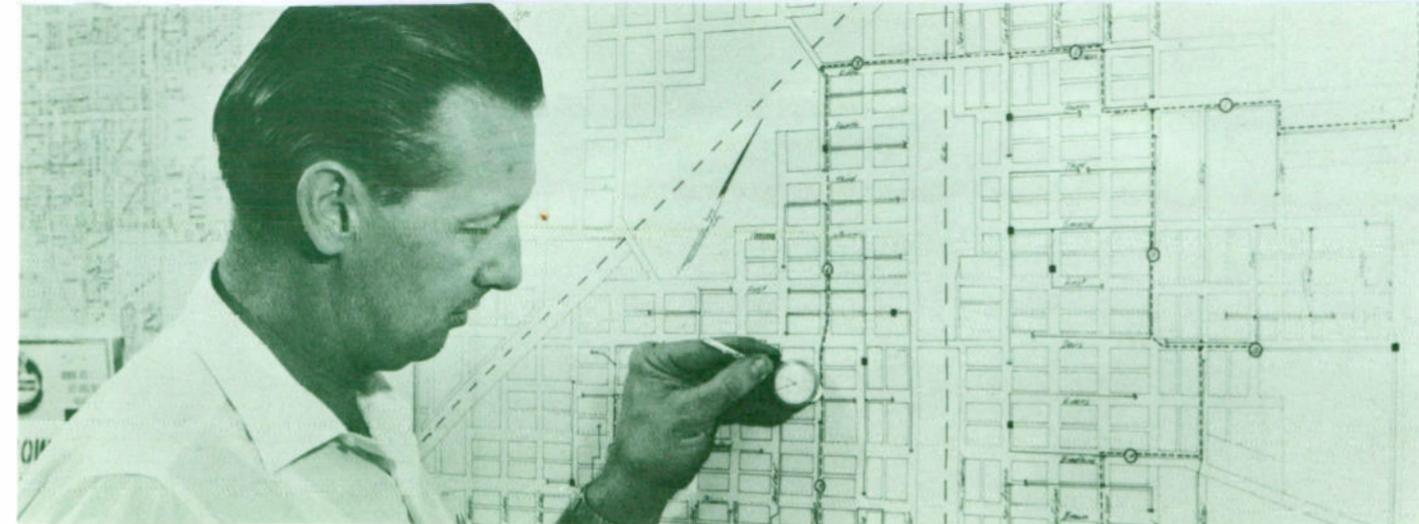
Your CAS catalog is always present. There's no waiting for a salesman to call. Order right from your office, when you want to. CAS keeps your catalog up-to-date with electrical and mechanical specifications and prices of all equipment. Simply fill out an order blank and send it to CAS . . . you save time, eliminate errors by ordering when it's convenient for you.



**Direct orders are faster** CAS anticipates customer requirements with ample inventories of the most wanted CATV equipment and accessories. Chances are your order will be filled the very day it is received. But, if you're really in a hurry, telephone your order directly to CAS. Off-the-shelf items can be shipped to you immediately by air!



**Save money, effort and time . . .** buy direct from your CAS CATV System Equipment and Accessories catalog. It is a salesman available 24 hours a day, every day of the year!



**System Design and Turn-key Construction Capabilities**

**CAS** knows well from actual experience as a CATV system operator that the responsibilities of turn-key construction extend well beyond "just building a system."

**Importance of good system design and equipment reliability**

If your system doesn't deliver consistently good signals without fluctuations caused by changes in weather, temperature or power conditions — you'll rapidly discover that keeping old subscribers will be as difficult as signing new ones. Your subscribers demand reception without noticeable deterioration and they expect only a minimum of downtime due to equipment repair.

CAS system design and turn-key construction capabilities assure your subscribers of the best possible reception . . . CAS performance-proved CATV equipment means an absolute minimum of downtime.

**CAS eliminates common CATV malfunctions**

Listen to what Mr. John Threadgill, experienced owner and operator of sev-

eral Texas CATV systems says:

"We built our first CATV system in 1954 and have been in the business ever since. In the past 12 years we have built and operated systems using strip, sub-channel and low-band amplifiers. These systems had three common problems:

1. Cross modulation
2. Noise
3. Outages from electrical storms

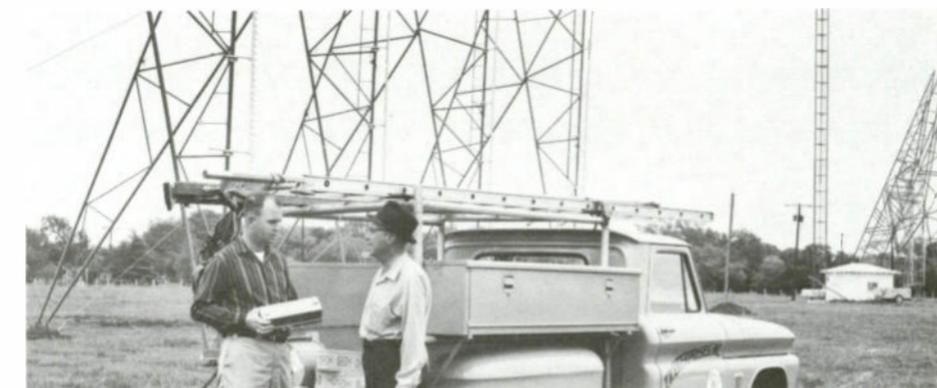
*CAS eliminated these problems in the all-band system which it turn-keyed for us in Marlin, Texas.*

The system is well over a year old and uses the complete line of CAS

transistorized amplifiers. Low power consumption of the CAS amplifiers helps keep our power bills down. They require only routine maintenance and minimize our repair costs."

**Good system design and equipment reliability build profits**

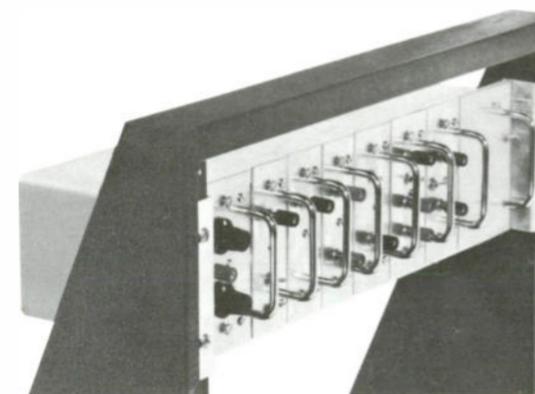
Whether you're considering building a new CATV system or modernizing an existing one, CAS system design and turn-key construction capabilities offer you the advantages of economy and reliability . . . a combination that means *more profits for you.*



Jack (left) and John Threadgill inspect new CAS amplifiers. Tropospheric parabolic scatter antenna in background was designed by Jack to eliminate fadeouts in the Threadgill's Marlin, Texas, system.

**NEW!**

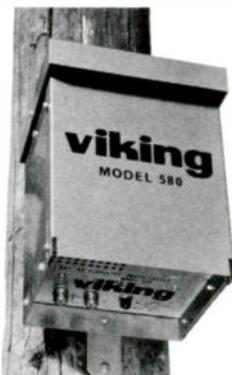
This automatic solid-state switch was designed by CAS to switch between the two troposcatter antennas shown in Marlin system photo above. It senses the stronger of the two antenna signals and automatically switches to the better picture to drastically reduce fades by utilizing the space diversified principle of the two antennas.



P. O. BOX 47066 • DALLAS, TEXAS 75207  
214/BL 3-3661

fitting or VF-61 fitting which will accept both 20 and 22 gauge 59U. Prices on request. #5903 12 Amp Regulated power supply.

**Model 580 remote power supply** provides 6 amperes of regulated 30 VAC to solid-state CATV system from either of two connectors. Output voltage is regulated within 1% for power line



voltage from 95 to 130 VAC, and within 2% for load variations between 2 and 6 amperes. Unit has built-in automatic re-set circuit breaker; an RF/power filter provides minimum of 60 db isolation between power lines and RF terminals. Unit may be rack, wall or cabinet mounted, and has meter for constant monitoring of output current.

## POWER COUPLERS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### AMECO, INC.

**PI-1-AM, PI-1-412, PI-1-500, PI-1-750** Ameco power inserters permit passage of AC or DC directly into cable. They are weatherproofed in epoxy coated lightweight housings that can be strand mounted. Low insertion loss; 20 db input-output return loss to prevent RF signal from entering power supply.

### ANACONDA ASTRODATA CO.

**Model 804 Power Inserter;** strand mounted, in line power inserter supplies cable powered system amplifiers, when the power supply is not immediately adjacent to the cable.

### BLONDER-TONGUE

**MDX-75.** Duplexer for carrying AC. Audio, AM to amplifier on same 75 ohm cable used to carry RF (2 needed). May be used to combine or split frequencies in 0-2 mc band with the 54-216 mc band. CATV: \$9.20.

### ENTRON, INC.

**RPU Series 30** remote power insertion unit, provides easy means of duplexing 30 vac or dc to cable power remotely located amplifiers. Weather-proof — add to system at any convenient location. Available with all popular fittings. Supplies power over coax from RPT transformer. Feeds power from RPU at input, output, or both. Price \$27.00.

### JERROLD ELECTRONICS CORP.

**Model SPJ-2** is a Starline power combiner for transporting 30 VAC power from Model SPS-12 power supply to the trunk-line in instances where Model SPS-12 is remotely located. Current carrying capacity is 12 amperes. Price \$19.95.

### KAISER-COX CATV

**Power couplers,** provide method for coupling AC power to coaxial cable. Weatherproof hous-

ing. Pole mounting matched for 75 ohm cable.

**Model KRP-412** .412" aluminum.

**Model KRP-412J** .412" jacketed aluminum.

**Model KRP-500** 1/2" aluminum.

**Model KRP-500J** 1/2" jacketed aluminum.

**Model KRP-750** 3/4" aluminum.

**Model KRP-750J** 3/4" jacketed aluminum.

**Model KRP-480 type 4920** .480" corrugated copper.

**Model KRP-650 type 4930** .650" corrugated copper.

### VIKING INDUSTRIES

**Model 5925** power duplexer—12 Amps AC/DC.

## SUB-CHANNEL CONVERTERS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### JERROLD ELECTRONICS CORP.

**Sub-channel to high VHF channel converter, Model CDX-713.** Converts signals in the 4 thru 47 mc range to channels 7 thru 13. Stabil-Life feature. Bridging input. Plug-in equalization pads. Gain: 15 db. Gain control range: 3 db. Noise figure: 10 db. 75 ohm input and output. Obtains power from BDA-26. Output (operating): 44 dbj. Price \$115.50.

## ATTENUATORS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### AMECO, INC.

**Fixed pad, Model PDF-3.** Weatherproof series to pass AC or DC power. Provides excellent match and available in 3 db steps. Has "F" or UHF connectors.

**PF Series:** Similar to PDF.

**PD Series:** available for UHF, AM; F-61, .412, .500 and .750 connectors.

### ANACONDA ASTRODATA CO.

**Model 920** Coaxial Attenuator. Fixed attenuators in values of 3, 6, 10 and 20 db. DC and Power voltage blocked. Price on request.

### BENCO

**H8-VAT** variable high-band attenuator; 3 to 21 db in 3-db steps. To be used ahead of distribution amplifier when close to split-level type trunkline repeater amplifier.

### BLONDER-TONGUE

**Fixed attenuator, Model FA.** Specify 3 db, 6 db, 10 db or 20 db. "QD" connectors. CATV: \$3.25.

### CRAFTSMAN

**Trunkline Couplers** for 2 or 4 output lines with outdoor pole or messenger housing. Power passing capability. Fittings as listed below:

**Model 504-PP-AM** 2-way \$10.75.

**Model 504-PP-412** 2-way \$13.25.

**Model 504-PP-500** 2-way \$15.25.

**Model 504-PP-750** 2-way \$17.50.

**Model 513-PP-AM** 4-way \$14.00.

**Model 513-PP-412** 4-way \$18.00.

**Model 513-PP-500** 4-way \$19.00.

**Model 513-PP-750** 4-way \$22.00.

## For Plus Performance SURE GRIP CONNECTOR



by craftsman

### DAVCO ELECTRONICS CORP.

Fixed AM, BNC, F, and UHF Types are available from stock. Other types available on request. Write for literature and prices.

### JERROLD ELECTRONICS CORP.

**Accessory pads** for BDA-213, Model BT-D-OL to 15L for the low band amplifier and Model BT-D-OH to 30H for the high band amplifier. Attenuation range at Channel 6 is 0, 3, 6, 9, 12 and 15 db for BT-D-OL to 15L and 0, 5, 10, 20, 25 and 30 db for BT-D-OH to 30H. Insertion loss is 1.0 db maximum. Price \$4.80.

**PDL.** Fixed attenuator series. 75 ohm impedance. Available in 3, 6, 10, 20 db values. 0 to 220 mc. F-61 fittings. Price \$3.50.

**Starline** plug-in pads, model SXP Series. Available with 0, 3, 6, 9, and 12 db attenuation. Price \$1.95 each.

### SPENCER-KENNEDY LABS

**438** attenuator. Fixed value attenuator pads available in 3, 6, 10, 20 db values. Model 296 for cable-powered systems. Weatherproof. Prices on request.

## EQUALIZERS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### BLONDER-TONGUE

**ME-1.** Equalizes all VHF channels for long cable runs. Attenuation ranges from 1 db at channel 13 to 17 db at channel 2. 75 ohm UHF connectors. CATV: \$16.00.

**ME-2.** Equalizes low VHF channels only. Attenuation ranges from 1 db at channel 6 to 9 db at channel 2. 75 ohm UHF type connectors. CATV: \$16.00.

**3412** Temperature-Controlled Slope Equalizer: Passive fixed unit compensates for cable slope and changes in cable slope caused by changes in temperature. Rugged cast aluminum housing with stainless steel faceplate, for mast, messenger cable, or surface mounting. Bandpass: 50-220 MHz,  $\pm 1/4$  db from ideal curve at 70°F. Cable slope equalizing length: 19 db (loss at 216 MHz). Temperature-controlled cable length: 64 db (loss at 216 MHz). Loss at channel 13

# JERROLD

## FIRST IN CATV

## LONG-HAUL TRANSPORTATION STARLINE

CATV Systems Division  
JERROLD ELECTRONICS CORPORATION  
401 Walnut St., Phila., Pa.

# SKL

## MONEY-SAVING FITTINGS

(216 MHz): 2.5 db at 70°F. Temperature range -40 to +120°F (-40 to +49°C). Input match: 19 db return loss (VSWR, 1.25). Output match: 15 db return loss (VSWR, 1.40). Current-handling ability: 6 amps. Price \$45.00.

### DAVCO ELECTRONICS CORP.

Distributors of Entron LEF and ECE models. Write stating your requirements.

### JERROLD ELECTRONICS CORP.

**Automatic Temperature Compensator, Model TOM-2.** For use with Model SCA-213 All-Band Distribution system (tube type). Equalizers for 21 db of cable at channel 13. Compensates for temperature tilt variations thru 64 db of cable. Price \$36.00.

**Models LSC-2, LSC-4, LSC-6, and LSC-8** equivalent cable lengths used in systems employing



LSA-410AB amplifiers in the main trunk line. They are equivalent, respectively to 2, 4, 6, or 8 db of cable measured at 90 mc. They cover 5 to 90 mc band, have an input and output impedance of 75 ohms with a maximum VSWR of 1.1:1 and are equipped with "N" fittings. Price \$26.50 ea.

**Models LSE-1 and LSE-2** equalizers used in systems employing LSA-410AB amplifiers in the main trunk-line. Units will provide compensation for varying cable attenuation due to variations in frequency. Used at amplifier locations. Model LSE-1 compensates for the variation in cable attenuation due to variation in frequency between 5 and 90 mc for 28.5 db of cable measured at 90 mc. Model LSE-2 will perform the same function for 24.5 db of cable. Price \$26.50.

**Models LTE-25 and LTE-29** plug-in thermal equal-

izers for 25 and 29 db of cable respectively. Used with amplifier Model TLSA-510. Price \$44.50 ea.

**Models LSET-1 and LSET-2** are thermatic equalizers used in systems employing LSA-410AB amplifiers. Model LSET-1 will compensate for the variation in cable attenuation due to variation in frequency between 5 and 90 mc for 28.5 db cable measured at 90 mc at 80°F. In addition, it will compensate for the variation in cable attenuation due to variation in temperature between 0°F and 120°F for the same length of cable. Model LSET-2 will perform the same functions for 24.5 db of cable. Price \$39.75.

**Models LVE-0, LVE-24, LVE-27, and LVE-30** plug-in cable equalizers used with model TLSA-510 amplifier. Model LVE-0 is used when no equalization is required. Model LVE-24 equalizes for from 22.5 to 25.5 db of a cable at 90 mc, 60°F. Model LVE-27 equalizes for from 25.5 to 28.5 db cable and model LVE-30 for from 28.5 to 31.5 db of cable at 90 mc, 60°F. Prices: Model LVE-0 \$9.75. All others \$28.75.

**Plug-in variable equalizer, Model PVE.** Provides cable equalization for one Model SCA-213 amplifier. Two controls, located at the top of the device, permit plus or minus 1/2 db adjustment of the equalizer from its given attenuation value to compensate for variations in distances between amplifier locations. Available in 18 and 21 db values. Price \$12.25.

**Model STE** is a Starline thermal equalizer used at every third trunk amplifier location. Equalizes for 17 db of cable at 216 mc at 70°F and compensates for temperature changes for 60 db of cable from 40°F to 120°F. Price \$44.50.

### SPENCER-KENNEDY LABS

**7210 Equalizers:** Series of wide-band fixed, thermal and combination equalizers for wide range of cable lengths. Strand mounted, with 5A AC bypass current capacity, connectorless cable fittings.

### VIKING INDUSTRIES

**Model 523** In line switchable pad to pass A-C and D-C. Contains a 3 db and 6 db pad that



can be used individually or together for a total of 9 db. Designed to be strand mounted or pole mounted in a Viking weather-proof die cast zinc case, it will give years of added service.

## DIRECTIONAL COUPLERS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### ANACONDA ASTRODATA CO.

**Model 805, 06, 07, 08, 09, 10 and 11** Directional Couplers. High isolation and directivity



directional couplers ranging from 12 db to 27 db in 3 db steps, and providing uniform frequency response from channel 12 through 13.

### C-COR ELECTRONICS

**Model TM Hybrid** directional taps, bandpass 56-216 MHz  $\pm 0.3$  db on thru terminals. Impedance 75 ohms all terminals with a return loss of 18 db. Isolation between outlets 23 db (min.) with a maximum insertion loss of 1 db all units except 10 & 15 db. Tap values range from 10 to 40 db in 5 db steps. Supplied in cast aluminum case with accommodations for seized center conductor. "F" connectors for service drops supplied.

**Model TU** Same as above but for pedestal mounting.

### CRAFTSMAN

**600A Directional Coupler** is available in tap attenuations of 10, 14, 18, 22, 26, and 30 db and features very high return loss on the input, output and tap terminals. The surface mounted tapoff features MF-61A fittings for the through coaxial line and tapoff line. It may be combined with Craftsman's two-way and four-way splitters, models 2WDWSF and 4WDW-F. Installers net price is \$7.95 including MF-59A cable connectors.

### DAVCO ELECTRONICS CORP.

Distributor of Entron and other type couplers.

### ENTRON, INC.

DF Series directional couplers provide one tapoff from trunklines to feed a distribution ampli-

## SOLID-STATE CATV Equipment / Accessories from ENTRON

Trunkline Amplifiers  
Bridging Amplifiers  
Extender Amplifiers

Line Splitters  
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Variable Attenuation

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for your CATV system"*

**For Plus Performance  
MODULAR  
DIRECTIONAL  
TAP  
by craftsman**



fier. Flat frequency response, excellent return loss. Physical and electrical isolation of distribution amplifiers from trunkline permits advanced



system installation techniques. Low insertion loss; weatherproof housing. Price \$22.50.

**JERROLD ELECTRONICS CORP.**

DC-8, 12 and 16 are back-matched directional coupler type high-isolation tap units with the following respective characteristics — Bandwidth 7-216 mc, 6-216 mc, and 6-216; insertion loss (max.) and 8 db (min.); 12.5 db (max.) and 12 db (min.).

Models SDC-8, 12 and 16 Starline directional couplers, with low insertion loss to the line and high isolation (26 db min.) between output and tap. Tap loss of SDC-8 is a nominal 8.25 db; of SDC-12, 12.25 db; and of SDC-16, 16.25 db. Power by-pass. Price \$21.25 ea.

Models LSA-8, LSA-12, and LSA-16 directional couplers, used to tap off a 75 ohm line. Units cover the 5-90 mc band, have input and output impedance of 75 ohms with a VSWR of 1.2:1, and are equipped with "N" fittings. Isolation between output and tap is 30 db minimum. Power by-pass (1 amp). Model LSA-8 has 8 db loss in one leg and less than 1 db in the other. Models LSA-12 and LSA-16 have, respectively, 12 and 16 db loss in one leg and less than 0.5 db loss in the other. Price \$26.50 each.

**TELE-SIGNAL ELECTRONICS**

Dee Cee Series power passing couplers are sealed in rugged extruded aluminum cases for positive weatherproofing. Available in either E or Y configurations with loss values of 8, 12, 16, 20, and 24 db.

**VIKING INDUSTRIES**

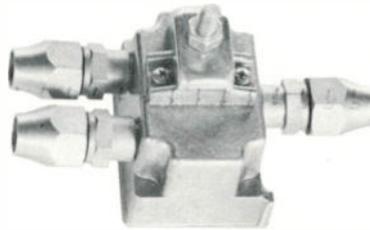
Model 5500 directional line tap with terminator, engineered to permit tapping of trunklines or feederlines and terminate trunklines with ac/dc-isolated termination. Additional outlets can be provided by using hybrid coupler #932 for

two or #934 for four outlets. No additional insertion loss is added while providing over 25 db of isolation between outputs.

Model 5502 underground multi-output directional tap is designed for easy installation in underground systems. Interference rejection of over 30 db. AC or DC power passing with tap isolated.

Ultra-flat directional tap: interchangeable plug-in 1, 2, 3 or 4 output plates. 30 db interference rejection; AC/DC power passing with taps isolated. Models 5520 21, 22, 23, 24.

Model 528 trunk line splitter; same as model 525 above, except unit has parallel outputs in-



stead of "T" type input-output configuration.

Model 932 two-way hybrid splitter; frequency range 50-220 mc; through loss 3.5 db maximum; isolation between outputs 30 db minimum high-band, 35 db minimum low-band. Zinc die-cast case. Available to pass AC on special order. Price \$4.00.

Model 933 four-way hybrid splitter; frequency range 50-220 mc; through loss 6.5 db maximum; isolation between outputs 30 db minimum. Zinc casting case; available to pass AC on special order. Price \$7.00.

Model 930 two-way indoor splitter; 3.3 db through loss. Price \$2.50.

Model 931 four-way indoor splitter; through loss 6.5 db. Price \$5.00.

Model 936 two-way back-matched indoor splitter; through loss 3.5 db. Price \$3.75 each.

Model 556 two-way hybrid splitter same as model 936 except fittings are on top and bottom of unit instead of front. Price \$3.75.

Model 526 two-way "Y" indoor splitter; same as model 936 except fittings are on sides of unit in "Y" configuration. Price \$4.00.

Model 533 three-way indoor hybrid splitter; through loss 3.5 db maximum for 3 db outputs, 6.5 maximum for 6 db outputs. Isolation between outputs is 28 db minimum. Price \$5.75.

Model 937 four-way indoor hybrid splitter; through loss 6.5 db maximum. Isolation between outputs 30 db minimum. Price on request.

**SPLITTERS**

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

**AMECO, INC.**

MLS-261 midget line splitters. 3 db loss to each lead; excellent signal matching. Weatherproofed units. MLS-261 takes Ameco F-61 connector. Price \$4.50.

LS-2 series line splitters.

LS-4 series line splitters.

LSS-2 line splitters.

LSS-3 line splitters.

LSS-4 line splitters.

Prices on request.

DS1-AM, DS1-412, DS1-500 and DS1-750 are directional line splitters designed to pass power

to the tap. They are available for aluminum connectors sizes AM, .412, 1/2" and 3/4".

LSL-2-AM, LSL-2-412, LSL-2-500, LSL-2-750, LSL-3-AM, LSL-3-412, LSL-3-500, LSL-3-750, LSL-4-61, LSL-4-AM, LSL-4-412, LSL-4-500, LSL-4-750 are Ameco Line Splitters that range from 2 to 4 outlets coming from a single input of any size connector.

LD-2-AM, LD-2-412, LD-2-500, LD-2-750 Two-way line dividers for in-line mounting to fit AM, .412, .500 and .750 cable. Units are weather sealed and epoxy flow-coated.

**ANACONDA ASTRODATA CO.**

Model 815 (two-way) and 816 (four-way) Splitters. In line type splitters by a broad band bridge circuit with outstanding isolation and impedance matching. Flatness plus or minus 0.25 db. Internal power bypass is provided for cable powered systems. Each unit is enclosed in a weatherproof housing.

**BENCO**

Two-way hybrid, Model 2 SP-75MP. Back-matched unit for 4.5-220 mc frequency range.



75 ohms. Better than 20 db isolation; 3.3 db loss per output. In new VERSACAN for flexible mounting.

Three-way splitter, Model 3 SP-75MP. Hybrid back matched for all-band operation. 75 ohms. Same as Model 2 SP-75MP.

4 SP-75MP. Same as Model 2 SP-75MP for four-way splitting. Better than 25 db isolation.

Asymmetrical splitter, Model 2 ASP-75MP. Available in 6, 8, 10, 12, 16, 20 and 25 db branch-line attenuation values. 20 db min. isolation. Passes all frequencies from 4.5 to 220 MHz. In new VERSACAN for flexible mounting.

3DSM-(412 or 500) In-line directional 3-way backmatched splitter with high (10 amp AC).

2DSM-(412 or 500) In-line directional 2-way back-matched splitter with high (10 amp AC) current passing capacity.

2-Split-75MP 2-way hybrid indoor splitter, back-matched.

4-Split-75P 4-way hybrid splitter for indoor use.

**BLONDER-TONGUE**

2-way, hybrid splitter, Model 2SBV. Can be used to split or combine two 75 ohm cables. 26 db isolation; 3 1/2 db loss. CATV: \$9.10.

Four-way hybrid splitter, Model 4SBV. Can be used to split or combine four 75 ohm cables. 18 db minimum isolation; 6 1/2 db loss. UHF-type connectors. CATV: \$12.60.

2-way hybrid splitter, Model TS-772. Indoor, surface mounted. Can be used to split or combine two 75 ohm cables. 3 1/2 db loss. CATV: \$4.00.

4-way splitter, Model TSB-774. Indoor, surface mounted. Can split four 75 ohm cables. 6 1/2 db loss. CATV: \$4.75.

2SBV-P 2-way high power hybrid 75-ohm splitter/mixer. Backmatched unit with power feed-through provisions, for VHF and subchannels. Designed especially for high-output head-ends and/or line powered CATV applications, where high RF levels and/or high currents must be

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**FIRST IN CATV  
SUBSCRIBER-CONNECTION  
EQUIPMENT  
DCM MULTI-TAPS**

CATV Systems Division  
**JERROLD ELECTRONICS CORPORATION**  
401 Walnut St., Phila., Pa.

handled. Weatherproof unit is mounted in cast aluminum case suitable for messenger cable, mast or surface mounting. Price \$12.50.

**2ASBV** two-way hybrid asymmetrical VHF/sub-channel splitter/mixer used for tapping off a portion of the signal from a line, while maintaining maximum isolation from the tapped line. In a typical application it is used when feeding a distribution amplifier or line extender from a trunk line. Three models: 2ASBV-8, 2ASBV-10, and 2ASBV-12 with tap losses of -8, -10, and -12 db respectively, are available. Power feed-thru provisions are present in all units. The 2ASBV is housed in a rugged, weatherproof, die-cast case, and may be mast mounted, secured to a messenger cable, or wall mounted. Price \$10.45.

**2ASBV-8/10/12-P** Similar to 2ASBV-8/10/12 except handles 6 amperes of AC power. Price \$15.00.

### CAS MFG. CO.

**CAS-2W** 2-way splitter, UHF fittings. Max. 3.2 db loss with 14 db isolation. Switch controls line powered voltage to both outputs. Strand mounting, weatherproof housing. Price from factory.

**CAS-4W** 4-way splitter, UHF fittings. 6.2 db loss and 20 db isolation across 4 legs. Switch controls line powered voltage to two legs. Strand mounting, weatherproof housing.

**CS-4** matched four-way cover splitter providing four subscriber taps. For use with ILT series. Price on request.

**CS-2** matched two-way cover splitter providing two subscriber taps. For use with ILT series. Price on request.

**AS-412, AS-500 and AS-750** splitters for aluminum cable. Inline splitters for .412, .500 or .750 aluminum. Passes power VSWR 1.20 or better. (Specify size cable).

**Indoor splitters.** Midget 2-way or 4-way back-matched. VSWR 1.25 or better. Price from manufacturer.

### CRAFTSMAN

**Model 2WDW-S-F:** a 2-way hybrid splitter providing two highly isolated outputs from single house drop. May also be used to mix 2 input signals for a single output. Weatherproof housing. Price \$3.15.

**Model 1592:** same as 2WDW-S-F except F connectors mounting on top instead of side. Price \$3.50.

**Model 4WDW-F:** a 4-way hybrid splitter providing 4 highly isolated outputs from a single house drop. Wall mounting. Price \$6.50.

**Outdoor hybrid splitters** for pole or messenger mounting. Rugged cast aluminum housing. F-CIA chassis and drop line fittings.

**Model 504** 2-way. Price \$4.25.

**Model 513** 4-way. Price \$7.95.

### DAVCO ELECTRONICS CORP.

Distributor of Craftsman, Davco and Entron Splitters. Two-way, three-way, and four-way types available from stock. Specifications and prices sent on request.

### ENTRON, INC.

**Passive line splitter, DL series.** For line branching. Excellent frequency response, low loss. Inexpensive, suitable for multiple in-building connections. Choice of 2 or 4 outputs. 75 ohm. "F" fittings; 50 MHz to 225 MHz. Price: 2 output \$6.50; 4 output \$7.50.

### G.C. ELECTRONICS

**A-1083 UHF-VHF Splitter.** Write to G.C. for areas and details.

### JERROLD ELECTRONICS CORP.

**1593 2-way splitter.** Splits one 75 ohm line into two 75 ohm lines with only 3.5 db loss in each leg. Passes 24 vac for line extenders.

Mounts on messenger cable. 23 db minimum isolation. F-61 fittings. Price \$10.75.

**1592 2-way splitter.** Response flat from 4 to 220 mc. Surface mounting. Isolation: 20 db low band; 15 db, high band. 75 ohm impedance. F-61 fittings. 3.5 db maximum insertion loss. Price \$6.95.

**1562 2-way transformer type splitter.** 20 db low band and 15 db high band isolation. Fittings come out around edges of "blister-can." B-59 fittings. Price \$3.65.

**1514 4-way transformer type splitter.** 12 db isolation. 6-7 db splitting loss. F-61 fittings. Covers 24 to 216 mc. Price \$6.95.

**Model SHS-2** Starline two-way, power-passing hybrid splitter with nominal insertion loss of 3.5 db. Price \$21.25.

**Model SO-1** creates one Starline feeder line with only 0.2 db (max.) insertion loss. Price \$4.75.

**Model SO-2** creates two Starline feeder lines with a nominal insertion loss of 3.5 to each. Price \$7.50.

**Model SO-3** creates three Starline feeder lines with a nominal 3.5 db loss to one, and 6.5 db loss to each of the others. Price \$8.50.

**Model SO-4** creates four Starline feeder lines with a nominal insertion loss of 6.5 db to each line. Price \$9.75.

### KAISER-COX CATV

**Models KLS-2, KLS-3 and KLS-4** line splitters. Available with connectors and fittings for aluminum and corrugated copper cable. Contact manufacturer for price.

### LINDSAY ELECTRONICS

Complete line of hybrid splitters. Contact manufacturer for information, prices.

### PLASTOID CORP.

**2-way splitter for trunk or feeder, Model 2WD3.** All-band; mounts on messenger strand. 3.5 db thru loss; 20 db isolation between outputs; UHF fittings. \$5.95 each.

**Model 3WD3.** Three-way splitter for trunk or feed line. Mounts on messenger. 1 output 3.5 db thru loss; 2 outputs 7 db thru loss. Net: \$6.50.

**Model 4WD3.** Same as above for four-way dividing. \$7.50.

**2-way splitter, Model 2WD-W.** All-band, hybrid type. 3.5 db loss for each outlet; high isolation. Waterproof. "For C" fittings. \$2.95.

**Model 2WD-W-S-F.** Same as 2WD-W with matched 75 ohm input to two matched 75 ohm outputs. 20 db isolation between outputs. \$2.95 each.

**Model 4WD-59-F.** Same as above for 4-way splitting. Isolation of at least 15 db between outputs. \$6.75 net.

### SPENCER-KENNEDY LABS

**SKL/7261 Multivider:** Strand-mounted splitter deriving one distribution line. Trunk insertion loss 1 db, splitting loss 12 db. Passes 5A AC for cable powering. Connectorless cable fittings.

**SKL/7262 Multivider:** Strand-mounted splitter deriving two distribution lines with nominal splitting loss of 3.5 db each. Passes 5A AC. Connectorless cable fittings.

**SKL/7263 Multivider:** Strand-mounted splitter deriving three distribution lines with nominal splitting losses of 6.5, 6.5 and 3.5 db. Passes 5A AC. Connectorless cable fittings.

**SKL/7264 Multivider:** Strand-mounted splitter deriving four distribution lines with nominal splitting loss of 6.5 db each. Passes 5A AC. Connectorless cable fittings.

**SKL/7265 Multivider:** Strand-mounted splitter deriving three distribution lines with nominal splitting loss of 5 db each. Passes 5A AC. Connectorless cable fittings.

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**SKL/7161** Plug-in splitter for Colorburst/7000 bridging amplifiers. Derives one distribution line with negligible loss.

**SKL/7162** Plug-in splitter for Colorburst/7000 bridging amplifiers. Derives two distribution lines with nominal splitting loss of 3.5 db each.

**SKL/7163** Plug-in splitter for Colorburst/7000 bridging amplifiers. Derives three distribution lines, two with 6.5 db and one with 3.5 db nominal splitting loss.

**SKL/7164** Plug-in splitter for Colorburst/7000 bridging amplifiers. Derives four distribution lines with 6.5 db nominal splitting loss.

**SKL/7165** Plug-in splitter for Colorburst/7000 bridging amplifiers. Derives three distribution lines with 5 db nominal splitting loss.

### TELE-SIGNAL ELECTRONICS LTD.

**LS2-PP Splitter,** completely weatherproof two-way splitter; sealed in rugged aluminum case for underground or exposed mounting. Insertion loss 3.2 db. Power pass rating 6 amps. Return loss at all connectors is 20 dbs. Available with all connectors except .750. CATV price \$14.95.

**LS3-PP Splitter,** completely weatherproof three-way splitter is sealed in rugged aluminum case for underground or exposed mounting. Insertion loss on one output is 3.2 db, and 6.5 at other two. Unit is power passing. Return loss at all connectors is 20 db. Available with all connectors except .750. Power pass rating 6 amps. CATV price \$17.50.

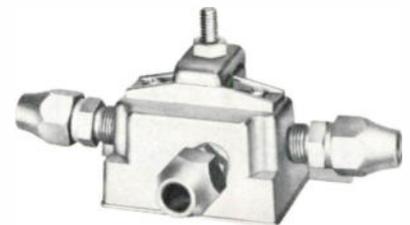
**LS4-PP Splitter** completely weatherproof 4-way splitter with same specifications as LS2, but with 6.5 db insertion loss per output. CATV price \$19.50.

### TV CABLE SUPPLY CO.

**2F cascade two-way hybrid splitter,** price \$2.95.  
**4F four-way line splitter,** hybrid, price \$5.75.

### VIKING INDUSTRIES, INC.

**Model 525** trunk line splitter for splitting trunk into two trunks or combining two trunks into one. Die-cast non-ferrous housing is designed



for pole or messenger mount. Isolation between outputs is 26 db minimum; through loss is 3.25 db. Unit will pass up to 4 amps AC or DC

**Model 932** two-way coupler; 3.5 db maximum through loss, 30 db minimum isolation between outputs. Price \$4.40.

**Model 933** four-way coupler; 6.5 db maximum through loss, 30 db minimum isolation between outputs. Price \$7.70.

**Model 557** two-way power passing trunk line coupler; vertical entry, 3.5 db maximum through loss, 30 db minimum isolation between outputs.

**Model 558** four-way power passing trunk line coupler; vertical entry, 6.5 db maximum through loss, 25 db minimum isolation between outputs.

# SKL

## PLUG-IN AMPLIFIERS

### TAP-OFFS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

#### AMECO, INC.

**Directional coupler tap-off series** available in various combinations of one, two and four outputs. Now color coded for tap value identification on the ground. Blue = 11 db. Orange = 14 db. Green = 17 db. Red = 22 db. Yellow = 26 db. White = 30 db. DT-2-AM61; DT-2-41261; DT-4-AM61; DT-4-41261; DT-4-5061; DT-2-315561; DT-4-315561.

**Directional tap, Model DTI-1161.** For feeder cable; excellent back match, low insertion loss (1/2 db), flat response. 75 ohms. Strand mounting. In 11, 14, 17, 22, 26, 30 db attenuation. Price is \$7.25. Minimum of 16 db isolation between taps. Price is \$8.50.

**Solid state active tap, Model APT-O.** Features unity gain with maximum output of 32 db at all four taps. Operates 50 to 220 mc; 75 ohm. For bridging or UHF. Isolation is 15 db average between outputs and loss per output is plus 1/2 db. Designed for outdoor strand mounting. APT-O-AM; APT-O-412; APT-O-500; APT-O-750. Price is \$21.95.

#### ANACONDA ASTRODATA CO.

**Model 805, 06, 07, 08, 09, 10 and 11** Directional Couplers. High isolation, high directivity directional tap offs ranging from 12 db to 27 db in 3 db steps, and providing uniform frequency response from channel 12 through 13. Four tap offs are built-in to each directional coupler.

#### BENCO

**Model 1T-75MP,** single backmatched tap-off, transformer design. Available in 12, 16, 20, 25, 30, 35 and 40 db tap-off attenuation values. Passes 4.5 - 220 MHz. Insertion loss from 0.85 to 0.3 db.

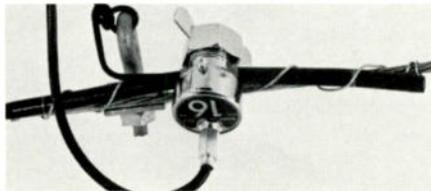
**Single tapoff, Model 1-TAP-75P.** Transformer type in 12, 16, 20, 25 and 30 db branchline attenuation values. All-band. 75 ohms. Insertion

loss ranges 0.33 to 0.15 db. For indoor use only. In "Blister" can.

**2-TAP-75P.** Similar to Model 1-TAP-75P except for dual use. Loss is 0.7 to 0.2 db.

**4-TAP-75P.** Similar to Models above except for four-way use. 0.7 to 0.25 db insertion loss.

**ST4-75MP, dropline tapoff.** 13, 16, 20, 25, 30, 35, 40, 45 and 60 db attenuation values. Solder-



less, pressure type with toroidal transformer; back matched 75 ohms. 1 to 0.2 db insertion loss.

**2T-75MP** Dual output backmatched transformer designed multi tap-off. Available in 12, 16, 20, 25, 30, 35, 40 db tap-off attenuation values.

**4T-75MP** 4-output backmatched, transformer designed multi tap-off. Available in 10, 15, 20, 25, 30, 35, 40 db tap-off attenuation values.

**6T-75MP** 6-output backmatched transformer designed multi tap-off. Available in 13, 20, 25, 35, 40 db tap-off attenuation values.

**Stinger-1, Stinger-2, Stinger-4.** Pressure tap inserts with one, two or four dropline outputs. Tap-off attenuation values available: Stinger-1: 13 to 40 db; Stinger-2: 16 to 40 db; Stinger-4: 20 to 40 db. Transformer designed, high isolation between backmatched outputs. Compatible with most pressure-tap blocks 3/8" threaded.

#### BLONDER-TONGUE

**MIT-4.** Four 75 ohm outputs from 75 ohm thru line. 17 db isolation. 0.35 db thru loss per output used. CATV: \$18.00.

**Stinger-3200 series.** 75 ohm back matched pressure tap insert. Available with 12 db and 15-50 db (5 db steps) isolation. Moistureproof seal. Type F connectors. CATV: \$1.84. (12 to 25 db models.) CATV: \$1.55 (30-50 db models.)

#### CAS MFG. CO.

**MC-2 and MC-4** multi-outlet backmatched transformers - "milk-cows". New CAS multi-outlet backmatched transformers make possible a choice of two or four outlets from a single existing pressure tap block without cutting the transmission cable. The MC-2 (two outlet) and MC-4 (four outlet) are direct screw-in replacements for 3/8-inch isolation units on all standard pressure tap blocks. Installation costs are reduced since it is not necessary to cut transmission cables. Isolation values (in db) MC-2 12, 16, 20, 25, 30, 35, 40. MC-4 15, 20, 25, 30, 35, 40. Color-coded for easy identification of isolation values. 25 db isolation (minimum) between

taps. Epoxy filled, completely waterproof. Price, MC-2 \$5.45; MC-4 \$5.95.



**TRA-215T** line powered 20 db amplified line tap; transistorized. Provides amplification to line tap which can be used to feed multiple outlet building. Price available on request.

**TR-215T** line powered 25 db amplified line tap; transistorized. Low-band. Price on request.

**ILT-830** directional in-line tap, variable 8 to



30 db attenuation. Hermetically-sealed cast aluminum housing. Power-passing. Price on request.

**ILT-830-2** directional in-line tap. Same as ILT-830 except has CS-2 cover splitter providing 2 drops

**ILT-830-4** directional in-line tap. Same as ILT-830 except has CS-4 cover splitter providing 4 drops.

**ILT-3** directional in-line tap, -3 db attenuation to tap. 3 db insertion loss. Single drop capacity. Price on request.

**ILT-3-2** directional in-line tap. Same as ILT-3 except has CS-2 cover splitter providing 2 drops.

**ILT-3-4** directional in-line tap. Same as ILT-3 except has CS-4 cover splitter providing 4 drops.

**ILT-0** end of line tap, zero db attenuation; terminates feeder. Single drop capacity. Hermetically-sealed cast aluminum housing.

**ILT-0-2** end of line tap. Same as ILT-0 except has CS-2 cover splitter providing 2 drops.

**ILT-0-4** end of line tap. Same as ILT-0 except has CS-4 cover splitter providing 4 drops. Price on request.

#### CASCADE ELECTRONICS LTD.

**CEDT-1** Directional Tap: A four tap device, utilizing a printed circuit and housed in a die cast

**ENTRON means Excellence in CATV\***

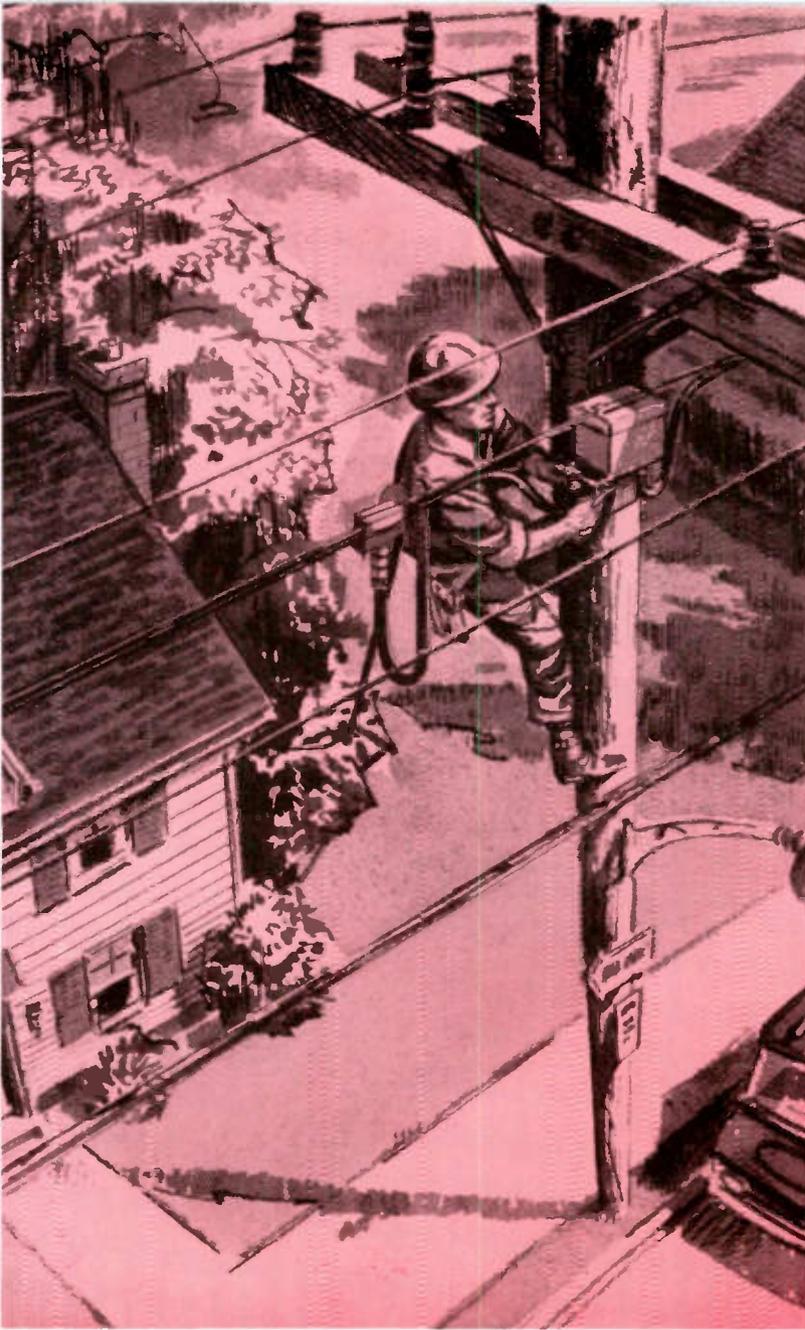
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You can forget about the cable later if you remember this now: Times JT1000 lasts longer up on the poles — without costly repairs or continuing maintenance. Instead of degrading from the day you install it, your cable will have the same high-



**Cable: Available in seamless lengths up to 1/2 mile**

performance quality five years or more from now. Because it's seamless, it's water and vapor proof. Self-sealing when tapped. Gives a 30db return loss guarantee, and radiation protection when high power level amplifiers are used.

So before you install a so-called "economy" cable that will send your men back up the poles for costly replacement, look into Times JT1000 cable. The payout makes the big difference.

  
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\*\* Published Daily at NCTA Convention (4 issues — rate sheet available upon request)

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# SKL

## FIRST INTEGRATED CIRCUIT

aluminum housing which is weather-and water-proof. Taps are available in 4 db steps, ranging from 12 db to 36 db. Price \$17.50.

### CRAFTSMAN ELECTRONICS INC.

**Model 1401** Capacitor tap-off unit (for hotels, motels, hospitals, apartment houses, etc.) Surface mounting. Color coded attenuation values permit use with highest gain amplifiers. Complete with three MF-59A male connectors. Price is \$2.15.

**Model 1WD-1-F** Tap for FM and TV outlets \$2.95. Pressure Tap Attenuators, with blocks.

**Model MI-C/201**, 203 Pressure tap attenuator, capacitive. Specify color or attenuation and block. Price is \$2.45.

**Model BMI-T/201**, 203 Back matched transformer tap. Specify attenuation and block. Price is \$4.20. Same pressure taps as listed above are available without blocks.

**Model MI-C** Capacitive. Price is \$1.00.

**Model BMI-T** Back-matched transformer tap. Price is \$2.75.

Modular Directional taps, outdoor; specify attenuation and tap plate.

**Model 900-412** \$7.90. 9-101 (1) tap plate \$1.58.

**Model 900-500** \$8.50. 9-102 (2) tap plate \$3.70.

**Model 900-AM** \$7.90. 9-103 (3) tap plate \$4.75.

**Model 900-UE-412** \$9.50. 9-104 (4) tap plate \$5.80.

**Model 900-UE-500** \$10.50.

Modular amplifier taps, transistorized amplifiers, 18 db gain with tilt and gain control.

**Model MAT-18-412** \$36.00.

**Model MAT-18-500** \$37.00.

**Model MAT-18-AM** \$36.00.

### DAVCO ELECTRONICS CORP.

Write for information and prices on all types, including several brands and prices.

### ENTRON

**FTB 460**. For use with double shield cables. 75 ohm output from 75 ohm thru line. Choice of attenuators (capacitive FTC series, resistive FTR series, or transformer FTT series, or matched transformer FTM series). Price \$1.40.

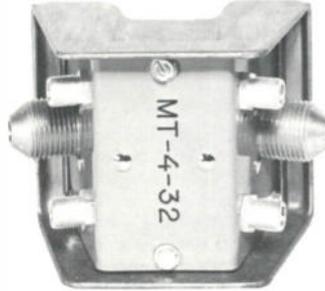
**FTB 480**. For use with corrugated copper shield cable. Price: \$1.40.

**FTB-412**. For use with 0.412" cable.

**MTV** multiple tap with variable attenuation. Solves problem of serving customers at different distances from multiple tap. Resistive, capacitive, transformer or back-matched attenuators can

be used. Thread sizes for all popular attenuators. Positive isolation. Four tap outlets. Weatherproof plugs for unused taps. Gold iridized zinc messenger mounted housing.

**Multee tapoffs, MT series**. Combines extremely flat frequency response with low VSWR for VHF high and low band operation. Adapts to any type 75 ohm coaxial cable up to 1/2" OD. Four



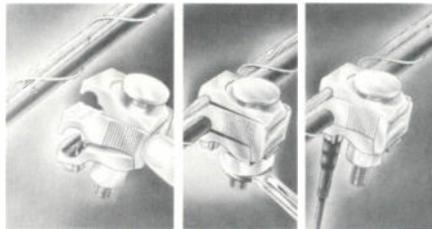
tapoff outlets. Tapoff attenuation for various models, 16, 20, 24, 28, 32 and 36 db. Through-line losses vary from 0.1 to 0.7 db. Write to manufacturer for full particulars and prices.

**FTB-405**. For use with single shield cables. 75 ohm output from 75 ohm thru line. Choice of attenuators (capacitive FTC series or resistive FTR series, or transformer FTT series, or matched transformer FTM series). Price \$1.30.

### JERROLD ELECTRONICS CORP.

**FMT-3**. Provides for connection of one FM set to line. Surface mounting. Isolation: 8 db minimum, 17 db maximum. Less than 1 db insertion loss. 75 ohm impedance. Price \$3.65.

**1491-AC\*** Capacitive tap. 1491A block for .405"



to .412" O.D. cables (includes PTC insert). Price \$2.60.

**1491-AR\*\*** Resistive tap. 1491A block for .405" to .412" O.D. cables (includes PTR insert). Price \$2.85.

**1491-BMT\*\*\*** Back-matched tap. 1491B block for .405" to .412" O.D. cables (includes BMT insert). Price \$4.60.

**1491-CMT\*\*\*** Color-matched tap. 1491A block for .405" to .412" O.D. cables (includes CMT insert). Price \$4.30.

**1492-AC\*** Capacitive tap. 1492A block for .460" to .480" O.D. cables (includes PTC insert). Price \$2.60.

**1492-AR\*\*** Resistive tap. 1492A block for .460" to .480" O.D. cables (includes PTR insert). Price \$2.85.

**1492-BMT\*\*\*** Back-matched tap. 1492B block for .460" to .480" O.D. cables (includes BMT insert). Price \$4.60.

**1492-CMT\*\*\*** Color-matched tap. 1492A block for .460" to .480" O.D. cables (includes CMT insert). Price \$4.30.

**1493-AC\*** Capacitive tap. 1493A block for .460" to .480" O.D. cables (includes PTC insert). Price \$2.60.

**1493-AR\*\*** Resistive Tap. 1493A block for .500" O.D. cables (includes PTR insert). Price \$2.85.

**1493-BMT\*\*\*** Back-matched tap. 1493B block for .500" O.D. cables (includes BMT insert). Price \$4.60.

**1493-CMT\*\*\*** Color-matched tap. 1493A block

for .500" O.D. cables (includes CMT insert). Price \$4.30.

**MT4-1\*\*\*** Four-output back-matched tap. 1491B block for .405" to .412" O.D. cables (includes BMT insert). Price \$18.50.

**MT4-2\*\*\*** Four-output back-matched tap 1492B block for .460" to .480" O.D. cables (includes BMT insert). Price \$18.50.

**MT4-3\*\*\*** Four-output back-matched tap. 1493B block for .500" O.D. cables (includes BMT insert). Price \$18.50.

**BMT\*\*\*** Back-matched isolation insert for "B" blocks. Price \$3.60.

**CMT\*\*\*** Color-matched isolation insert for "A" blocks. Price \$3.15.

**PTC\*** Capacitive insert for "A" blocks. Price \$1.60.

**PTR\*\*** Resistive insert for "A" blocks. Price \$1.85.

**1491A** "A" block for 1491-AC, AR, or CMT taps. Price \$1.10.

**1491B** "B" block for 1491-BMT and MT4-1, 2, or 3 taps. Price \$1.20.

**1492 A** "A" block for 1492-AC, AR, or CMT taps. Price \$1.10.

**1492B** "B" block for 1492-BMT, MT4-1, 2, or 3 taps. Price \$1.20.

**1493A** "A" block for 1493-AC, AR, or CMT taps. Price \$1.10.

**1493B** "B" block for 1493-BMT and MT4-1, 2, or 3 taps. Price \$1.20.

**DPT-A** Blank plug (replaces attenuation unit in 1491A, 1492A, 1493A, during disconnect periods) PNS.

**DPT-B** Blank plug replaces attenuation unit in 1491B, 1492B, 1493B, and MT4 during disconnect periods. PNS.

**CD-11** Cable cutting tool for 1491 "A" series block. Price \$2.25.

**CD-12** Cable cutting tool for 1491, 1492, 1493, "B" series blocks, and MT-4 multi taps. Price \$4.75.

**CT-2** Serrated cutting tip for CD-11. Price \$1.10.

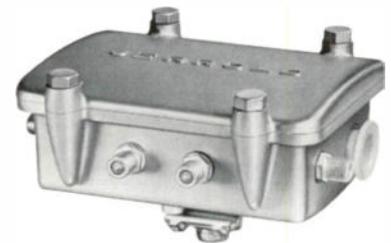
**CT-4** Serrated cutting tip for CD-12. Price \$1.15.

\*Specify color for desired isolation value (W, R, Y, G, B, BK.)

\*\*Specify numeral for desired isolation value (3 for 30 db, 6 for 35 db, or 15 for 40 db).

\*\*\*Specify attenuation for desired isolation value. BMT-35, 30, 25, 20, 16, 12, or 12T. CMT-36, 30, 24, 20, 16, or 12.

**Model DCM Series** 4-outlet pressure taps permits up to four subscriber drops from a single location and is available in eight different isolation values (10, 13, 18, 24, 28, 32, 36 and 40 db).



The Model DCM-Series features the new Model F-61B chassis fittings at drop cable connection points to permit simpler weather proofing of the connection. The new fitting is similar to the F-61A except that the flats have been removed. Housed in air-tight, radiation proof, messenger-mounting, utility housings. Feeder-line cable apertures in these housings will accommodate any of the Jerrold VSF-type, seized-center-conductor fittings. Price \$15.00.

**Matchmaker Series** four-outlet, pedestal or surface-mounting directional-coupler tap with com-

## JERROLD

**FIRST IN CATV  
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EQUIPMENT  
DCM MULTI-TAPS**

CATV Systems Division  
**JERROLD ELECTRONICS CORPORATION**  
401 Walnut St., Phila., Pa.

# SKL

## SERIES 7500 COLORTAPS

plete vertical disposition of all fittings and incorporating Permagraip cable connectors to accommodate any type of feeder-line cable. The Matchmaker permits up to four subscriber drops from a single location and is available in eight different isolation values (10, 13, 18, 24, 28, 32, 36, and 40 db). Other features of the Matchmaker include: no disassembly of housing required for cable installation, seized-center-conductor facilities to completely insure against center-conductor pull-out, removable plugs to provide ready access for testing, and a removable bracket which permits mounting flexibility.

### KAISER-COX CORP.

**KDT-2** two-output directional tap; modular construction; hermetically-sealed housing. Price on request.

**KDT-4** as above but with four outputs.

### PLASTOID CORP.\*

**Models MT 404 and MT 408 pressure taps.** For single and double shield cable. Comes complete with boot, attenuator and fittings for \$2.25.

**Line tap, Model 1401.** Surface mounting for MATV applications. Color coded attenuation values permit use with highest gain amplifiers. Complete with mounting bracket. 72 ohm. PNS.

### SPENCER-KENNEDY LABS

**Series 7500 Colortap/Multitaps.** Strand or pedestal-mounted single, directional-coupled taps



available as listed: Model 7500-0, Tap loss, 0 db; Model 7500-10, Tap loss, 10 db; Model 7500-22, Tap loss, 22 db.

**Series 7500 Colortap/Multitap Tap Adders.** Derive multiple taps when added to basic Series 7500 Colortap/Multitaps. Total tap loss is sum of Multitap and Adder losses. Available Tap Adders

are: Model 7502-3, 2 taps, 3.5 db ea.; Model Model 7504-6 4 taps, 6.5 db ea.; Model 7504-12 4 taps, 12 db ea.; Model 7504-18 4 taps, 18 db ea.

### TELE-SIGNAL ELECTRONICS LTD.

**LT4-VTOS variable tap-off** allows setting of system levels for 75% saturation at time of construction — amplifier levels remain as originally specified until 75% saturation is exceeded. Basic unit has a four-drop inline device. Connection between line and drop is made through plug-in tap which comes in losses from 12 to 40 db (in 4-db steps). No-loss plug also available. Price \$12.25.

**Dee Cee Series Directional Matched Taps** provide for four subscriber drops through F61 type connectors with very low insertion loss. Excellent directionality. Return loss at all connectors is a minimum 20 db. Available with 12, 16, 20, 24, 28, 32, and 36 db drop loss. Stocked with .412 type distribution line connectors; available in 500 or AM type also. Power pass rating 6 amps. CATV price: \$14.50.

### TV CABLE SUPPLY CO.\*

**TVC All-weather pressure taps** for any cable from .460" to .480" O.D. cables.

**Golden Line Tap Body** \$1.15 ea.

**Silver Line Tap Body** \$1.00 ea.

**Capacitive Insert** \$1.15 ea.

**Resistive Insert** \$1.15 ea.

**Transformer Insert** \$1.80 ea.

**Back Matched Transformer** \$1.95 ea.

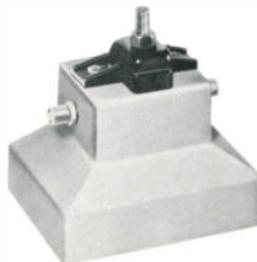
### VIKING INDUSTRIES INC.

**Model 935 directional tap** for trunkline use or for use as a multiple tap source or as a bridging device. Insertion loss for 10 db tap is .7 db maximum, for 17 tap .3 db maximum, for 24 db tap .25 maximum. Adaptable to either flexible or aluminum cable with provision for messenger or pole mounting.

**Model 5500 directional tap** with terminator; internal RF termination, DC-AC isolated, 500 volts maximum. Designed to permit tapping of trunk lines of feeder lines and terminate trunk lines with a high quality AC/DC termination. Isolation between outputs is 25 db.

**Model 573 two-output directional tap** combines features of model 935 above with model 932 two-way hybrid splitter, in one small weatherproof case. The dual taps provide matched, isolated outputs which can be used for distribution, amplifiers or individual taps. 20 db isolation between outputs. Available with fittings for any type cable, the unit comes with provisions for pole or messenger mounting.

**Model 511 four-way directional tap**, designed to give maximum signal at the taps with low insertion loss (.5 db maximum). All taps are isolated by over 30 db from each other and



by 40 db from the out line. Terminals are matched, and unit is housed in non-ferrous die-casting. Units permit up to 2 amperes power feed-through with taps isolated.

**Model 522 four-way directional flattap** is a directional tap combined with a four-way hybrid splitter. Only the desired signal coming from the amplifiers is selected by the tap. The unit

is designed for use with high quality trunk cables, 2 amperes of power feed-through permitted, with taps isolated.

**Model 534 and 535 back-matched pressure taps.** Model 534 is four-way tap; model 535 is two-way tap. Unit is available in a choice of four block sizes; can accommodate both trunk and feeder line. Pressure block is in integral part of weatherproof housing. Since casing is same, four-output unit may replace two-output unit as requirement increases. Isolation between taps is 19 db.

**Model 566 inline tap**, four-output solid-state unit providing four back-matched taps with signals at same level as main line. A compact two-transistor in-line amplifier compensates for 1/2 db insertion loss. Unit is housed in zinc die-casting and has built-in power supply.

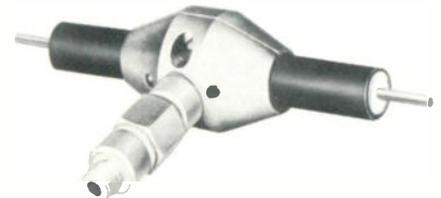
**Model 559 inline tap** for 59/U, indoor type, complete with mounting bracket and "C" type connectors.

**Model 938 two-way inline tap** for use in main distribution line of multiple installations to provide drop lines or risers; transformer line taps or low loss networks. Available with isolation values of 12, 16, 20, 24 and 30 db. Capacitive AC-DC isolation. Specify db value when ordering. Price \$4.00.

**Model 939 four-way inline tap**, same as model 938 above except four-way tap. Price \$5.00.

**Model 532 underground pedestal-mount directional tap** designed for direct installation in underground system pedestal or cabinet mounting. Insertion loss, 10 db tap .7 db max., 17 db tap .3 db max., 24 db tap .25 db max. Isolation 30 db for 10 and 17 db models; 36 db for 24 db model. All models permit AC or DC power feed-through with tap isolated.

**Underground "football" tap models 547 through 551**, designed for underground systems. Tap is secured by two screws which make unit com-



pletely waterproof. Tap size is 2" long with O.D. of 1-1/3". Contact manufacturer for specifications and prices.

**Pressure tap blocks** only, hook type, button type and underground models. Contact Viking for specifications and prices on complete selection.

## MATCHING TRANSFORMERS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### AMECO, INC.

**MX Series matching transformers**, 75 to 300 ohms; VSWR 1.2 maximum; HHS 1652 connectors.

**MX-3** flush electrical outlet box, ivory finish, connectors and screws included.

**MX-5** housed in molded plastic case, set mounting.

**MX-S1** Similar to MX-5 but allows customer selection between cable and private antenna.

### AMERICAN CABLE ELECTRONICS

**ACE T75-C or F 75** to 300 ohm matching trans-

## JERROLD

**FIRST IN CATV  
SUBSCRIBER-CONNECTION  
EQUIPMENT  
DCM MULTI-TAPS**

CATV Systems Division  
**JERROLD ELECTRONICS CORPORATION**  
401 Walnut St., Phila., Pa.

former in an aluminum housing. Completely epoxy potted. Aluminum housing covered with mylar dielectric for the finest insulation available in extra heavy lead wires with crimp tipped extra heavy duty lugs. Available with either C or F fittings. DC blocked or direct. Virtually indestructible due to the epoxy potted assembly. A complete unit with male fittings, ferrule, cable clamp and screw. Individually packaged in polyethylene bags. Price \$.95 each.

#### ANACONDA ASTRODATA CO.

**Model 901** matching transformer matches 75 ohm cable to 300 ohm TV set, Transformer flatness  $\pm 0.2$  db. AC isolation. Strain relief on twin lead. Components mounted on polyethylene circuit board. Gold plated contact.

#### BENCO

**Broadband antenna matching transformer, Model AMT.** 300-75 ohm symmetrical circuit. 54-216 mc range; less than 1 db insertion loss 300 ohm striplless terminal.

**Set matching transformer, Model SMT.** Symmetrical circuit; high AC isolation. 75 to 300 ohms with voltage gain of 6 db.

#### BLONDER-TONGUE

**TS-731** matching transformer. Surface mounted box for indoor use. Matches 75 ohm and 300 ohm connections. CATV: \$3.00

**Cablematch matching transformer.** For indoor use. Matches 75 ohm to 300 ohm. For VHF and FM. CATV: \$1.80.

**Cablematch F 3370** Set matching transformer. Similar to Cablematch, but with F-connector and metal lug for fastening unit to back of set. Connector mates with Blonder-Tongue male BTF plug (not supplied). Price: \$1.35 each in gross quantities.

#### CAS MFG. CO.

**WP-75.** Flush mounted plastic telephone cover with phone jack, mates CAS CT-series transformer cable. 75 ohm resistor terminates line when phone plug disconnected. Prices available from CAS.

**WB-75.** Same circuit as WP-75 (can be mounted on telephone cover).

**WBT-4.** Choice of 4 taps (10, 15, 20, and 25 db) by removing paralleled capacitors. Mounts on telephone wall plate. Phone jack mates with CT-series cable transformer.

**FM-WBT.** Same as WBT-4 except has low-loss FM tap-off circuit.

**CT-series.** 75 to 300 ohm set matching transformer on length (4', 8', 15') RG/59U cable, phone plug.

**F-300** matching transformer, 75 to 300 ohm; high AC isolation. Set-mounting. Price on request.

#### CRAFTSMAN

**T-15** transformer is completely potted and epoxy filled for durability. 300 ohm twin lead, completely encapsulated to prevent pull-off. Full



shielding metal can with plastic covering to prevent shock. Plastic clip, male connector and ferrule supplied. Price is \$1.20.

**Model 6175 Switchmatch** allows customers to switch from cable to roof top antenna, to eliminate possible interference between cable and antenna. Special transfer circuit provides 35 db minimum isolation. Unused input automatically terminated to prevent distortion to feederline. 300 ohm output.

#### DAVCO ELECTRONICS CORP.

Variety of types and brands of matching transformers in stock. Write for prices.

#### ENTRON, INC.

**WBN** matching transformer matches 75 ohm cable to 300 ohm receiver. "F" fitting accepts any solid or foam dielectric 59-type cable. Twin lead includes spade lugs to speed connection to TV set. Mounting strap supplied (use optional). Plus 6 db voltage transfer ratio. Price \$1.70.

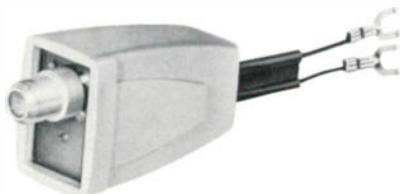
#### G.C. ELECTRONICS

**A-1088** 75 to 300 ohm outdoor matching transformer. Write to G. C. for prices and details.

**A-1089** 75 to 300 ohm indoor transformer. Write to G. C. for prices and details.

#### JERROLD ELECTRONICS CORP.

**T-378** 75 to 300 ohm matching transformer



(economy model) \$1.55.

**T-372** surface mounting matching transformer, \$2.75.

**T-373** flush mounting matching transformer, \$2.75.

#### LINDSAY ELECTRONICS INC.

**LPSL-75** 300 wall plate matching transformer. **MT** set mounting matching transformer.

#### PLASTOID CORP.

**Model T-10** matching transformer. Symmetrical circuitry; 75-300 ohms. 4 to 300 mc bandwidth. Standard connectors. \$1.10.

**Model T-5** transformer. Capacitor type with positive isolation. \$1.25 each.

**Model WT-5** matching transformer. Wall mount; capacitor type for positive isolation. \$1.75 net.

#### VIKING INDUSTRIES INC.

**Model 910/C** matching transformer, 72-300 ohm for back of set mounting. AC-DC isolation, full 6 db voltage set up, high impact case with internal aluminum shielding. 300 ohm twin lead, "C" type 59/U fitting. Cream colored, packed 25 to carton, \$1.10 each.

**Model 911** matching transformer, same as model 910 except for baseboard mounting. Price \$1.10 each.

**927/F Super-Match** transformer; completely blocks AC from set; guaranteed non-ghosting. Aluminum case; snap-on back; heavy duty 300 ohm twin lead. Completely shielded. "F" type fitting: Price \$1.30 each.

**Model 980/C** matching transformer; same as 927/F except with "C" type fitting. Price \$1.25 each.

**Model 927/PF** matching transformer; same as 927/F except with plastic case. Price \$1.30 each.

**Model 980/PC** matching transformer; same as 980/C except with plastic case. Price \$1.25 each.

**Model 928/C** TV/FM matching transformer. Full 6 db voltage step up for TV band. High impact case with internal aluminum shielding. "C" type 59/U fitting. Price \$1.45 each.

**Model 928/F** matching transformer; same as 928/C except with "F" fittings. Price \$1.50 each.

**Model 592** Mighty Midget matching transformer. Extremely small size; spring type "F" fitting.

**Model 5250** self terminating surface box. Terminates line when telephone type plug is removed. Available with 10' of 59U with mating plug on one end and 906 male "F" fitting on other end.

#### TV CABLE SUPPLY CO.

**Model 114111** matching transformer; AC isolation on both sides. \$1.09 in lots of 100.

# SKL

## PLUG-IN LINE-SPLITTERS

### MISC. DISTRIBUTION EQUIPMENT

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

#### AMECO, INC.

**Model POI-1.** Power overload indicator with visual flasher and automatic reset. VSWR is 1.15:1, unit comes in 1 and 3 amp sizes. 75 ohms in and out; for inline strand mounting. Accepts 1/2", .412, 3/4", AM and UHF connectors.

**PP3.** Power protector from 115 vac sources. Features 600 watt self healing lighting arrestor; automatic reset overload relay and 60 db RF filter. In strand box for indoor or outdoor use.

**Model ASP-II** surge protection device to protect CATV equipment from damage caused by power surges. Unit responds to voltages above 40 vac and shunts currents of up to 5 amperes.

#### AMERICAN PAMCOR, INC.

**29460** house installation grounding kit, consists of one A-MP house grounding block, two A-MP type F solderless fittings for RG-59 cable, two covering boots and two mounting screws.

**Wall receptacles** model 1-332181 (surface mount) has a built-in 75 ohm line load which is automatically engaged when plug is disconnected. Model 332181 wall plate available for flush mounting.

**Cable Leads** available—RG/59 cable with "F" fitting and phono plug applied in either 6 foot length (Model 50274) or 10 foot length (Model 50274-1).

#### AMPLI-VISION CORP.

**Local Channel Converter** eliminates ghosts caused by signals radiated directly to subscribers sets. Connected between the cable and the TV set input, it permits the cable distribution of 12 channels of TV even where there are powerful



local transmitters. The drop cable is connected to the converter input and the converter output is connected to the subscriber's TV set. The subscriber uses the tuner on the converter instead of the one on his TV set. The TV set is tuned to the converter's output channel which is either Channel 12 or Channel 13, depending upon local requirements. Solid state circuitry; better than 100 db isolation against unwanted television stations; VHF and UHF station identification is preserved; custom labeling of channel numbers for UHF stations on detent tuner dial.

#### CRAFTSMAN

**FM subscriber tap model TWD-1-F** provides for the connection of one FM and one TV set to an

For Plus Performance  
**MATCHING TRANSFORMER**



by **craftsman**

RG-59/U coaxial cable house drop. The model 1WD-1-F is comprised of a precision tuned, filter network. The unit is complete with F-61-A connectors for connection to house drop, and to each receiver. The FM tap port on the 1WD-1-F is used only for connection of an FM receiver.

**LM ERICSSON TUBES**

**6CY5/CATV-6 long-life tube** designed for use on CATV amplifiers. Life expectancy is in excess of 40,000 hours. \$2.85.

**5591/403B long-life tube** for use in CATV amplifiers; RF amplifier pentode, replacement for types 6AK5, 6AK5W, 6096, 5654. Life expectancy over 50,000 hours. \$2.85.

**SUPERIOR CABLE CORP.**

Automatic refrigerant and chemical type Dehydration equipment designed for pressurizing air-dielectric cables and wave-guide. Component equipment includes flow meter panels, alarm panels, airflow indicators, and related pressurization accessories. All equipment designed for indoor or outdoor application.

**TELE-SIGNAL ELECTRONICS LTD.**

**AMP-PBP Amplifier Power By-Passing Unit.** This is a high isolation, low pass filter designed specifically for CATV systems using tube type or non-power passing distribution amplifiers in conjunction with line powered amplifiers. Cable power connectors are AM type. RF to amplifier input is through "F" type connectors. Power by-passing capacity: maximum 6 amps AC. CATV price \$5.50.

**VIDEO COMMUNICATIONS, INC.**

Tel-Line Amplifiers LSV-31, LZV-31, LEV-31, for the transmission of video frequency signals on a simple pair of telephone lines. At the transmission end, the asymmetrical signal is symmetrized by the LSV-31. At the receiving end, the LEV-31 amplifies, compensates for cable losses, corrects distortions and returns the symmetrical signal to an asymmetrical one. An intermediate Amplifier LZV-31 is used to increase the distance. A common chassis design is used for all three types of amplifiers, making changes in the types of amplifiers or combination of amplifiers simple. Cable loss calculations show that the No. 22 gauge wire pair permit a transmission distance of 3280 feet without loss. With the use of the Intermediate Amplifier LZV-31, a distance of 2960 feet can be covered between each amplifier. The use of two Intermediate Amplifiers LZV-31 is permissible, resulting in a total distance of 8800 feet. Any interfering sig-

nals introduced into the system, i.e. induced noise, etc., are suppressed by a special interference suppressor stage. A second stage corrects phase shifts.

**VIKING INDUSTRIES INC.**

**Model 977 FM tap-off.** Indoor metal case; push-on fittings; passes all frequencies from 0 to 220 mc, but taps off FM only. Price \$3.00.

**Model 979 combination switches and matching transformer.** Unit switches form direct feed for home antenna to matching transformer for community system signals. Price: \$2.10.

**Model 527 FM tap-off,** provides for connection of one FM set to trunk line without significant insertion loss to video signals. Unit is complete with "F" fittings. Price: \$3.75 each.

Viking also manufactures a complete line of wall plates for TV and FM applications. Contact the manufacturer for specifications and prices.

**Model 413 Wall Plate:** Plastic ivory wall plate with 3/8 clearance hole to accept F81 fittings.

**EQUIPMENT HOUSINGS**

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

**AMECO, INC.**

**AH-1 All-Weather housing,** 18 3/4" x 20 3/4" x 13 1/4"; for crossarm or bench mounting. Features air chamber in top cover for insulation and ventilation. Vent windows have fine screens. Dust cover is hinge-mounted. Tamperproof construction.

**AH-T1 All-Weather housing;** 18" x 9 1/2" x 8 1/2"; messenger mount with "C" clamps 18 gauge steel construction, cadmium plate, zinc chromide prime, white reflective final coat. Pre-punched holes for mounting, equipment, cables.

**AH-T2 All-Weather housing,** strand mount; 16" x 6" x 4 3/4"; mounts with two "D" clamps, 20 gauge steel, finished as above. Accepts ATA-60, ATM-60, ATMB-60 and ATB-11.

**AH-4 All-Weather housing,** pole mounted; 11 1/2" x 6 1/4"; 18 gauge steel, finish as above; designed to accommodate ATPS-3 and PP-3 power supplies. Mounts with four bolts or screws.

**BENCO**

**H-4 Rugged, universal weatherproof equipment housing** for 4 strip-amplifiers or 19" rack mounted equipment (RA-4 19" rack mounting brackets optional). Has provision for mounting SOLA 250 VA Regulating Transformer. Dimensions: 29" x 22" x 10 1/2".

**H-6 Rugged universal weatherproof equipment housing** for 6 strip amplifiers or 19" rack mounted equipment when using RA-6 rack mounting brackets (optional). Has mounting studs for SOLA 250 VA Regulating Transformer. Dimensions: 35 1/2" x 29" x 10 1/2".

**HR-13 Weatherproof equipment housing** for 19" rack mounted amplifiers. Provides 13" rack space. Overall dimensions: 24" x 14 1/2" x 8 1/4".

**BLONDER-TONGUE**

**BH-1.** Indoor. Fully ventilated. Perforated mounting surface. Keyed slots for vertical and horizontal mounting. Provision for locking 20" x 27" x 10 1/2". CATV: \$35.00.

**BK-1. Outdoor conversion kit for BH-1 housing.** CATV: \$24.00.

**MWH-2. Outdoor housing. Weatherproof.** 18 1/4" x 14" x 6". CATV: \$32.00.

**MRH-A.** Outdoor, radiation proof housing. Provision for locking. Perforated mounting surface.

18 1/4" x 14" x 6". Heavy duty cadmium plated steel. CATV: \$44.50.

**DAVCO ELECTRONICS CORP.**

**Model EQ-2.** Complete with mounting hardware, ready to install. 31 1/2 x 18 x 10 inches deep, will accommodate all-band equipment — heavy 24 gauge steel, phosphorized, then painted white. Latch, provision for lock—die-cut louvres for ventilation and spun glass insulation between



walls of double lid for cooler operation. Bottom and side vents are screened. Holes and plugs are included for any combination of trunk and feeders. Reversible layout. Blower kit is optional at additional cost. No drilling at installation site. \$39.75, F.O.B. Batesville, Arkansas.

**JERROLD ELECTRONICS CORP.**

**HB-1.** Weather protective, umbrella housing for outdoor mounting of 1500 series splitters. Housing can be mounted on messenger, or on antenna masts. PNS.

**WC-400.** Weatherproof utility cabinet. Heavy gauge steel. Heavy galvanized finish. Hardware and cable connector holes are pre-punched. Cabinet can be locked with standard padlock. 10" x 18 5/8" x 24 1/4". Crossarm or bench mounting. Price \$27.50.

**Models WC-5 and WC-6 weatherproof equipment cabinets** for pole or cross-arm mounting of TML-Line amplifiers. Prices: WC-5, \$33.50; WC-6, \$24.50.

**Model WC-7.** Weatherproof equipment cabinet for strand-mounting TML-line amplifiers. Price \$29.50.

**Model WC-410 weatherproof equipment cabinet** for pole or cross-arm mounting of LSA-410AB amplifiers and associated equipment. Price \$99.75.

**RATELCO, INC.**

Equipment housings, weatherproof and non-weatherproof for protection of system equipment from weather, vandalism, etc.

**SPENCER-KENNEDY LABS**

**Cabinets, model 853B,** Constructed of welded sheet steel and reinforcing steel channel members. Door louvres and screened openings in cabinet bottom provide excellent ventilation. Cabinets are rustproof and have exterior finish of baked white enamel. Price and size available from factory.

**VIKING INDUSTRIES INC.**

**Model 569 all-weather housing unit.** 30" x 20" x 9-15/16". 18" gauge steel construction. Hinged cover with draw bolt catch closure. Phosphate coated followed by one prime and one finish coat of paint. Price: \$58.00.

**Model 571 housing unit.** 30" x 20" 9-15/16". Price: \$35.80.

**Model 570 housing unit.** 24" x 18-1/8" x 9-15/16". Price: \$34.50.

**Model 509 "C" span clamp** for attaching snubber grips to messenger where tap is not adequately supplied. Price: \$.40 each.

**Model 538 hanger bracket** designed for use with messenger mounted devices where direct mounting is difficult or impossible. Price: \$.60 each.

**JERROLD**  
**FIRST IN CATV**  
**SUBSCRIBER-CONNECTION**  
**EQUIPMENT**  
**DCM MULTI-TAPS**  
CATV Systems Division  
**JERROLD ELECTRONICS CORPORATION**  
401 Walnut St., Phila., Pa.



# **SUPERIOR**

Your quality  
world of  
**COMMUNICATIONS**

## Television System Products

COAXIAL CABLES COAXIAL CONNECTORS  
TV EQUIPMENT HOUSINGS FOR CATV, CCTV, ETV

### MATCHING 75 OHM COAXIAL CONNECTORS

- PLUGS • JACKS • ADAPTERS • SPLICES
- Type "N", "F", "UHF", Bulkhead "N"



### NUT RETAINER SERIES

For 4920, 4930, 6020, 6030 coaxial cables. All with captive contacts; contact crimping tool available.



### FULL CRIMP SERIES

For 4920 and 4930 coaxial cables. All with integral captive contacts. 3-stage connector crimping tool available.



### "Coppergard"

#### Copper-Shielded 75 Ohm Coaxial Cables

- 4920 and 4930 Cell-O-Air® Expanded Polyethylene for aerial installations.
- "Solid-D" solid natural polyethylene for direct burial installations.
- New extra high strength 4059 coaxial drop wire.
- Single and double-armored submarine coaxials.
- "Figure 8" self-supporting Type IM coaxials.

**5-Year Guarantee on "Coppergard" coaxials!**



### "Alumagard"

#### Aluminum Sheathed 75 Ohm Coaxial Cables

- Conventional Aerial  
Cell-O-Air® Expanded Polyethylene dielectric; extra high strength solid aluminum sheath.
- Jacketed Aluminum  
Cell-O-Air® dielectric; solid aluminum sheath; outer jacket of polyethylene.
- "Figure 8" Aerial  
Similar to above construction, except with extra high strength galvanized steel integral messenger.

## Fiber Glass TV EQUIPMENT HOUSINGS

For Underground and Direct Burial  
Television System Applications

Designed to accommodate trunk line  
amplifiers, distribution amplifiers,  
splitters, multi-tap units, and other  
types of television equipment.

- Stake-Mounted and Pole-Mounted  
Types
- Lock Closure on all models
- Units Easily Removed and  
Re-Installed



For full information, write, wire or call



# **SUPERIOR CABLE**

Superior Cable Corporation • Hickory, North Carolina 28601

**CABLE TELEVISION REVIEW**

The Weekly News Service of  
TV's Communications Magazine

NOVEMBER 14, 1966

**NEW YORK CITY HAS NON-FRANCHISED CATV**

First News Offering: "Telephone Cable TV" via Bell Leaseback

Mattie Nager, president of Com-Tel, Inc., a subsidiary of Bell Telephone Inc., a New York City CATV firm—said the Review last week that his firm is currently operating a "first run" cable television system serving 10 square blocks of Manhattan. The area covered, Central Park South, stretches from 13rd to 15th Streets and from 9th to Broadway. Nager reported that the cable television service is being provided in Manhattan under an exclusive leaseback arrangement with New York Telephone Co. A wholly owned AT&T subsidiary, Empire City Relay Co. Ltd., owns the conduit and handles the AT&T undercross communication in New York City. It is these conduits which are being used to string the cable through which the television signals will be relayed to Com-Tel. Nager stated that, as in most leaseback CATV operations, Com-Tel owns the head-end and terminal distribution facilities and New York Telephone owns the underground lines. He went on to point out that arrangements began with the AT&T affiliate early this year, but the system has been inaugurated for only a short while now.

It is well known that Empire City Relay Co. vigorously opposed the Board of Estimates' decision to allow the franchised CATV operators—Buffing Information Services, TeleFrontier and CATV Enterprises—access to its conduits. This confrontation occurred in late January. Subsequent to that, the AT&T subsidiary attempted to obtain a revision of the rules and regulations maintenance and access to the conduits. The proposed revisions would, in the opinion of many, have established AT&T as the arbiter over who would be allowed in the ducts. The three franchise holders in New York City opposed Empire City Relay's revision recommendations, and they were not accepted.

Com-Tel in recent weeks has mailed letters to building owners and tenants in its pilot area. The subscription form which accompanied the letters is interesting for two reasons. First, the form refers to the service being rendered by Com-Tel and New York Telephone as "telephone cable TV." The price structure referred to in the subscription form also merits attention. The rate is described as "far less than any independent underground cable system." Specifically, Com-Tel proposes to charge \$5.00 per month plus \$10.00 installation charge. This compares

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*“As a consultant, it’s basic that I know the status of the industry. That includes the latest construction and financial reports. That’s why I subscribe to Cable Television Review.”*

**Cable Television Review**  
reports industry transactions.  
**Weekly.**

# TRANSMISSION LINES & ACCESSORIES

The following section includes product listings for CATV transmission lines, connectors and fittings, and accessory tools. Listings marked with an asterisk (\*) indicate that new information was not supplied by the manufacturer for that listing. For mailing addresses and other data concerning firms listed in this section, see the "Manufacturers and Suppliers" section located in the front of this Directory.

## CABLES

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### AMECO CABLE, INC.

**AME 75-412 "Amecoax"** .412 cable with high purity uncoated copper center conductor, cellular polyethylene dielectric and high purity seamless aluminum outer conductor. Structural return loss is 26 db minimum. "Amecoax" AME 75-412 is designed for use as customer drops or wherever .412 cable is required.

**AME 75-412J "Amecoax"** has same characteristics as AME 75-412 except "J" indicates the cable is jacketed with black high molecular weight polyethylene.

**AME 75-500 "Amecoax"** CATV cable for bridger and trunkline use. O.D. is .500; has high purity uncoated copper center conductor; cellular polyethylene dielectric, and high purity seamless aluminum outside sheath. 75 ohm impedance; structural return loss is 26 db minimum.

**AME 75-500J "Amecoax"** has same characteristics as AME 75-500 except with black high molecular weight polyethylene jacket.

**AME 75-750 "Amecoax"** CATV trunkline cable is 3/4-inch O.D. for 75 ohm use. Cable has inner

conductor of high purity uncoated copper, cellular polyethylene dielectric and high purity seamless aluminum outer conductor.

**AME 75-750J** is same as "Amecoax" AME 75-750 except has black high molecular weight polyethylene jacket.

### AMPHENOL CABLE DIVISION

**No. 621-412** is a lightweight, seamless aluminum sheathed cable available in 1000 foot minimum lengths. 100% lab sweep tested. Solid copper center conductor, Polyfoam dielectric. Maximum attenuation per 100 feet, .86 db at ch. 2, 1.65 db at ch. 13. Shipping weight 92 lbs. per 1000 ft.

**No. 621-412-1** same as 621-412 but with weather resistant black polyethylene jacket. O.D. of jacket is .470". Shipping weight per 1000 ft. is 108 lbs.

**No. 621-500** is a lightweight, seamless aluminum sheathed cable with copper wire center conductor, Polyfoam dielectric. Available in 1000 foot minimum lengths. Maximum attenuation per 100 feet is .67 db at ch. 2, 1.40 db at ch. 13. Shipping weight per 1000 ft. is 153 lbs.

**No. 621-500-1** same as No. 621-500 but with weather resistant black polyethylene jacket. Jacket O.D. is .580". Shipping weight per 1000 ft. is 181 lbs.

**No. 621-750** is a lightweight, seamless aluminum sheathed cable with copper wire center conductor and Polyfoam dielectric Available in 1000 foot minimum lengths. Maximum attenuation per 100 feet, .47 db at ch. 2, 1.03 db at ch.

13. Shipping weight per 1000 ft. is 286 lbs. **No. 621-750-1** same as No. 621-750 but with weather resistant black polyethylene jacket (O.D. .825"). Shipping weight per 1000 ft. is 324 lbs.

**No. 21-973** messenger support RG 59/U cable has 22 AWG copperweld wire center conductor, polyethylene dielectric, and braided copper shield. Black polyethylene jacket with integral galvanized steel messenger strand. Shipping Weight is 57.5 lbs. per 1000 ft.

**No. 21-959** 59U cable has 22AWF copperweld wire center conductor, polyethylene dielectric, braided copper shield and black polyvinyl chloride, type 1 jacket. Shipping weight is 33.2 lbs. per 1000 ft.

**No. 621-186** 59U Polyfoam cable has 22 AWG copperweld wire center conductor, Polyfoam dielectric, copper braid shield and black poly jacket. Shipping weight is 32 lbs. per 1000 ft.

**No. 21-025-24** RG 59/U cable with 22 AWG copperweld wire center conductor, polyethylene dielectric, braided copper shield and black poly-chloride type-1 jacket. Weight 37 lbs/1000 ft.

### ANDREW CORP.

Helix flexible air and foam coaxial cables.

Air Dielectric:

|              |              |
|--------------|--------------|
| 1/4" size    | Type HJ1-50  |
| 3/8" size    | Type HJ2-50  |
| 1/2" size    | Type HJ4-50  |
| 7/8" size    | Type HJ5-50  |
| 1- 3/8" size | Type HJ7-50A |
| 3" size      | Type HJ8-50  |

## 8 GREAT WAYS KAISER-COX CATV EQUIPMENT MAKES MONEY FOR YOU



The Phoenix Series



write, wire or phone collect:



**KAISER-COX CORPORATION**  
P.O. Box 9728 / Phoenix, Arizona 85020 / Ph. (602) 944-4411

Pictured is the full line of solid-state, all-band amplifiers (8 in all) offered in the great new Kaiser-Cox Phoenix Series. Its modular circuit design permits you to plug-in whatever is needed . . . from trunkline amplifier to 2 and 4-output bridging amplifiers to combinations of both, with or without automatic gain control and tilt. Also, standardized fittings are used throughout the series. This interchangeability saves you money on parts inventory, today . . . saves you money as you convert for expansion, tomorrow!

For Plus Performance  
SURE GRIP CONNECTOR



by craftsman

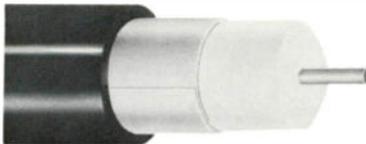
Foam Dielectric

|              |               |
|--------------|---------------|
| 1/4" size    | Type FHJ1-50  |
| 3/8" size    | Type FHJ2-50  |
| 1/2" size    | Type FHJ4-50A |
| 7/8" size    | Type FHJ5-50  |
| 1- 3/8" size | Type FHJ7-50  |
| 3" size      | Type FHJ8-50  |

Coaxial cable connectors for all above sizes.

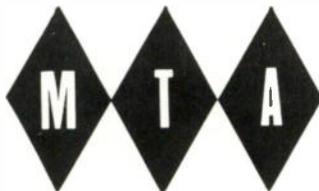
**ANACONDA ASTRODATA CO.**

**Sealmatic coaxial cable, SLM-AL:** Aerial cable is available in 412, 500, 625 and 750 sizes. Construction: Outer jacket of virgin polyethylene hermetically bonded to seal outer conductor of aluminum — insulation is cellular polyolefin — center conductor is annealed copper. Structural return loss guaranteed 26 db or better. Easy to work with and may be bent by hand without kinking; guaranteed bending, 10 x O.D. Hermetically sealed outer conductor assures moisture resistance. Sequentially marked at 2 foot intervals.



**Sealmatic coaxial cable, SLM-F8:** Figure 8 cable is available in 412, 500, 625 and 750 sizes. Construction: Outer jacket of virgin polyethylene bonded to hermetically sealed outer conductor of aluminum — insulation is cellular polyolefin — center conductor is annealed copper. Structural return loss guaranteed 26 db or better. May be bent by hand without kinking; guaranteed bending, 10 x O.D. Hermetically sealed outer conductor assures moisture resistance. Sequentially marked at 2 foot intervals. No additional support is required.

**Sealmatic coaxial cable, SLM-CU:** Duct cable is available in 412, 500, 625 and 750 sizes. Construction: Outer jacket of high density polyethylene hermetically bonded to sealed outer conductor of copper — insulation is cellular polyolefin — center conductor is annealed copper. Structural return loss guaranteed 26 db or better. Copper is used for the outer conductor to prevent electrolysis. May be bent by hand without kinking; guaranteed bending radius of 10 x O.D. Hermetically sealed outer conductor assures moisture resistance. Sequentially marked at 2 foot intervals.



**MALARKEY, TAYLOR & ASSOCIATES**

**CATV**

**Brokers/Consultants/Engineers**

1101 - 17th Street, N. W. • Washington, D. C.  
Phone: Area Code 202 • 223-2345

**Sealmatic coaxial cable, SLM-DJ.** Direct burial cable is available in 412, 500, 625 and 750 sizes. Construction: Outer jacket, high density polyethylene over a corrugated steel jacket inner jacket of polyethylene hermetically bonded to sealed outer conductor of copper; — insulation is cellular polyolefin — center conductor is annealed copper. Structural return loss guaranteed 26 db or better. Copper is used for the outer conductor to prevent electrolysis. May be bent by hand without kinking; guaranteed bending, 10 x O.D. Hermetically sealed outer conductor assures moisture resistance. Sequentially marked at 2 foot intervals.

**BRAND-REX**

**Combination TV drop and telephone drop cable;** aerial (integrated messenger optional) and direct burial; polyethylene dielectric and jacket, corrugated copper shield.

**T-4411** 75 ohm coaxial cable—.077 solid bare copper conductor; Foam polyethylene dielectric; aluminum sheath; optional jacketing.

**T-4500** 75 ohm coaxial cable — .098 solid bare copper conductor; Foam polyethylene dielectric; aluminum sheath; optional jacketing.

**CANADA WIRE AND CABLE CO.**

**AL 41275 and AL 41275P** .412" O.D. seamless aluminum sheathed cable; foam polyethylene dielectric; polyethylene jacket optional (can be buried) 1.53 db loss per 100 ft. at Ch. 13.

**AL 1275 and AL 1275P** .500" O.D. seamless aluminum sheathed cable; foam polyethylene dielectric; polyethylene jacket optional (can be buried) 1.20 db loss per 100 ft. at Ch. 13.

**CAX 750 and CAX750P** .750" O.D. seamless aluminum sheathed cable; foam polyethylene dielectric; polyethylene jacket optional (can be buried) 84 db loss per 100 ft. at Ch. 13.

**CAS MFG. CO.**

Markets a full line of transmission cables for CATV applications. Contact CAS for catalog and pricing.

**DAVCO ELECTRONICS CORP.**

Distributor of Superior and Davco branded cables. Aluminum, corrugated copper shielded, and RG-59/U drop cable available from stock. Contact Davco for specifications and pricing information.

**GENERAL CABLE CORP.\***

Manufacturers a complete line of cables for CATV applications. Contact manufacturer for complete specifications and prices.

**ITT WIRE AND CABLE**

Manufactures line of aluminum sheathed coaxial cable and flexible coaxes for CATV.

**JERROLD ELECTRONICS CORP.**

Jerrold cables are manufactured by Times Wire and Cable Co. See listing under this manufacturer.

**PHELPS DODGE**

"Foamflex" coaxial cables for all-band operation. Provides average VSWR of 1.05 on all channels, low loss, stable attenuation. Semi-flexible aluminum sheath with copper conductor. Write manufacturer for prices.

**FXA 41-75.** .412 OD; 0.75 db/100' nom. attenuation at channel 2 and 1.55 at channel 13.

**FXA 12-75.** .500 OD; 0.61 db/100' at channel



2, 1.27 at channel 13.

**FXA 34-75.** .750 OD; 0.42 db/100' at channel 2, 0.92 at channel 13.

**FXA 158-75.** 1.625 OD; 0.22 db/100' attenuation at channel 2, 0.52 at channel 13.

**HMA 34-75, HMA 78-75, HMA 100-75** major trunk cable; aluminum sheaths for aerial or direct burial (polyethylene jacket). Polyethylene helix dielectric.

**HMA 34-75** .750" O.D. outer conductor, .67 db



loss per 100 feet at channel 13.

**HMA 78-75** .875" O.D. outer conductor, .57 db loss per 100 feet at channel 13.

**HMA-11-75** 1.00" O.D. outer conductor, .49 db loss per 100 feet at channel 13.

**PLASTOID CORPORATION**

**Broadband and all-band cables for CATV.** Swept and thoroughly tested at factory. Cable available with or without poly outer jacket and inner jacket of solid aluminum sheath.

**TA4.** Solid aluminum sheath coax with form dielectric. Semi-flexible for easy handling. 1.60 nominal attenuation on channel 13.

**TA4J.** Same as TA4 with overall poly jacket.

**TA5.** Foam poly dielectric; solid aluminum sheath



for trunkline use. 1.26 db/100 ft. at channel 13.

**TA5J.** Solid sheath, foam poly dielectric with outer jacket of black poly. 1.26 db/100 ft. at channel 13.

**PP 14145.** 11/U feeder. Poly jacket; foam dielectric; wire braid; copper conductor. 1.36 db at channel 6.

**PP 15077.** Double shielded/jacketed 11/U. Jackets of black poly shields are wire braid. 2.3 db at channel 13.

**PP 15259.** 59/U house drop with .025" copper-weld (solid) conductor; foam dielectric, wire braid shield and black PVC jacket. Channel 13, 3.93 db/100 ft.

**PP 15080.** House drop 59/U, foam dielectric .032" bare copperweld conductor; 3.64 at channel 13.

**PP 15079.** Double shielded/jacketed 59/U house drop. Outer/inner jacketed black poly; outer/inner shield wire braid. Foam dielectric copper weld conductor. 1.92 db at channel 6.

**PP 16387.** 59/U house drop with integrated messenger of steel with 350 lb. breaking point. 3.64. With resistive or capacitive inserts \$3.95; with transformer tap \$4.65; with back matched (No. 514 insert) \$5.95.

**PP 15076.** Double shield, double jacket trunk; with bare copper (solid) conductor; wire braid shield, foam dielectric. Channel 13, 1.49 db.

**PP 15076.** Double shield, double jacket trunk; foam dielectric, outer and inner jacket of black poly; outer and inner shield of wire braid. 1.49 db/100 ft., channel 13.

**PP 20423.** Trunk or feeder line with flat braid shield, foam dielectric, solid copper conductor. 1.01 db at channel 6.

**PP 20395.** Double shielded trunk or feeder. Black poly jacket; inner/outer shield flat braid. 1.6 db/channel 13. Foam poly dielectric and solid copper conductor.

**PP 21429.** Trunk or feeder with messenger of 2M lb. breaking point steel. Foam dielectric, black poly jacket, flat braid shield. Db/100 ft. at channel 13 is 1.6.

**PP 21493.** Integrated messenger on double shielded trunk or feeder. Shields of flat braid, foam dielectric, poly jacket. Channel 13, 1.6 db.

**547 underground pressure tap.** For .580 OD cable. Same price as 542 tap.

When you need the finest in  
aluminum sheathed cable for  
CATV trunks and feeders...  
Or when you are ready to add  
drop lines to your system...  
There is just one address to remember.  
For special technical and pricing  
information, please call,  
wire, write or cable:

# cable address

PLASTOID CORPORATION, 42-61 24TH STREET, LONG ISLAND CITY 1, NEW YORK, TEL. 212 ST 6-6200



**PLASTOID**  
CORPORATION

Plus Performance Products  
For Advanced  
TV  
Systems  
by **craftsman**



- 549 underground pressure tap. For .480 OD cables. Same price as 542 tap.
- 550 underground pressure tap. For .407 cables. Same price as 542 tap.
- 551 underground pressure tap. For .465 cables. Same price as 542 tap.

**PRODELIN, INC.**

- Spir-O-Foam coaxial cable.** High conductivity copper inner conductor. Cellular polyethylene dielectric foam; aluminum sheathed. 50 or 75 ohm impedance. Either plain or jacketed.
- 53-375. 3/8" OD, \$229/M ft.
  - 54-375. 3/8" OD, \$257/M ft. With jacket.
  - 55-375. 3/8" OD, \$210/M ft.
  - 56-375. 3/8" OD, \$238/M ft. With jacket.
  - 53-500. 1/2" OD, \$308/M ft.
  - 54-500. 1/2" OD, \$358/M ft. With poly jacket.
  - 55-500. 1/2" OD, \$227/M ft.
  - 56-500. 1/2" OD, \$277/M ft. With jacket.
  - 53-875. 7/8" OD, \$763/M ft.
  - 54-875. 7/8" OD, \$889/M ft. With jacket.
  - 55-875. 7/8" OD, \$763/M ft.
  - 56-875. 7/8" OD, \$648/M ft.

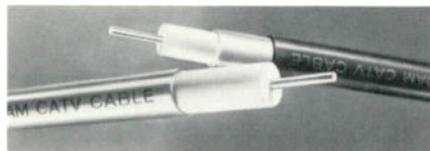
**Spir-O-Line coax cable.** For feeding 6 kmc antenna systems. In either aluminum sheath or poly jacket. Dielectric is six polyethylene tubes in tangential contact with copper inner conductor. Price ranges from \$530/M feet to \$2,540/M feet. Contact manufacturer for specifications.

**JACK PRUZAN CO.**

Markets complete line of Phelps Dodge and other brand coaxial cables.

**ROME CABLE**

"Uniform" cables available with or without poly



jacket. Copper conductor; seamless aluminum sheath.

- RO75-412-1 .412" O.D.; 1.51 db loss per 100 feet at channel 13.
- RO75-012-1 .500" O.D.; 1.23 db loss per 100 feet at channel 13.
- RO75-034-1 .750" O.D.; .86 db loss per 100 feet at channel 13.

**SUPERIOR CABLE CORP.**

Coaxial Cables, expanded Cell-O-Air or solid dielectric; "Coppergard" corrugated copper shielded; "Alumagard" solid aluminum sheathed; coaxial constructions for aerial, (conventional or messenger types), for direct burial, for submarine applications.

- 4000 tap-off lead-in cable, solid poly dielectric, braided copper shield; 5.2 db loss per 100 feet at channel 13.
- 4100 similar to 4000 but with .072" steel messenger.
- 4059 tap-off lead-in cable, solid poly dielectric, copper-clad steel flat strip braided shield; black PVC jacket. 5.2 db loss per 100 feet at channel 13.
- 4400 TV drop cable, Cell-O-Air dielectric, round braid copper shield; black PVC jacket; 4.2 db loss per 100 feet at channel 13.
- 4500 similar to 4400 except IM construction with .072" steel messenger.
- 4900 tap-off lead-in cable, extra high strength; Cell-O-Air dielectric, flat strip braid shield, black PVC jacket. 4.2 db loss per 100 feet at channel 13.
- 4910 feeder cable, Cell-O-Air dielectric, corrugated copper shield, poly jacket. 1.85 db per 100 feet at channel 13.
- 4920 feeder cable, Cell-O-Air dielectric, corrugated copper shield, poly jacket. 1.5 db loss per 100 feet at channel 13.
- 4920T identical to 4920 but with jacket marked by two strips longitudinally applied at diametrically opposite points along the cable jacket.
- 4930 trunk cable, Cell-O-Air dielectric, "Coppergard" corrugated copper shield, poly jacket. 1.15 db loss per 100 feet at channel 13.
- 4940 trunk cable, Cell-O-Air dielectric, corrugated copper shield, poly jacket. .85 db loss per 100 feet at channel 13. Sequentially foot marked at no charge.
- 5030 similar to 4930 except IM construction with 1/4" 7-wire steel messenger.
- 5130 similar to 4930 except with .134" steel messenger.
- 5230 similar to 4930 except has .148" steel messenger.
- 5020 feeder cable, Cell-O-Air dielectric, corrugated copper shield, poly jacket. 1.5 db loss per 100 feet at channel 13.
- 5110 similar to 4910 but with .134" steel messenger.

- 5120 similar to 4920 but with .134" steel messenger.
- 5220 same as 4920 but with .148" steel messenger.
- 5310 same as 4910 but with .109" steel messenger.
- 6020 direct burial cable, solid poly dielectric, corrugated copper shield, 1.48 db loss per 100 feet at channel 13.
- 6020S single armored submarine cable, similar to 6020, but with jute bedding, galvanized steel armor wires, outer poly jacket.
- 6030 direct burial cable, solid poly dielectric, corrugated copper shield, poly jacket. 1.14 db loss per 100 feet at channel 13.
- 6030S single armored submarine cable similar to 6030 but with armor similar to 6020S.
- RG-11/U general purpose cable, solid poly dielectric, single braid copper shield, PVC jacket.
- RG-59/U general purpose cable, solid poly dielectric, braided copper shield, PVC jacket.

**SURFACE CONDUCTION CO.**

Manufactures "G-line" UHF/VHF transmission lines. Includes low power launchers and receivers. Single-wire design. Nylon string support for trunk or antenna feeder. VHF loss .2 db/100 ft. from ch. 2 to 13; UHF loss 1 db/100 ft. from 400 mc to 1200 mc; UHF Special Transmitter Line loss .5 to .8 db/100 ft.

**UHF Receiver Line Model TVL** consists of two launchers and 150 feet of wire. Price is \$56.00. Additional wire is available at \$40/500' reel.

**TIMES WIRE & CABLE**

Standard and special purpose coaxial cable. Complete cable assemblies. Transmission system design and engineering. Times' CATV cables are



available for immediate delivery. Semiflexible, seamless aluminum sheath cable. **JT-1412.** .412" seamless aluminum sheath cable . . . the low cost, low loss feeder. Guaranteed 30 db return loss. Average VSWR of 1.05 on channels 2 through 13. All types available with long-life non-contaminating Xelon jacket. Can be buried. Available in lengths up to 2500 feet. Available with integral messenger.

**JT-1500.** 1/2" seamless aluminum sheath cable. The all purpose trunk/feeder cable. The best db/dollar cable buy. Guaranteed 30 db return loss. Average VSWR of 1.05 on channels 2 through 13. Available in lengths up to 2500 ft. Also available with long-life, non-contamination Xelon jackets. Available with integral messenger.

**8 GREAT WAYS KAISER-COX CATV EQUIPMENT MAKES MONEY FOR YOU**



The Phoenician Series



write, wire or phone collect:

**KAISER-COX CATV** KAISER-COX CORPORATION  
P.O. Box 9728 / Phoenix, Arizona 85020 / Ph. (602) 944-4411

Pictured is the full line of solid-state, all-band amplifiers (8 in all) offered in the great new Kaiser-Cox Phoenician Series. Its modular circuit design permits you to plug-in whatever is needed . . . from trunkline amplifier to 2 and 4-output bridging amplifiers to combinations of both, with or without automatic gain control and tilt. Also, standardized fittings are used throughout the series. This interchangeability saves you money on parts inventory, today . . . saves you money as you convert for expansion, tomorrow!

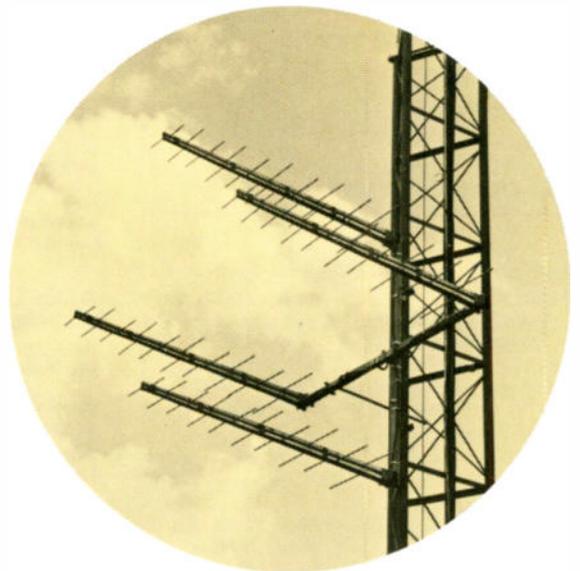
**eliminate  
co-channel interference  
with**

**GUARANTEED  
ANTENNA  
PERFORMANCE**

Consult with Scientific-Atlanta on your particular antenna problem. We will advise you frankly whether our

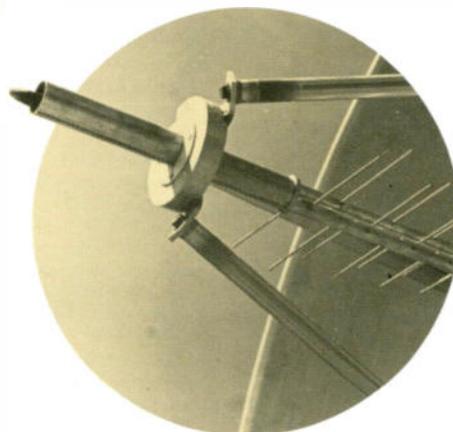
**CHANNELER ANTENNAS**

can solve it. If, based on our recommendation you buy and install one of our antennas and are not completely satisfied with its performance, you can return it within 30 days for a full purchase price refund.



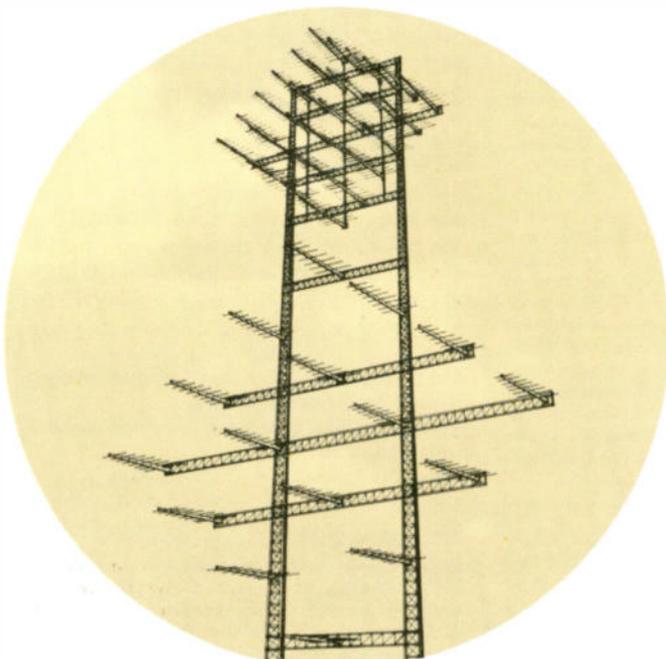
**ELIMINATE VHF CO-CHANNEL INTERFERENCE  
WITH THE "QUADRATURE CHANNELER" ANTENNA**

Superior black/white and color reception. Very low sidelobe level; very high front-to-back ratio; narrow beamwidth; high gain; wide bandwidth. Weather-proof construction, complete packaged assembly and **GUARANTEED TO SATISFY!**



**INTERFERENCE-FREE UHF RECEPTION  
WITH THE "ULTRA-CHANNELER" ANTENNA**

Will do for UHF what the "Quadrature-Channeler" does for VHF; interference-free reception of all channels. Very high VHF signal rejection; simple pole or tower mounting; one antenna for entire UHF band. Environment protected, completely packaged and **GUARANTEED TO SATISFY!**



**LONG-DISTANCE INTERFERENCE-FREE RECEPTION  
WITH THE "SUPER-CHANNELER" ARRAY**

110-130 mile reception with no channel interference. Tower mounting provides greater signal stability and reduces exterior interferences. Multiple element arrays provide narrower beamwidths and significantly higher gain. Fully weatherproofed, completely packaged and **GUARANTEED TO SATISFY!**



Scientific-Atlanta, Inc., offers a complete engineering service of problem identification and solution. All Master Antenna Systems are available in "turnkey" packages, or modified to conform to existing facilities. For more information contact Mr. Tom Smith or Mr. J. B. Weston at

**SCIENTIFIC - ATLANTA, INC.**

Box 13654, Atlanta, Ga. 30324, 404-938-2930, TWX 810-716-4912

For Plus Performance  
**MODULAR  
 DIRECTIONAL  
 TAP**  
 by craftsman



**Semiflexible, seamless aluminum sheath cable.**

**JT-11625.** 1 3/8" seamless aluminum sheath cable for special problem areas. 30 db/mile at channel 13. 16 db/mile at channel 6. Guaranteed 30 db return loss. Average VSWR of 1.05 on channels 2 through 13. Trunk line. Also available with long-life non-contamination Xelon jackets. Available in lengths up to 2500 ft.

**JT-1750.** 3/4" seamless aluminum sheath cable for lowest loss trunk. Permits larger system with reduced number of amplifiers in cascade. Guaranteed 30 db return loss. Average VSWR of 1.05 on channels 2 through 13. Also available with long-life non-contamination Xelon jackets. Available in lengths up to 2500 feet.

**JT-11250.** 1 1/4" seamless aluminum trunk cable, for those systems requiring prohibitive number of amplifiers in cascade. .36 db/100 ft. at Channel 6 (19 db/mile). .68 db/100 ft. at Channel 13 (35 db/mile). Attenuation 40% lower than 3/4" cable. Available with Xelon jacket.

**Coaxial cable for drop line service.**

**RG 59/U.** Solid polyethylene, dielectric. PVC jacket. Color, black. Copper braid.

**RG-59/U-MS.** Messengered cable. Solid polyethylene dielectric. Copper braid.

**JEL-105.** Solid polyethylene dielectric. Long life Xelon jacket. Copper braid.

**JEL-105-MS.** Messengered cable. Solid polyethylene dielectric. Long life Xelon jacket.

**JT-205.** Foamed polyethylene dielectric. Long life Xelon jacket. Copper braid.

**JT-205-M5.** Messengered cable. Foamed polyethylene dielectric. Long life Xelon jacket.

Lowest loss, economical priced drop cable. Max. attenuation at Channel 13 is 3.2 db/100 ft. High shielding efficiency reduces direct pickup problems. Low attenuation cuts subscriber drop line loss 40%, and reduces number of line extenders to service feeders. Xelon jacket. Available with integral messenger.

**VIKING INDUSTRIES INC.**

**VIKAL** solid seamless aluminum sheath coaxial cables. Jacketed cables have high molecular weight black polyethylene jacket, and are available with both single or double raised ribs on outer polyethylene jacket for identification.



**VK-1412** .412" O.D., loss per 100 feet at channel 6 is .95 db, at channel 13 is 1.55 db.

**VK-1412J** same as above but with .480" O.D. jacket.

**VK-1412JM** same as above but with .480/.760 messenger.

**VK-1500** .500 O.D., loss per 100 feet at channel 6 is .80 db, at channel 13 is 1.25 db.

**VK-1500J** same as above but with .580" O.D. jacket.

**VK-1500JM** same as above but with .580/.860 messenger.

**VK-1750** .750" O.D., loss per 100 feet at channel 6 is .57 db, at channel 13 is 1.0 db.

**VK-1750J** same as above but with .850" O.D. jacket.

**CONNECTORS  
 AND FITTINGS**

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

**AMECO, INC.**

Manufacture complete line of connectors, fittings and terminals for CATV applications. Contact Ameco for catalog.

**AMERICAN ELECTRONIC LABS**

**ER-500** Aluminum cable connector to connect .550" aluminum cable to any amplifier, line extender or equipment using center conductor grip with standard 5/8-24 thread. Receptacles are made from T-2011 aluminum clear iridited for protection and appearance, fully lubricated and absolutely waterproof. O-Rings are lubricated to prevent tearing or cutting of rings during cable installation. Connector threads are permanently coated with a special wax coating



to prevent aluminum-to-aluminum seizing. Three piece simplified construction for easy, foolproof operator installation. Price \$2.50 each.

**ER-750** Aluminum cable connectors connect .750" aluminum cable to any amplifier, line extender or equipment using center conductor grip with standard 3/8-24 thread. Receptacles are made from T-2011 aluminum clear iridited for protection and appearance, fully lubricated and absolutely waterproof. O-Rings are lubricated to prevent tearing or cutting of rings during cable installation. Connector threads are permanently coated with a special wax coating to prevent aluminum-to-aluminum seizing. Three piece simplified construction for easy, foolproof operator installation. Price \$4.00 each.

**ER-412** Aluminum cable connectors to connect .412 aluminum cable to any amplifier, line extender or equipment using center conductor grip with standard 5/8-24 thread. Receptacles are made from T-2011 aluminum clear iridited for protection and appearance, fully lubricated and absolutely waterproof. O-Rings are lubricated to prevent tearing or cutting of rings during cable installation. Connector threads are permanently coated with a special wax coating to prevent aluminum-to-aluminum seizing. Three piece simplified construction for easy, foolproof operator installation. Price \$2.35 each.

**AMERICAN PAMCOR, INC.**

**332051** type U solderless connector for 375P or 1878 disc cable. Two-piece, tin plated assembly has gas plug for pressurizing line. Fitting is moisture resistant.

**330702** solderless type F connector for RG/59 cable—use center cable conductor as pin.

**50316, 1-332050-0, 332135** Type "U" solderless connectors for 3/4", 1/2" and .412" aluminum sheathed cables.

**ANACONDA ASTRODATA CO.**

31 specially designed connectors are available for any SLM and aluminum 412, 500, 625 and 750 coaxial cable to fit Anaconda Astrodata equipment and competitive equipment or cables (See attached list). Positive locking "O" rings prevent loosening from vibration and assures

hermetic sealing. Only three parts insure easy installation. Compatible metals are used in each type of connector to prevent electrolysis and minimize corrosion.



- 020** SLM-AL-412 Cable Connector to A/A XDR.
  - 021** SLM-CU-412 Cable Connector to A/A XDR.
  - 022** SLM-DJ-412 Cable Connector to A/A XDR.
  - 023** 412-Aluminum Cable Connector to A/A XDR.
  - 024** SLM-412 Aerial and Duct Connector to other manufacturers (please specify).
  - 025** SLM-DJ-412 Connector to other manufacturers (please specify).
  - 028** Splice Connector for SLM-AL-412.
  - 029** Splice Connector for SLM-CU-412 & (DJ).
  - 030** SLM-AL-500 Cable Connector to A/A XDR.
  - 031** SLM-CU-500 Cable Connector to A/A XDR.
  - 032** SLM-DJ-500 Cable Connector to A/A XDR.
  - 033** 500-Aluminum Cable Connector to A/A XDR.
  - 034** SLM-500 Aerial and Duct Connector to other manufacturers (please specify).
  - 035** SLM-DJ-500 Connector to other manufacturers (please specify).
  - 038** Splice Connector for SLM-AL-500.
  - 039** Splice Connector for SLM-CU-500 & (DJ).
  - 040** SLM-AL-625 Cable Connector to A/A XDR.
  - 041** SLM-CU-625 Cable Connector to A/A XDR.
  - 042** SLM-DJ-625 Cable Connector to A/A XDR.
  - 044** SLM-625 Aerial and Duct Connector to other manufacturers (please specify).
  - 045** SLM-DJ-625 Connector to other manufacturers (please specify).
  - 048** Splice Connector for SLM-AL-625.
  - 049** Splice Connector for SLM-CU-625 & (DJ).
  - 050** SLM-AL-750 Cable Connector to A/A XDR.
  - 051** SLM-CU-750 Cable Connector to A/A XDR.
  - 052** SLM-DJ-750 Cable Connector to A/A XDR.
  - 053** 750-Aluminum Cable Connector to A/A XDR.
  - 054** SLM-750 Aerial and Duct Connector to other manufacturers (please specify).
  - 055** SLM-DJ-750 Connector to other manufacturers (please specify).
  - 058** Splice Connector for SLM-AL-750.
  - 059** Splice Connector for SLM-CU-750 & (DJ).
- ANDREW CORPORATION**
- Helix coaxial cable connectors:** Wide range of EIA connectors to connect Helix air or foam dielectric coaxial cables (copper or aluminum) to RF equipment. Cable sizes 1/4" to 5".
- 41U.** UHF jack, female that mates with PL-259A. for 1/4" cable.
  - 42U.** Same as above for 3/8" cable.
  - 41P.** UHF plug, male that mates with SO-239A. for 1/4" cable.
  - 42P.** Same as above for 3/8" cable.
  - 41N.** "N" jack, female, 1/4" cable.
  - 42N.** Same as above for 3/8" cable.
  - 44AR.** 7/8" flange for use with copper cable.
  - 44AR-3.** Same as above for aluminum cable.

For Plus Performance  
SURE GRIP CONNECTOR



by **craftsman**

- 44AZ. Copper cable splice.
  - 44AM. Male copper cable LC plug.
  - 44AL. Female copper cable jack.
  - 44AP. Male plug for copper cable. Use —3 for aluminum.
  - 44AU. Female UHF jack for copper cable. Use —3 for aluminum.
  - 44AW. "N" plug, male, for copper, 50 ohm. —75 is 75 ohm; —3 is for aluminum cable.
  - 44AN. "N" jack, female, for copper. Use —3 for aluminum.
- Similar fittings are available for 7/8" copper and aluminum cables.

**BLONDER-TONGUE**

- CL-5959. Couples 2 RG-59/U cables. CATV: \$1.80.
- CL-1111. Couples 2 RG-11/U cables. CATV: \$1.80.
- CL-1159. Couples RG-11/U cables to RG-59/U cable. CATV: \$1.80.
- P-59T. RG-59/U UHF type male plug. Solderless. CATV: \$1.05.
- POU-59. Solderless push-on plug for SO-239 female UHF connector and RG-59 type cables. CATV: \$2.15.
- POB-59. Solderless push-on plug for type F receptacle and RG-59 type cables. CATV: \$1.40.
- MC. Couples 2 UHF type male plugs. Also may be used as a feed thru bushing. CATV: \$1.75.
- P-11T. RG-11/U UHF type male plug. Solderless. CATV: \$1.05.
- POB-59TP. Push-on BTF-type 75-ohm terminating plug. Price \$1.80.
- 3393 2-watt, 75-ohm 'UHF' terminating plug for high-level head-end systems. Screws directly onto 'UHF' jack. Price \$3.65.
- 3397 Blocking Connector. Blocks AC, passes RF; UHF plug and UHF receptacle. Price \$4.60.
- 3398 Blocking Terminator. 1/2 watt, 75 ohms; UHF receptacle. Price \$4.50.
- 3399 Blocking Terminator. 1/2 watt, 75 ohm, UHF plug. Price \$4.00.
- MTP-75 UHF-type 75-ohm terminating plug. Screws directly onto 'UHF' jack (SO-239-type). Can be used with MC coupler and either P-11T or P-59T connector to terminate RG-11/U or RG-59/U. Price \$1.55.

**CAS MFG. CO.**

CAS markets complete line of fittings for CATV applications.

**COMMUNICATION DYNAMICS CORPORATION**

**UHF Male** for use with smooth sheath, foam cable. Manufactured in accordance with CDC specification number C-12627V, issue 2; (available on request from Communication Dynamics). Features weatherproof-sealed to 30 psi; silverplated, beryllium copper contacts; virgin teflon dielectric; unitized grip assembly — installed in seconds.

**UHF Female** for use with smooth sheath, foam cable. Manufactured in accordance with CDC specification number C-12627V, issue 2; (available on request from Communication Dynamics). Features weatherproof-sealed to 30 psi; silverplated, beryllium copper contacts; virgin teflon dielectric; unitized grip assembly — installed in seconds.

**UHF Bulkhead Female** for use with smooth sheath, foam cable. Manufactured in accordance with CDC specification number C-12627V, issue 2; (available on request from Communication Dynamics). Features weatherproof-sealed to 30 psi; silverplated, beryllium copper contacts; virgin teflon dielectric; unitized grip assembly — installed in seconds.

**F Female** for use with smooth sheath, foam cable. Manufactured in accordance with CDC specification number C-12627V issue 2; (available on request from Communication Dynamics). Features weatherproof-sealed to 30 psi; silverplated, beryllium copper contacts; virgin teflon dielectric; unitized grip assembly — installed in seconds.

**F Male** for use with smooth sheath foam cable. Manufactured in accordance with CDC specification number C-12627V, issue 2; (available on request from Communication Dynamics). Features weatherproof-sealed to 30 psi; silverplated, beryllium copper contacts; virgin teflon dielectric; unitized grip assembly — installed in seconds. Lowest VSWR.

**F Bulkhead Female** for use with smooth sheath, foam cable. Manufactured in accordance with CDC specification number C-12627V, issue 2; (available on request from Communication Dynamics). Features weatherproof-sealed to 30 psi; silverplated, beryllium copper contacts; virgin teflon dielectric; unitized grip assembly — installed in seconds.

**SPLICE** for use with smooth sheath, foam cable. Manufactured in accordance with CDC specification number C-12627V, issue 2; (available on request from Communication Dynamics). Features weatherproof-sealed to 30 psi; silverplated, beryllium copper contacts; virgin teflon dielectric; unitized grip assembly — installed in seconds.

**Entry Fitting** for use with smooth sheath, foam cable. Manufactured in accordance with CDC specification number C-12627V, issue 2; (available on request from Communication Dynamics). Features weatherproof-sealed to 30 psi; silverplated, beryllium copper contacts; virgin teflon dielectric; unitized grip assembly — installed in seconds.

**N Female Bulkhead** for use with smooth sheath, foam cable. Manufactured in accordance with CDC specification number C-12627V, issue 2; (available on request from Communication Dynamics). Features weatherproof-sealed to 30 psi; silverplated, beryllium copper contacts; virgin teflon dielectric; unitized grip assembly — installed in seconds.

**N Female** for use with smooth sheath, foam cable. Manufactured in accordance with CDC specification number C-12627V, issue 2; (available on request from Communication Dynamics). Features weatherproof-sealed to 30 psi; silverplated, beryllium copper contacts; virgin teflon dielectric; unitized grip assembly — installed in seconds.

**N Male** for use with smooth sheath, foam cable. Manufactured in accordance with CDC specification number C-12627V, issue 2; (available on request from Communication Dynamics). Features weatherproof-sealed to 30 psi; silverplated, beryllium copper contacts; virgin teflon dielectric; unitized grip assembly — installed in seconds.

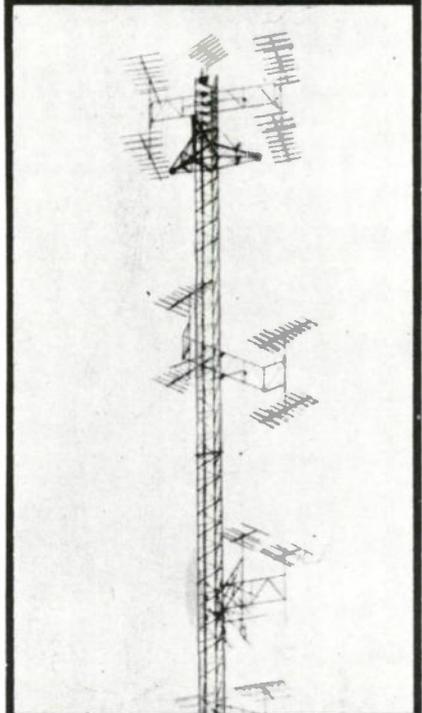
**CRAFTSMAN ELECTRONICS**

Complete line of fittings, connectors, terminals and related accessories for all types of trunk, feeder and drop cables. Cost schedule CCS-1 available on request from Craftsman.

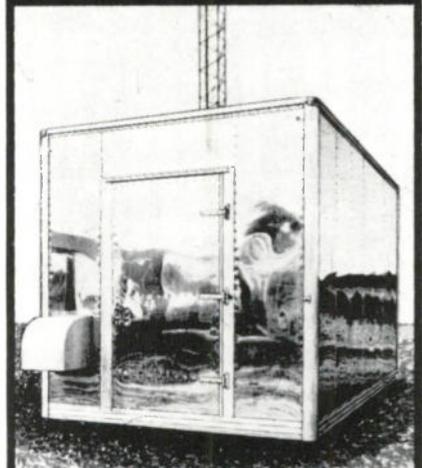
**DAVCO ELECTRONICS CORP.**

Independent distributor of adaptors, splices and AM, BNC, C, F, N and UHF connectors. Write for complete information and prices. Very large stock of both popular and unusual connectors. Write for connector catalog.

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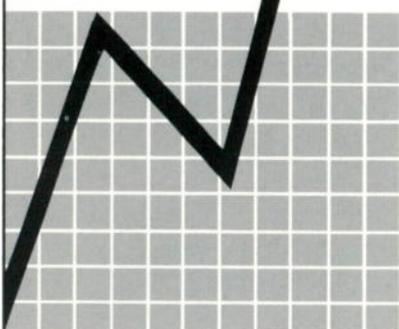
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For money to step up or complete your CATV program, call us today. CATV system owners in 42 states have relied on Economy Finance, the pioneer in cable system financing. We are aware of the many problems and monetary needs of this fast growing industry, having financed more CATV systems than any other financial institution. Let us design a financing program for your particular needs that will give you room to grow and the power to expand. Call us collect—area code 317—638-1331. Ask for Gail Oldfather, Harold Ewen or Jim Ackerman.

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F type connector adapters to all RF connectors as required.

**GILBERT ENGINEERING CO., INC.**

Complete line of aluminum cable connectors, connectors for RG-59/U, RG-11/U, 408, 4920 and 4930 cables. Contact manufacturer for complete catalog, prices.

Aluminum cable connectors, 3/4".

**GM-750-BAF** "GM" series female adaptor, mates with any "GM" connector. GM-408, GM-11, GM-412-M, etc. Nut & ferrule included with lock nut for bulk head mounting.

**G-750-BAF** "F" series female adaptor, mates with G-500-AFM, G-AF-404/201, G-AF-408, etc. Nuts, ferrule & washer included.

**G-750-BAUHFF** "UHF" series female adaptor. Mates with any male "UHF" connector. GU-259-



CH, G-500-AUHFM, GU-408, etc. Nut & ferrule included with lock nut for bulk head mounting.

**G-750-SP** splice, female.

Aluminum cable connectors, 1/2".

**GM-500-M** "GM" series male adaptor. Mates with any "GM" female connector. GM-274, GM-258, etc. Nut and ferrule included.

**GM-500-BAF** "GM" series female adaptor. Mates with any "GM" male connector. GM-11, GM-



408, GM-259-CH, etc. Nut and ferrule included with lock nut for bulk head mounting.

**G-500-CH** chassis mounting female connector with solder terminal. Nuts, ferrule and washer included.

**G-500-BAFF** "F" series female adaptor. Mates with G-AF-408, G-500-AFM, G-AF-404/201, etc. Nuts, ferrule and washer included.

**G-500-AUHFM** "UHF" series male adaptor. Mates with any female "UHF" connector. G-PL-274, G-500-BAUHFF, GU-239-CH, etc. nut and ferrule included.

**G-500-BAUHFF** "UHF" series female adaptor. Mates with any male "UHF" connector, GU-59, GU-408, GU-259-CH, nut and ferrule included with lock nut for bulk head mounting.

**G-500-SP** Splice, female. Nuts and ferrule included.

**G-500-AFM** "F" series male adaptor. Mates with GF-11/59, G-500-BAFF, G-F-61, etc. Nuts and ferrule included.

Aluminum cable connectors, .412".

**GM-412-M** "GM" series male adaptor. Mates with any female "GM" connector, GM-258, GM-274, etc. Nut and ferrule included.

**GM-412-BAF** "GM" series female adaptor. Mates with any male "GM" connector. GM-408, GM-259-CH, GM-11, etc. Nut and ferrule included with lock nut for bulk head mounting.

**G-412-CH** chassis mounting female connector with solder terminal. Nuts, ferrule and washer included.

**G-412-SP** splice, female, nuts and ferrules included.

**G-412-BAFF** "F" series female adaptor. Mates with G-F-59-CH, G-AF-408, G-500-AFM, etc. Nuts, ferrule and washer included.

**G-412-AUHFM** "UHF" male adaptor. Mates with any female "UHF" connector GU-239-CH, G-

500-BAUHFF, G-PL-274, etc. Nut and ferrule included.

**G-412 BAUHFF** "UHF" female adaptor. Mates with any male "UHF" connector. GU-259-CH, GU-59, GU-408, etc. Nut and ferrule included with lock nut for bulk head mounting.

**G-412-AFM** "F" series male adaptor. Mates with



G-500-BAFF, G-F-11/59, G-F-61, etc. Nut and ferrule included.

Also manufacture complete line of terminators and specials, chassis mountings, fittings and accessories. Write for complete catalog and prices.

**ENTRON**

**FS series** connectors. Line of flare splices for .412", 1/2", and 3/4" O.D. aluminum cables. Prices: \$3.10 to \$8.50.

**FUF series.** Flare adaptors from aluminum cable to UHF female. 412 and 1/2" cable used. Also use as bulkhead connector. Approximately \$3.

**FUM series.** Flare adaptors from aluminum to UHF male. For 412 and 1/2" cable. \$3.20 to \$3.60.

**Model CW-59E.** UHF male push-on plug. Nickel plated; for RG-59/U. Price: \$.20.

**Model SC-11.** Solderless male plugs for RG-11 cable. \$.70 each.

**JERROLD ELECTRONICS CORP.**

Flexible cable connectors:

**AF-101** Adapts G-11/U, Jet 101, or 104 cable to F-61A fittings. PNS.

**AF-201** Adapts JT-201, 204, 301, 304, or 404 cable to F-61A fitting. PNS.

**AF-408** Adapts JT-408 cable to F-61A fitting. Price \$1.10.

**C-52** Adapts RG-59/U, Jel-102, 105 or JT-205 cable to C-61 fitting. PNS.

**F-56** Adapts RG-6/U cable to F-61A fitting. PNS.

**F-59** Adapts RG-59/U, Jel 102, 105, or JT-205 cable to F-61 fitting. PNS.

**F-200** Adapts JT-200 cable to F-59 connector. PNS.

**F-400** Adapts JT-400 cable to F-59 connector. PNS.

**F-408-59** Adapts JT-408 cable to F-59 connector. Price \$1.10.

**FHC-404** Adapts JT-201, 204, 301, 304, or 404 cable to F-59 connector. For constructing jumpers carrying up to 12 amperes. Price \$.75.

**G-59** Push-on RG-59/U connector mates with G-61. Price \$.48.

**PF-59** Push-on F-59 mates with F-61 and F-81. Price \$1.70.

**SC-24** Splice for either JT-201, 204, 301, 304, or 404 cable. PNS.

**SC-48** Splice for JT-408 cable. Price \$1.75.

**VSF-404** Bushing accepts JT-201, 204, 301, 304, or 404 cable. Introduces cable into weatherproof equipment housing via a threaded aperture. Connection to equipment within housing via seized center conductor. Price \$1.80.

**VSF-408** Bushing accepts JT-408 cable. Introduces cable into weatherproof equipment housing via a threaded aperture. Connection to equipment within via seized center conductor. Price \$1.80.

Aluminum cable connectors for JT-1000 series aluminum cables are manufactured from clear, irradiated 2011T3-type aluminum. Connectors have been completely lubricated at factory. They are completely weather-proof. A template for cutting the cable center conductor to the exact length is available for each size and type of connector.

# SKL

## SERIES 7260 MULTIVIDERS

**AF-712** Splices JT-1412 cable to JT-1750 cable. Price \$7.50.

**F-412A** Adapts JT-1412 cable to TR-72F or 75F termination. Smooth barrel. Price \$2.75.

**F412B** Introduces JT-1412 cable into weather-proof equipment housing via un-threaded aperture. F-61 fitting on F-412B mates with F-59 or F-4C-404 fitting on jumper cable for connection to equipment within housing. Threaded barrel. Price \$2.75.

**F-500A** Adapts JT-1500 cable to TR-72 or LTR-75F termination. Price \$3.00.

**F-500B** Similar to F-412B but used with JT-1500 cable. Price \$3.00.

**F-750** Similar to F-412B but used with JT-1750 cable. Price \$7.50.

**SC-412A** New splice for JT-1412 cable features a sleeve which accepts bared center conductor of each cable end. Sleeve is then crimped to hold each conductor firmly and insure perfect connection. Splice is then laid in a plastic shield which snaps into place in the barrel of the connector, to center the splice. When the gland nuts are tightened to the barrel, a built-in ferrule is compressed to clamp the cable shield firmly and insure an excellent ground connection. A built-in gland is also compressed to form a completely weatherproof seal for the splice. Electronically, the splice is as radiation-proof as the cable itself and the VSWR (return loss of the splice) is better than VSWR of the cable. PNS.

**SC-500A** Similar to SC-412A but used with JT-1500 cable. PNS.

**SC-750A** Similar to SC-412A but used with JT-1750 cable. PNS.

**VSF-412** Introduces JT-1412 cable into weather-proof equipment housing via a threaded aperture. Connection to equipment within housing via seized center conductor of cable. Price \$1.55.

**VSF-500** Similar to VSF-412 but used with JT-1500 cable. Price \$1.85.

**VSF-750** Similar to VSF-412 but used with JT-1750 cable. Price \$3.00.

**C-61** Female chassis fitting with collet. Mates directly with C-52 and TR-72 or (via A-61) with F-56, F-71, FHC-404, any AF series connector, TR-72F. PNS.

**F-61A** Female chassis fitting with improved clutch collet. Mates with F-56 F-59, F-71, FHC-404, any AF-series connector, or TR-72F. PNS.

**A-61** F to C adaptor adapts C-61 chassis fitting to accept F-series male connectors. PNS.

**C-81** Female coupling (feed-thru). Back-to-back C-62 fittings. Feed-thru chassis fitting or splice for male connectors. PNS.

**F-81** Female coupling (feed-thru). Back-to-back F-61A fittings. Feed-thru chassis fitting or splice for male connectors. PNS.

**F-71** Male coupling. Back-to-back F-59 connectors. Splice for female connectors. \$1.00.

**TR-72** Termination. Male C-52 connector incorporating 75-ohm resistor. Mates with C-61 fitting. Terminates lines w/o ac. PNS.

**TR-72-F** Termination. Male F-59 connector incorporating 75-ohm resistor. Mates with F-61-A fitting. Terminates lines w/o ac. Price \$90.

**LTR-72F** Similar to TR-72F but for terminating lines carrying ac. Price \$1.80.

**LGB-3.** Grounding blocks. Price \$1.15.

**1026** Ferrules for bonding RG-6/U or Jel-102 cable to mandrel of connector. PNS.

**1051** Ferrules for bonding RG-59/U, Jel-105, or JT-205 cable to mandrel of connector. PNS.

**1095** Ferrules for bonding RG-11/U, JT-201, 204, 301, 304, or 404 cable to mandrel of connector. PNS.

**1098** Ferrules for bonding JT-408 cable to mandrel of cable connector. PNS.

### KAISER-COX CORP.

**KCSP-412.** .412 Aluminum splice.

**KCSP-500.** 1/2" Aluminum splice.

**KCSP-750.** 3/4" Aluminum splice.

**KCSP-480.** .480 Corrugated Copper.

**KCSP-650.** .650 Corrugated Copper.

**KCTR-412.** .412 Aluminum line termination.

**KCTR-500.** 1/2" Aluminum line termination.

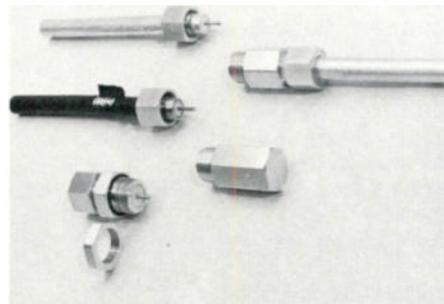
**KCTR-750.** 3/4" Aluminum line termination.

**KCTR-480.** .480 corrugated Copper line termination.

**KCTR-650.** .650 Corrugated Copper line termination.

**KCBC.** Blocking capacitor.

**KCSP** Coaxial splice, available for aluminum



cable in .412", 1/2", and .750", also type 4920 and 4930 corrugated copper.

**KCTR** Coaxial terminator, available as above.

**KCBC** Coaxial blocking capacitor, available as above.

### KINGS ELECTRONICS CO., INC.

Contact manufacturer for information on line of RF connectors for CATV applications.

### PLASTOID

Connectors and Fittings for Aluminum Jacketed Cables

**8-BA-11/75.** 1/2" Cable Adaptor "UHF" Female. \$3.95.

**6-BA-11/75.** Same, except for 3/8" cable. \$3.75.

**8-SP-75.** For 1/2" cable splice. \$4.25.

**6-SP-75.** Same, except for 3/8" cable. \$4.00.

**8-A-UHFM/75.** 1/2" cable adaptor "UHF" male. \$3.95.

**8-BA-FF/75.** 1/2" cable adaptor "F" female. \$4.25.

**8-A-FM/75.** 1/2" cable adaptor "F" male. \$4.25.

**8-CH-75.** Chassis mount connector. \$3.75.

Connector for .412" diameter & 3/4" diameter Aluminum Jacketed Cables.

**412-BA-FF/75.** Adaptor, .412 Aluminum Cable & "F" Series female. \$1.95.

**412-A-FM/75.** Adaptor, .412 Aluminum Cable & "F" Series male. \$1.95.

**412-SP-75.** Inline splice for .412. \$2.65.

**412-BA-UHFF/75.** Adaptor, .412 Aluminum Cable & "UHF" Series female. \$2.55.

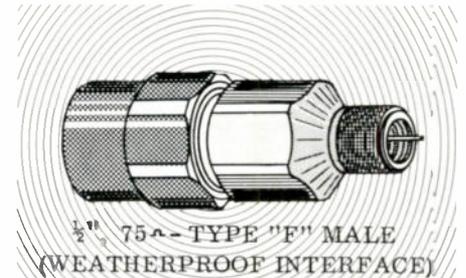
**412-A-UHFM/75.** Adaptor, .412 Aluminum cable & "UHF" Series male. \$2.85.

## CONNECTORS

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*the Quality Standard from--*

## COMMUNICATION DYNAMICS



CDC proudly offers the performance standard for CATV connectors. Introducing the quality and reliability of missile specifications to the CATV industry for the first time at a competitive price, the complete line includes N, F, UHF, Modified UHF, Splices and amplifier entry fittings. Cable sizes .412", 1/2", 3/4".\*

### PERFORMANCE SPECIFIED AND GUARANTEED\*

- TRULY WEATHERPROOF—SEALED TO 30 PSI
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- LOWEST VSWR\*\*
- NO SPECIAL TOOLS REQUIRED

\*\*Catalog and Technical Performance Specification C-12627-V, Issue 2 available on request.

\*Connectors for other cable types, sizes and specials also available.

## COMMUNICATION DYNAMICS



289 NEPPERHAN AVENUE  
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Tel. (914) 965-3006

# SKL

CONTROLLED QUALITY

**412-CH-75.** Chassis mounting connector with solder terminal. \$2.45.

**12-BA-UHFF/75.** Adaptor, 3/4" aluminum cable & "UHF" series female. \$8.50.

**12-A-FF/75.** Adaptor, 3/4" aluminum cable & "F" series female, \$8.50.

**12-SP-75.** Inline splice for 3/4". \$9.75.

## PRODELIN, INC.

Prodelin manufactures a complete line of Spir-o-loc fittings, 50 ohm adapters and couplings for Prodelin Spir-O-Foam cable.

**75-380.** 3/8" type N female. \$4.50 ea.

**75-580.** 1/2" type N female. \$4.50 ea.

**75-880.** 7/8" type N female. \$6.85.

**76-380.** 3/8" type N male. \$4.50.

**76-580.** 1/2" type N male. \$4.50 ea.

**76-880.** 7/8" type N male. \$7.30.

**84-380.** 3/8" UHF female. \$7.00.

**84-580.** 1/2" UHF female. \$4.00.

**84-880.** 7/8" UHF female. \$9.50.

**87-380.** 3/8" UHF male. \$8.00.

**87-580.** 1/2" UHF male. \$5.00.

**87-880.** 7/8" UHF male. \$10.00.

**79-380.** 3/8" coupling. -580, 1/2", -880 7/8". 75 ohm adapters and couplings for Spir-O-Foam cable.

**76-581.** Type N. Male 1/2". \$4.50.

**87-581.** Type UHF Male; 1/2". (Mismatched.) \$4.50.

**144-581.** UHF female; 1/2". Bulkhead mismatched. \$5.00.

**79-581.** 1/2" coupling. \$5.00.

**97-581.** Type U female bulkhead. 1/2". \$5.00.

**146-581.** Bulkhead, 1/2". To F-61 female. \$5.00.

**147-581.** 1/2" bulkhead to F-59 male. \$5.00.

## JACK PRUZAN COMPANY

Handles AMP and Gilbert connectors and fittings.

## SPENCER-KENNEDY LABS

**Model 703 wide band detector.** Bandwidth 10-300 mcs. 75 ohm input impedance. Input, type N connector; output BNC. Price on request.

## SUPERIOR CABLE CORP.

75 ohm Captive Contact Connectors. Nut Retainer Type for 4920 Coaxial Cable:

492A "N" Plug.

492FA "F" Plug.

492UFA "UHF" Plug.

BH492JA "N" Jack, Bulkhead.

493U (ADP)

NRA-23 90° (ADP)

493FM (ADP)

494J (N) Jack.

494 "N" Plug.

Write for prices.

75 ohm Captive Contact Connectors, nut retainer type, for 4930 coaxial cable.

493. "N" Plug.

493F. "F" Plug.

493UF. "UHF" Plug.

492J. "N" Jack.

BH493J. "N" Jack, Bulkhead.

493B. "N" Plug.

493. "FB" Plug.

493. "JB" Jack.

BH493. "JB" Jack.

Write for prices.

75 ohm integral captive contact full crimp connectors for 4920 coaxial cable.

**C42N.** "N" Plug.

**C42UF.** "UHF" Plug.

**C42NJ.** "N" Jack.

**C42S.** "N" Splice.

Write for prices.

75 ohm integral captive contact full crimp connectors for 4920 coaxial cable.

**C43N** "N" plug.

**C43UF** "UHF" plug.

**C43NJ** "N" jack.

**C43S** "N" splice.

**BHC 43J.**

**BHC 42J.**

Write for prices.

## TIMES WIRE AND CABLE

**Timatch Connector** with Coilgrip Clamp designed and produced connector for use with semi-flexible (aluminum sheath) cable. One piece construction incorporating excellent electrical characteristics and a positive, simple, non-destructive clamp. Available in series F, UHF, VSF and N., in all sizes.

## TV CABLE SUPPLY CO.

Weatherproof cable slice housing. For use with all conventional type splice connectors.

**105439** F59 type male connector with ferrule \$20.

**104239** C52 male connector with ferrule \$20.

**130855** F81 double female F splice \$4.45.

**104322** C81 double female C splice \$4.40.

**130455** F61 female chassis fitting \$3.35.

**103809** C61 female chassis connector \$3.35.

**131011** AF 408 male "F" connector for .480" dia. cables \$1.20.

**131311** F408-59 female "F" connector for .480" dia. cables \$1.40.

**103455** AU408 male UHF connector for .480" dia. cables \$5.50.

## VIKING INDUSTRIES, INC.

SM (Super Match) 75 ohm connectors for aluminum sheathed cable. Features full one-inch engagement of cable conductor and full two-inch insertion of aluminum sheath to prevent thermal contraction "pull-out." True 75 ohm connectors have VSWR of 1.05:1 maximum.



**SM-412F.** Female adaptor for "VIKAL" .412 aluminum cable. Supplied with locknut for bulkhead mounting.

**SM-412M.** Male adapter for "VIKAL" .412 aluminum cable.

**SM-412SP.** Inline splice for "VIKAL" .412 aluminum cable, complete assembly.

**SM-500F.** Female adaptor for "VIKAL" .500 aluminum cable. Supplied with locknut for bulkhead mounting.

**SM-500M.** Male adaptor for "VIKAL" .500 aluminum cable.

**SM-500SP.** Inline splice for "VIKAL" .500 aluminum cable, complete assembly.

**SM-750F.** Female adaptor for "VIKAL" .750 aluminum cable. Supplied with locknut for bulkhead mounting.

**SM-750M.** Male adaptor for "VIKAL" .750 aluminum cable.

**SM-750SP.** Inline splice for "VIKAL" .750 aluminum cable, complete assembly.

**SM-101.** Female chassis mount. Fits thru 3/8" panel hole.

**SM-59.** Cable end for 59/U Cable, mates with SM female.

**578.** Fixed Attenuator Pad designed to be used with Super-Matched fittings. Unit will pass AC or DC power. Available in 3 db, 6 db, 10 db or 20 db. Furnished with Super Match male on one end and female on the other.

**579.** Blocking Condenser to block power where no power is required. Designed to be used with Super-Matched fittings with SM Male on one end and SM Female on the other end.

**582.** Blocks power and terminates a SM 101 fitting.

**Jumper Lead 572.** Adapts SM Females to "F" fitting. Consists of SM59 fitting, 12" of 59U and 906 assembled ready for use. Longer lengths on request.

**SM-552.** Terminator for .412 aluminum cable.

**SM-553.** Terminator for .500 aluminum cable.

**588.** UHF adaptor for Super Match. Converts Super Match to UHF.

Aluminum connectors for aluminum sheathed cables.

**SPA models** "VIKAL" cable to "VIKAL" cable inline splice, complete assembly.

**412 SPA .412", \$2.05.**

**500 SPA 1/2", \$3.00.**

**750 SPA 3/4", \$7.00.**

**FFA models,** "VIKAL" cable to "F" type male fitting, furnished with "F" type female fitting and lock-nut for box mounting.

**412 FFA .412", \$1.65.**

**500 FFA 1/2", \$3.00.**

**750 FFA 3/4", \$5.50.**

**FMA models,** "VIKAL" cable to "F" type female fitting, furnished with "F" type male fitting.

**412 FMA .412", \$1.70.**

**500 FMA 1/2", \$3.00.**

**750 FMA 3/4", \$5.50.**

Super Match "SM" 75 ohm connectors for corrugated copper shielded cable. Write manufacturer for prices.

**SM-308BAF.** Super Match female cable adaptor. Fits 480 size corrugated & 308 strip braid. Furnished with locknut for bulkhead mounting.

**SM-480BAF.** Super Match female adaptor for 480 corrugated and 308 strip braid. Pressure clamping nut ensures positive ground and weather-proofing.

**SM-480M.** Super Match male counterpart of CF-480BAF above.

**SM-480SP.** Super Match heavy duty matched splice for 480 size corrugated or 308 strip braid. Pressure clamping nuts as CF-480. (For economy use 308SP).

**SM-655BAF.** Super Match adaptor, 655 O.D. corrugated copper and strip braid cables. Female.

**SM-655FFA.** Super Match adaptor for CF655 corrugated copper cable to "F" female connector.

**AU-308.** UHF series cable end for 308 strip braid and CF 480 size corrugated cable. Same crimping ring and tool as "F" series connectors. (Mates with SO-239).

**3085P.** CF480 corrugated copper cable to CF-480 corrugated cable or 308 strip braid to 308 strip braid inline splice.

**924.** CF480 corrugated copper cable or 308 strip braid to "F" type cable fitting.

**918/308.** CF480 corrugated copper cable or 308 strip braid cable female cable terminator.

**923.** CF480 corrugated copper cable or 308 strip braid cable "F" type chassis female fitting.

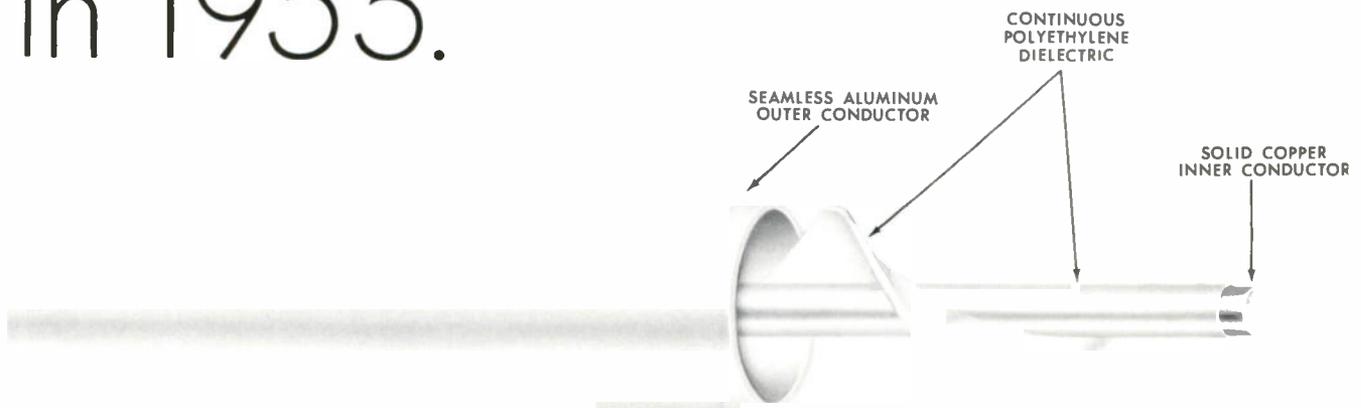
**RG-59 cable connectors:**

**906 (F-59)** male connector for standard 59/U type cables. "F" type.

**F-81** splice, double female, "F" series.

# SPIRAFIL<sup>®</sup> II

The first significant breakthrough in coaxial cable design since we introduced Foamflex in 1955.



Lower Attenuation    32 db Return Loss  
Fewer Amplifiers    Less Maintenance

■ What makes Spirafil II so radically different is a solid polyethylene helix which completely covers the solid copper center conductor without interruption. Among other things, this means great mechanical stability and an absolutely non-collapsible helix. Add to this the advantage of unusually attractive electrical characteristics (attenuation at Channel 13 .412" 1.27 db/100', .500" 1.02 db/100', .750" 0.75 db/100') and a system

cost competitive with conventional foam cable systems.

Spirafil II comes plain or jacketed in .412", 1/2" and 3/4" diameters, 75 ohm impedance, in 1000-foot reels.

For a complete listing of Sales Service Stocking Centers plus up-to-the-minute technical data, write, TWX or telephone: Phelps Dodge Copper Products Corporation, 300 Park Avenue, New York, N. Y. 10022 (212) 751-3200, TWX (212) 865-7455.

**BURIED SYSTEMS  
EQUIPMENT SPECIALISTS**  
TELEPHONE-CATV  
**CHANNELL**  
COMMERCIAL CORP.  
620 W. Foothill Blvd. • Glendora, Calif. • (213) 963-1694

F-61 Female chassis mount, "F" series. Available in round pin or flat spring pin.

909 (C-52) for standard 59/U type cables. "C" type.

C-81 splice, double female, "C" series.

C-61 female chassis mount fitting, "C" series to solder point.

918 terminator, 75 ohms, "F" type connector.

919 terminator, 75 ohms, "C" type connector.

59POT terminator, 75 ohms, push-on type connector for #921 flush mounted wall plate.

537 adapts "C" fittings to "F" fittings.

595P inline splice, 75 ohm cables. Push-on fittings, complete with ferrules.

059 ferrule, for use with RG59U.

011 ferrule, for use with RG11U.

03B ferrule, for use with VK308.

## TOOLS & ACCESSORIES

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### ANACONDA ASTRODATA CO.

Sealmatic flaring tool available for SLM 412, 500, 625 and 750 cable. It expands the Sealmatic cable outside conductor to allow ferrule installation.

### ANDREW CORP.

Coaxial Switching Devices for 7/8" and 1-5/8" transmission lines.

Pressurization equipment: automatic dehydrators for coaxial cable or rigid line systems.

### BLONDER-TONGUE

CR-2. Crimping tool and cutting pliers. CATV: \$7.55.

S-1. Rotary cutter and stripper CATV: \$3.30.

### DYNAMIC RADIO LTD.

Manufactures transmission line accessories and tools.

### GILBERT ENGINEERING CO., INC.

CET cable expander; expands 4920 cable size to accept GM-408, GAF-408, GF-408/59 etc.

CET cable expander; expands 4930 cable size to accept G-4930-SP etc.

### JERROLD ELECTRONICS CORP.

PL601 Tool for crimping 1051 ferrule. Price \$4.00.

PL-602 Tool for crimping 1026, 1051, or 1095 ferrule. Price \$5.00.

PL-603 Tool for crimping 1098 ferrule. Price \$5.25.



ET-404 Expansion tool. Forms separation between shield and dielectric of JT-201, 204, 301, 304, or 404 cables. Price \$1.15.

ET-408 Expansion tool. Forms separation between shield and dielectric of JT-408 cable. Price \$1.25.

WB-412 Weather boot for F-412 and VSF-412 connectors. Price \$1.95.

WB-500 Weather boot for F-500 and VSF-500 connectors. Price \$1.95.

WB-750 Weather boot for F-750 and VSF-750 connectors. Price \$2.50.

WSC-450 Weather boot for SC-412, and SC-500 splice connectors. Price \$4.05.

WSC-750 Weather boot for SC-750 splice connector. Price \$2.75.

WBT-450 Weather boot for terminators on JT-1412, and JT-1500 cable. Price \$1.25.

WB-59. Weather boot for RG-59/U cable connector. PNS.

WB-24/48. Weather boot for SC-24 or SC-48 splice. PNS.

### JACK PRUZAN COMPANY

Handles complete line of tools and equipment for cable installation.

### SUPERIOR CABLE CORP.

3-Stage Connector Crimping Tool.

CRT-2. For use with 4930 Coaxial Cable.

CRT-4. For use with 4930 Coaxial Cable.

### TELSTA CORPORATION

Manufactures complete line of tools and equipment for coaxial cable installation. Write for details.

### VIKING INDUSTRIES, INC.

555 loop crimping tool for aluminum cable. Price \$9.95.

908 59/U E-Z spread tool; spreads all 59U type cables for easy application of C and F type fittings. Price \$2.25.

541 coring tool with cutting tip. Expressly designed for all Viking pressure taps. Tip will fit all blocks to core out any cable. Price \$4.50.

542 coring tool cutting tip for aluminum cables. Price \$2.50.

543 coring tool cutting tip for flexible cables. Price \$2.50.

540 cable cutter, ideal for aluminum cable. \$5.50.

544 messenger stripper, designed for all types of figure-eight 59U with built-in messenger. \$5.00.

925 snubber grip for 59U. Grit surface to in-



sure tight cable grip. Made of strong hot-dipped galvanized steel. \$.20 each.

920 grounding block for RG59 cable, \$.50 each.

Quick Disconnect Box #989. Complete with 59/U splice fitting with 2 crimp rings. Splice is made inside box and cover bolted on. When splice is opened to disconnect customers' service, a wire seal may be put through the bolt to prevent tampering with disconnect. Vik-O-Process plated to prevent corrosion problems.

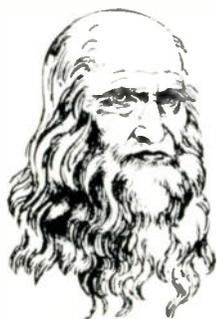
#509 "C" Span Clamp for attaching snubber grips to messenger cables where tap is not adequately supplied. Designed exclusively for the "growing system" that often has numerous drop lines from same area.

#539 Wire Clamp. This all aluminum Vik-O-Processed clip is designed to hold 59U to any spot permanently. Eliminate costly return calls due to accidental pull out of matching transformer. Keeps cable where you want it.

#407 Griplock strain relief clamp. The "Grip-lock" holds the RG59U drop cable securely in a loop that allows flexibility and relieves cable strain. It is installed by sliding the unit over the pressure tap or messenger clamp button hook. Constructed of heavy gauge aluminum the "Grip-lock" is designed for years of trouble free service. All units are stamped out of high density, corrosion proof aluminum. Size 4 3/8" long x 2 3/4" wide x 1/2" high.

#800 Alligator Clips. Ideal for all service calls. A new rugged hi-impact plastic so tough it won't break when you step on it. Spring will not rust or lose its tension.

#415 Lashing wire clamp — hot dipped galvanized. Packed 100 to a carton.



*Leonardo da Vinci...*

... was a leading painter, scientist and sculptor in his day. He was an innovator.

We're innovators too. In our day we're the leading CATV contractor in the Pacific Northwest-CATV specialists.

Our knowledge has been proven by such projects as pioneering the installation of integrated "figure 8" cable in the Wenatchee, Washington area. Experience proven by the fact we have laid more than a million

feet of cabling in most major cities in the Northwest for such companies as General Telephone Co. of the Northwest, American Cable Television, H and B American Corp., Telecable, Inc., and many others. We offer complete construction service. May we serve you next?

Contact us for your CATV installation.

## Cascade Line Constructors, Inc.

Specialist in CATV Systems

BOX 604, WENATCHEE, WASHINGTON 98801 ■ AREA CODE 509 TU 4-7161

## Watch out for the 'SS' men!

They're on the move. They're the ones building more CATV systems than any other independent in the business. The ones whose experienced know-how in CATV construction produces the finest quality, most profitable systems money can buy! About to build or modernize? Call 'em collect. They're good guys to have on your side. They work for **STAN SOCIA CORPORATION, TYLER, TEXAS, AREA CODE 214, LY 3-0911.**



**CABLE TELEVISION REVIEW**

The Weekly News Service of  
TV's Communications Magazine

NOVEMBER 14, 1966

**NEW YORK CITY HAS NON-FRANCHISED CATV**  
From New Offering "Telephone Cable TV" Via Bell Leaseback

HELEN NGUY, president of Con-Tel, Inc., a subsidiary of Bell Telephone Inc., a New York City CATV firm, told the Review last week that his firm is currently operating a "limited out-put" cable television system serving 18 square blocks of Manhattan. The area served, Central Park South, stretches from 12th to 13th Streets and from 7th to 8th Avenues. Nguy reported that the cable television service is being provided in Manhattan under an exclusive leaseback arrangement with New York Telephone Co., a wholly owned AT&T subsidiary. Empire City Subway Co. will be the conduit and handles the AT&T subscription communications in New York City. It is these conduits which are being used to carry the cable through which the television signals will be relayed to Con-Tel. Nguy stated that, as in most franchised CATV operations, Con-Tel owns the head-end and terminal distribution facilities and New York Telephone owns the underground lines. The work on to permit use of that arrangement began with the AT&T affiliate early this year, but the system has been recognized for only a short while now.

It is well known that Empire City Subway Co. vigorously opposed the Board of Estimates' decision to allow the franchised CATV operators—Marketing Information Services, TelePresence and CATV Enterprises—access to its conduits. This confrontation occurred in late January. Subsequent to that, the AT&T subsidiary attempted to obtain a revision of the rules and regulations maintenance and access to the conduits. The proposed revisions would, in the opinion of many, have established AT&T as the ultimate user who would be allowed to use the lines. The three franchise holders in New York City opposed Empire City Subway's revision recommendations, and they were not accepted.

Con-Tel in recent weeks has mailed letters to building owners and tenants in its pilot area. The subscription form which accompanied the letters is interesting for two reasons. First, the form refers to the service being rendered by Con-Tel and New York Telephone as "Telephone Cable TV." The price structure referred to in the subscription form also merits attention. The cost is described as "for less than any independent underground cable system." Specifically, Con-Tel proposes to charge \$3.50 per month plus \$15.00 installation charge. This compares

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***"Why subscribe to Cable Television Review? Because I want to know what the broadcast and telephone industries are doing. Being informed is the only way I can protect my system."***

**Stay informed with  
Cable Television Review  
Weekly.**

# CONSTRUCTION MATERIALS & EQUIPMENT

The following section includes product listings for CATV line construction materials such as messenger wire, lashing wire, buried plant pedestals and accessories, tapes and splicing materials, poles, and miscellaneous pole line hardware. Also included are listings of line construction tools and equipment with particular application to CATV plant installation and maintenance. Listings marked with an asterisk (\*) indicate that new information was not supplied by the manufacturer for that listing. For mailing addresses and other information concerning firms listed in this section, see the "Manufacturers and Suppliers" section located in the front of this Directory.

## MESSENGER & GUYING WIRE

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### AMECO, INC.

CATV distributor of Line Materials Company construction materials and equipment. Quality line ranges from C-clamps to poles.

### DAVCO ELECTRONICS CORP.

Complete line of poleline hardware, messenger strand and lashing wire is carried in stock for immediate shipment. Request information and prices.

### JACK PRUZAN COMPANY

Colorado galvanized wire and strand. All sizes and grades of galv. class A messenger strand available from stock. Mill shipments by carload or LCL anywhere. Copperweld and Alum-O-Weld Strand for guying or messenger in stock. Other sizes as follows:

1/6" TV Guy Strand  
4x20 Service Drop Messenger  
6x20 Service Drop Messenger  
3/16" Galv. Common Strand 1350#  
3/16" Utilities Strand 2400#  
1/4" Siemens Martin Strand 3150#  
1/4" High Strength Strand 4750#  
1/4" Extra High Strength 6600#

### SOUTHWIRE CO.

Galvanized steel strand support messenger for distribution cable installation. Contact manufacturer for specifications, prices.

### TV CABLE SUPPLY CO.

Messenger Strand. Complete listing on 3/16", 1/4", and 5/16" messenger. 25,000' or more freight prepaid East of Mississippi.

## LASHING WIRE

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### AMECO, INC.

Ameco is CATV distributor of Line Materials Company construction materials and equipment. Quality line ranges from C-clamps to poles.

### ABERDEEN COMPANY

Stainless steel, 0.045 diameter—type 430. Wax coated finish. 6 coils per carton. Competitively priced, with freight paid on orders of 18 or more coils. Prompt delivery from either coast.

### CHANNELL COMMERCIAL CORP.

RL-580-C or CS "Rapid Lash". Coiled galvanized or stainless steel spring wire used as a patented method for securing cables to supporting strand without use of mechanical lasher. Contact manufacturer for price.

### DAVCO ELECTRONICS CORP.

Stainless steel .045 diameter, type 430, Waxed, 1200' per coil, 6 coils per carton. In stock.

### JACK PRUZAN COMPANY

Cable lashing wire in stainless steel and galvanized. Also associated accessories such as cable lashers, bonding, slack pullers, rubber blankets, cable blocks, lashing wire grips, aerial cable guides, cable blocks, etc.

#### In stock cable lashing wire—stainless steel:

.045 Strait hub  
.045 Cone hub  
.065 Straight hub  
.065 Cone hub

#### In stock cable lashing wire—galvanized:

.061 Cone hub  
.091 Straight hub

### TV CABLE SUPPLY CO.

Type 430: .045 Stainless steel lashing wire, 1200' coils, waxed. Freight prepaid 24 or more coils East of Mississippi. 24 or more, \$5.95 ea.

### VIKING INDUSTRIES

Stainless steel .045 diameter, type 430, Waxed, diameter with wax coated finish. Has straight core and is put up on 1200 foot rolls. Six rolls to a shipping carton.

## BURIED PLANT ACCESSORIES

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### AMECO, INC.

Ameco is CATV distributor of Line Materials Company construction materials and equipment. Quality line ranges for C-clamps to poles.

### BUTLER MANUFACTURING CO.

Manufacturers of Cablegard metal covering for buried cable.

### CHANNELL COMMERCIAL CORP.

"UT" Series underground closures: utilized to hermetically protect all adjustable and passive CATV distribution components direct buried in concrete access boxes or underwater. Consult factory for special problems and application.

**Pedestal Housing PH-400 Series.** Channell ABS plastic pedestal housing with integral matching stake in 4" dia. Airtight or open throat versions to accommodate tap-offs and splitters.

**Channell Hermetic Closures** for passive and adjustable distribution components in aerial, vault or direct burial. ABS plastic case with use of Neoprene grommets to seal on cable and provide permanent protection for equipment installed. May be re-entered repeatedly and protects against unauthorized tampering. Contact manufacturer for prices.

### JACK PRUZAN COMPANY

Handlers of Channell Splicing Machine and Utility Products pedestals, terminals and other related buried plant accessories.

### REEF INDUSTRIES DIVISION

TerraTape method for protection and location of all underground installations. A color coded polyethylene strip imprinted with CAUTION



message is buried just below the surface restoration to provide a warning to subsequent excavators and to help maintenance crews locate the buried installation.

### SIGMA INDUSTRIES, INC.

Sigmaform thick wall, self sealing, heat-shrink-

# SKL

## NEW, ADVANCED CIRCUITS

able splice covers and molded parts for the sealing against moisture, corrosion, for strain relief, etc., for underground construction.

### SUPERIOR CABLE CORPORATION

Fiberglass equipment housings designed for use in buried plant TV systems employing all sizes of electronic equipment. Fiberglass housings are available for low-profile or below grade application. Several models are designed for joint use with TV, power and telephone or any combination therein.

### U.S. EXTRUDED VINYL PRODUCTS, INC.

Pipe-A-Flex is a high density polyethylene utility pipe for use in underground CATV installations. The pipe has a corrugated profile designed to meet the needs of CATV applications.

### UTILITY PRODUCTS CO.

Full line of buried TV closures with prices ranging from \$12.00 to \$49.25.

## TAPES & SPLICING MATERIALS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### AMECO, INC.

Ameco is CATV distributor of Line Materials Company construction materials and equipment. Quality line ranges from C-clamps to poles.

### BISHOP MFG. CO.

Manufactures complete line of splicing, shielding and terminating materials. Contact Bishop for complete information.

### CHANNELL COMMERCIAL CORP.

PS 170 Series splice connector closures. Closures available in various lengths or special lengths or special order to hermetically seal over RF cable connectors. May be re-opened and repeatedly re-entered.

### DAVCO ELECTRONICS, INC.

Waterproofing materials such as Dow-Corning DC-4 Silicone, Scotchkote, and Synco. Tapes include Blue Cross black cloth tape. Bishop-Bi-Seal, Scotch 33, Scotch 88 and assorted other plastic tapes.

### MINNESOTA MINING & MFG. CO.

"Scotch" Brand pressure sensitive electrical tapes for splicing. Vinyl plastic electrical tapes for: general purpose, temperature extremes, oil contamination areas. Aluminum tape for moisture barrier. Paper tape for marking purposes. Moisture seal tape, electrostatic shielding tape, outside splice wrap tape, and build-up tape in putty form. Self-stripping electrical connectors for connecting wires. Splicing kits and resins for end sealing and splicing and blocking cables. Splice materials also available — injection fittings, spacer tape, restricting tape, channeling pins, epoxy resin, cable sealing accessories, resin pressure guns and cable shield connectors. Electrical sealer—as a bonding agent for splices. Adhesive flat cable systems. Mounting plates for hardware installation. Vinyl plastic adhesive cable clips. Contact manufacturer for prices.

### JACK PRUZAN COMPANY

Complete line of tapes and compounds for splicing communications wires and cables of all types. Brand names include: 3M Company, General Machine Products, Bishop Mfg, and Channell Splicing Machine.

### SIGMA INDUSTRIES, INC.

Sigmaform thick wall, self sealing, heat-shrinkable splice covers and molded parts for the sealing against moisture, corrosion, for stain relief, etc., for overhead as well as underground construction.

## MISCELLANEOUS POLE LINE HARDWARE

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### ABERDEEN COMPANY

Clamp, Model A, for RG 59/U. Fits all multi-taps, one piece stainless steel that is easy to use and economically priced.

### AMECO, INC.

Ameco is CATV distributor of Line Materials Company construction materials and equipment. Quality line ranges from C-clamps to poles.

### CRAFTSMAN ELECTRONIC PRODUCTS

PG-1 Posi-Grip-Snubber for overhead drop hook-ups. Made of hot dipped galvanized steel. Price: \$20.00/per 100.

### DIAMOND EXPANSION BOLT COMPANY, INC.

Various items of Pole Line Hardware. Clamps and straps, drive rings, screw eyes, bridle rings, angle screw fixtures and aerial cable supports. Lashed cable supports and lashed cable support kits. Cable lashing clamps, span clamps, tangent supports, strand connectors, conduit rods, tie wires and tie splints.

### FANNER MANUFACTURING CO.

**Superlock Clamps** . . . for galvanized steel, aluminum-covered or copper-covered steel strands.

**Straight-Bight Fanngrrips** . . . for galvanized steel or aluminum-covered steel strands and fiberglass rods.

**Superformed Fannsplices** . . . for galvanized steel, aluminum-covered or copper-covered steel strands and fiberglass rods.

**Tygard Line Ties** . . . for galvanized steel or aluminum-covered steel messengers.

**Fanner Metal Sheaves** . . . for pole attachment of messengers.

**Plastic Safety Guards** . . . for covering and protecting ground-end of guys.

**Treeguards** . . . helically pre-slit plastic tubing for wrapping cables to protect them against tree-branch abrasion.

**Cable Guards** . . . pre-slit plastic tube lengths for cable protection or insulation at a single point.

**Lashing Rods** . . . helically formed wire for lashing cables onto messengers.

**Wrapit Spiral Lashing** . . . spiral plastic wrapping for lashing cables, service drops, multi-pair lines and for field-bundling control cable wire.

**Kover-Gard Molding** . . . extruded plastic molding for mounting over surface mounted cables.

**Vibradampers** . . . for damping vibration on long-guy and messenger strands.

**Plastic Line Dampers** . . . for damping open-wire aeolian vibration.

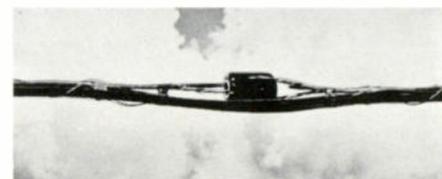
### JACK PRUZAN COMPANY

Complete stocks of galvanized bolts, anchors, pole bands, braces, brackets, bushings, caps, clamps, clips, connectors, crossarms, dampers, eyelets, eyes, grips, guards, guy attachments, hangers, hooks and the many-many other supplies necessary for pole line construction or attachment. Comprehensive catalog available.

**Complete stock of Pole Line Hardware** in warehouses located in strategic points to serve all areas of the continent. All specialty items for power or communications applications: Performed Line Products Diamond Expansion Bolt Products; Macoid Plastics, Copperweld, and many others. All sizes of bolts, anchors, rods, and washers. Crossarms and braces, guy fittings and clamps, grounding materials and connectors, insulators and guard. Plastic and steel conduit and pipe. Engineered items for special applications.

### PREFORMED LINE PRODUCTS CO.

Spiral vibration damper. A one-piece helically



formed unit that inhibits vibration, thus preventing premature wire fatigue damage. Price from manufacturer.

FOR CATV

# know-how!

COMMUNITY  
FEASIBILITY STUDIES  
FINANCING  
ENGINEERING

MANAGEMENT  
PROMOTION  
BROKERAGE

... contact the  
CATV consultants  
of experience

## DANIELS & ASSOCIATES, Inc.

2930 EAST THIRD AVE. • DENVER, COLORADO 80206 • (303) 388-5888

**BURIED SYSTEMS  
EQUIPMENT SPECIALISTS**  
TELEPHONE-CATV  
**CHANNELL**  
COMMERCIAL CORP.  
620 W. Foothill Blvd. • Glendora, Calif. • (213) 963-1694

**Strand splices.** To restore the full mechanical strength and electrical conductivity of the strand. Price on request.

**Plastic spacer.** Eliminates mid-span hits. Reduces maintenance on existing wires. Made from PVC plastic for long endurance.

**Lashing rods.** To secure cable to the messenger; eliminates need for clamps, slips or spinners.

**Guy-grip deadends.** Holds full rated breaking strength of all popular sizes and types of strands.

**Plastic guy guards.** Provides positive protection for down guys. Tamper-proof. Impact-resistant.

**Dead-ends for Figure 8—cable.** Provides low distribution of holding stresses to prevent premature fatigue breaking.

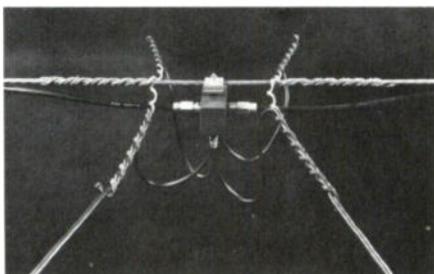
Weather-proof. Economical. Available in Green - Yellow - Gray.

**False dead-ends.** For Cable Television installations

**Telegrip.** Apply at pole, house or tap. Flexible single-leg design. Will hold 100% of the rated breaking strength of RG-59/U television coaxial cable.

**Stainless steel dead-end.** Designed for use on RG-59/U coaxial cable.

**Preformed Teletap Connector** one-piece holding product for multiple tapping systems. Applies in seconds and gives superior holding power at



lowest installed cost. Develops full strength of RG-59/U coaxial cable. Comes with neoprene coating to cushion service drop cable. Price on request.

#### TV CABLE SUPPLY CO.

**Pole Line Hardware.** Inventory of Joslyn pole line hardware, including all reliable items and preform dead-ends.

#### POLES

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

#### CASCADE POLE CO.

Creosoted Douglas Fir and Cedar poles. Write for prices.

#### C. M. CHRISTIANSON CO.\*

Northern White and Western Red Cedar Poles. Pentachlorophenol treated. Write for prices.

#### DIERKS FORESTS, INC.

Pressure-treated posts, poles and lumber.

CATV Equipment & Services

#### EPPINGER & RUSSELL CO.\*

Poles; creosoted Penta, Creo-penta. Write for prices.

#### INTERNATIONAL CREOSOTING AND CONSTRUCTION CO.\*

Creosoted Southern Yellow Pine poles. Write for details.

#### JACK PRUZAN COMPANY

Handles Cascade wood poles and Brooks Lumber crossarms.

#### TAYLOR-PIEDMONT

Creosoted and creosote-Penta treated Pine poles. Write for prices.

#### CONSTRUCTION EQUIPMENT

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

#### ABERDEEN CO.

**Model S** lashing machine; light weight, for use on short runs, maintenance, line extensions, drop cables, overlash, etc. Easy to use, weighs only 15 lbs. Aluminum construction — uses standard lashing wire. Comes with steel carrying case. Price \$160.00.

#### AMECO, INC.

Ameco is CATV distributor of Line Materials Company construction materials and equipment. Quality line ranges from C-clamps to poles.

#### ATECO

Cable layers for all crawler tractors and motor graders.

#### BAKER EQUIPMENT MFG. CO.

**TH-Series** aerial device for cable plant maintenance. Features include one man basket, rugged steel booms, high pressure hydraulic system controlled from basket; Auxiliary controls at rear of main boom for operation from truck. Optional ac outlet at basket. Cab to basket intercom also optional. Cable maintenance truck bodies also available for use with TH-Series.

#### THE CHARLES MACHINE WORKS, INC.

**Ditch Witch Model V-30** trencher/Vibratory Plow/Backhoe Unit. Unit performs all underground installation tasks. Eliminates necessity of multiple pieces of equipment. Backhoe and Vibratory plow are quick field attachment and removal units. Trencher has four variable, mechanical chain speeds with hydraulic drive and power steering. Digging capacity of 6" to 12" width and up to 6' deep. \$7,885.00 F.O.B. Perry, Okla. (Many other models available from \$795.00 to \$4,795.00).

**Sky Witch Work-Load Lift.** Work platform of adjustable height, that lifts workman and material to desired working height. Many models available with lifting capacities from 750 lbs. to 2000 lbs., heights from 9' to 30', Platform from 7' to 25'. Sky Witch Work Load Lifts are totally self contained, mobile and flexible in job application. No time consuming task of set up for job.

#### DAVCO ELECTRONICS CORP.

Stock of construction and line tools are maintained in Batesville warehouse. Portable AC generators, portable power drills, hoist, nut drivers, screwdrivers measuring wheels, cable lashers, climbers, safety belts, tool pouches.

## Low Silhouette SERVICE BODIES by Douglass

MAKE YOUR SYSTEM MAINTENANCE MORE EFFICIENT WITH ALL-METAL DOUGLASS BODIES



**CUSTOM INTERIORS** are built to fit your specific needs. Every inch of space is used. Fully enclosed and locked cabinets save tools and equipment, cut storage costs. Keeps needed equipment with you at all times.



**LOW PROFILE** gives unobstructed visibility. easy access to inner bed from all sides. better stability. Increases over-all hauling capacity. enables more efficient system maintenance.

**RUGGED ALL-METAL CONSTRUCTION** for heavy duty. Full lower cross supporting. No body modification necessary to add hoists, ladders, etc. Interchangeable from one truck to another. Sizes to fit 1/2 to 1 ton trucks. Improve your system construction/maintenance methods with these sturdy units.

Write or call today . . .

## C. C. DOUGLASS MFG. & SALES

231 21st Street, Bakersfield, Calif.  
Phone (805) 324-6341

# SKL

## 7210 THERMAL EQUALIZER

soldering irons, pliers, and other tools are available from stock. Lines include Arrow, Coffin, Everlite, General Equipment, General Machine Products, Klein, Miller, Rolatape, Vaco, and Weller. Write for catalog.

### C. C. DOUGLASS MFG.

**Low Silhouette Service Body:** All steel bodies with unitized (sectional) construction. Std. height on all std. models is 30". Length on std. models varies from 6½' to 9'. Side box width varies from 13" to 22". The Douglass Body stores your equipment and materials in locked, all metal compartments, out of the weather, and still located for fast and easy accessibility. A Patented Internal Wheel Housing which provides these advantages: Lower overall height with no lost storage space. Increased safety with better visibility. Greater roadability with a lower center of gravity. Added structural strength with full width cross supports. Other special features are: (Sectional) Unitized Body Construction for faster, easier, and more economical repair or replacement of any damaged areas. (Parts are readily available). Many accessories are available for your particular job. Transfers easily from one truck to another (may outlast four or five, or more trucks). Prices \$445 to \$775.

### DUO-SAFETY LADDER CORP.

Manufacturer of ladders for utility-type work. Contact manufacturer for literature on complete line.

### EASTERN METAL OF ELMIRA, INC.

Manufacturer of buried cable signs, work area protection equipment such as flags, vests, etc. Contact manufacturer for complete literature.

### GAMBLE BROTHERS, INC.

Electrically safe Type D extension ladders with Spruce rails reinforced with hickory. Rungs are aluminum. Ladders weigh 45 lbs. (24 ft. size) and 54 lbs. (28 ft. size). Contact manufacturer for complete information.

### GENERAC CORP.

Power generator for mounting on vehicle engine; provides both 12 VDC and 115 VAC. Replaces vehicle alternator. Available in four sizes, 1200 to 5800 watts AC. Also manufacturers of portable alternator units.

### GENERAL MACHINE PRODUCTS CO.

Manufacturers of aerial construction equipment, cable lashers, and safety equipment. Contact manufacturer for complete information.

### HALLINE UTILITY EQUIPMENT CO.

**Aerial Ladders:** Elevate a man and some equipment from ground to working heights ranging from 30' to 50' — permits man to string CATV cable, splice cable, or other necessary functions for CATV work. Electric, manual or hydraulic type operation. Can be equipped with 110 volt AC generators, air compressors, etc. options such as top controls permitting the operator to have full control of all functions of the ladder.

**Diggers (earth augers).** Various models hydraulically driven developing from 3000 ft. lbs. torque to 5500 ft. lbs. of torque. For driving augers up to 24" diameter for CATV poles.

**Hydraulic Derricks** to hydraulically set poles,

cross arms, transformers, string CATV cable, and other major construction that requires heavy capacity.

**Articulated Aerial Beams** to place a man and equipment in air up to 40' working heights. The unit has a fiberglass upper beam which is insulated. Upper beam travels over center permitting wide working range. Can be equipped with hydraulic tools at basket to permit operator to drill, saw, crimp, etc.

**CATV Truck Bodies** manufacture side boxes, service bodies, line bodies and special bodies to serve the CATV industry.

### HOLAN

Manufacturers of aerial lifts, pole handling equipment, cable reel loaders, utility truck bodies. Contact manufacturer for complete information.

### KLEIN TOOLS

Manufacturer of all kinds of pliers: side cutting, oblique cutting, end cutting, long nose, curved nose conduit, and skinning plier. Manufacturers complete line of electricians' tools including wrenches, saws, screwdrivers, knives and scissors. Pocket tool kits and linemen's wrench. Klein climbers, climber straps, climber pads, and gaff guards. All types of belts, safety straps and accessories. Manufacturer of Chicago and Haven grips. Also make tackles, hand lines and snap hooks.

### MIDWEST LAWN-SAVER

**Interline-2 Intermediate Plow** to be pulled by D-6 or equivalent prime mover for burial of cable from 30 to 42 inches in depth. No backfill or cleanup required. Can bury any number of cables with special attachments. Self-contained hydraulic system, not attached to prime mover. Trailed plow. Price \$4,300.00.

**Lawn-Saver** Small plow to be winched by line truck, buries cables from 12 to 24 inches in depth in a narrow slit, no backfill or cleanup required. Can be moved by one man, 2-man crew can utilize this tool. Low maintenance with only 4 replaceable parts. Price \$245.00.

### PIERCE AUTO BODY WORKS, INC.

Manufacturers of utility type truck bodies and compartment units. Contact manufacturer for complete information.

### PITMAN MFG. CO.

**Pitman Pelican II:** Hydraulically operated mobile aerial unit. Telescoping boom—available in three sizes: 36-foot, 32-foot, 28-foot with continuous rotation. Insulated upper boom. Mounted on light-weight truck. Enables one-man crew to handle trouble, service, and maintenance jobs. Controls can be operated from bucket or from ground station. Designed especially for the telephone and CATV industries. Priced \$4,200 to \$6,500.

Hydraulically operated aerial devices with articulated boom system. Available in following heights: 36-foot, 41-foot, 46-foot, 50-foot. Standard rotation system 375°—continuous rotation available. Insulated upper boom and lower boom insert made with Epoxiglas. Available with one or two buckets. 50-foot unit available only with two buckets. 46-foot available with only one bucket. One and two buckets are available on 36-foot and 41-foot units. Priced \$6,000 to \$12,000.

### THE PRUZAN COMPANY

All linemen's equipment, body belts safety straps, climbers, and hand tools. Handles fiber glass, wood and aluminum ladders. A. B. Chance and Diamond Expansion Bolt pole line hardware and specialties. Has Utility Tool & Body truck bodies and equipment. General Machine Products cable lashers and special cable tools, traffic cones and warning flags. Manila and polypropylene ropes and block and tackle, cable and strand pulling ropes.

### RATCLIFF HOIST CO.

Manufacturer of ratchet lever hoist and ratchet lever load binders for utility construction and maintenance applications.

### RATELCO, INC.

**IC-7 mobile intercom system:** complete 2-way intercom system for use on construction vehicles. Provides continuous communication between operator and workman on boom-type vehicles such as "cherry pickers," aerial ladders, etc. Provides hands-free communication to workman on end of boom. Operates from 12, 24 or 32 VDC, all transistorized, low battery drain. Unit is small, compact, rugged and can be supplied in weatherproof version if amplifier not desired in vehicle cab. Price \$114.00.

### ROLATAPE CORPORATION

**Model 415** Measuring wheel that measures lineal feet and inches. Has a counter which records measurements up to 100,000 feet. Wheel circumference is 4 feet, diameter 15½ inches. 9 lbs. shipping weight. Wheel calibrated to ½ inches on one side of the disc and ½ of one-tenth ft. on the other. Equipped with automatic brake to insure holding position. Built-in-stand. Folding handle. Plated steel disc which permits ease movement through brush. One man can measure faster, more conveniently and accurately. Price \$69.50.

### STAHL METAL PRODUCTS CO.

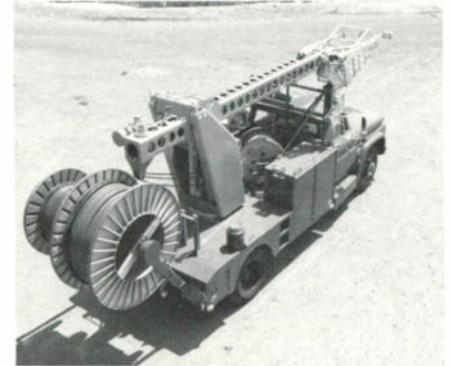
Manufacturers of utility type truck bodies, aerial ladders, side boxes for pick-up trucks. Contact Stahl for complete information.

### SUPERIOR CABLE CORP.

Mobile power units—designed as a self-contained unit to provide AC power, water pumps, (Stationary and portable) heaters, blowers, air compressors, emergency lighting or any combination therein. All units are mounted as single or tandem axle trailer and enclosed in sheet metal housings.

### TELSTA CORPORATION

**Model T-36.** Aerial lift for stringing cable. Fully electric; telescoping. Designed total field opera-



tion; single lever control for 1, 2 or 3 directions separately or simultaneously.

**Model T-40B.** Telescoping electric lift. Similar to above with longer reach; additional features.

### TUCKER SNO-CAT CORP.

Manufacturer of heavy duty Sno-Cat vehicles for construction and maintenance of remotely located head-end or microwave relay sites.

**Model 500** 150 hp Chrysler, headlights, heater, tachometer standard, load capacity 1800 pounds; 35 gal. fuel capacity—5 to 6 miles per gallon. Aluminum cab construction. Contact manufacturer for details on other models.

### UTILITY TOOL & BODY CO.

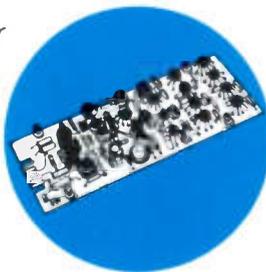
Manufacturer of complete line of construction equipment from winch line hooks to truck bodies.



# Cablecasting..

*TELEMATION'S SYSTEMS CONCEPT*

■ You wouldn't consider building a cable plant without a system design, nor would you want to use non-compatible components. In the absence of established industry standards, it is even more vital that you choose compatible local origination devices.



■ This is why TeleMation offers 18 separate products for CATV local origination, plus the choice of television broadcast equipment from over 150 manufacturers



to provide you with an integrated local origination facility that is both compatible and complete.

## How TeleMation's System Concept will benefit you:

■ Your WEATHER CHANNEL™, old or new, can be used as a film and slide source.

■ WEATHER CHANNEL™ and NEWS CHANNEL™ can be combined on a single system channel by use of the new SAV-A-CHANNEL™ or with CHROMA-CHANNEL™ to originate weather forecasts in color.

■ Cameras equipped with a TeleMation TSG-1 Sync Generator can be integrated into a broadcast-like system for smooth,

professional operation with TeleMation's new CABLECASTER™ Video Control Center — a new concept in CATV origination. Cameras used with the CABLECASTER™ system can be used for outside use by merely disconnecting from the studio system — conversion to self-contained operation is completely automatic.



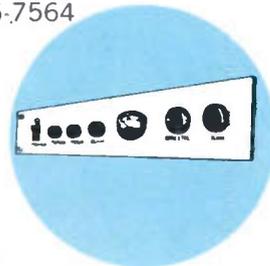
■ Video recordings made on TeleMation-supplied recorders are guaranteed interchangeable between machines.

■ TeleMation engineers have over 60 years' combined experience in the television broadcast field. Why not take advantage of this in planning your live and/or automated cablecasting facility?

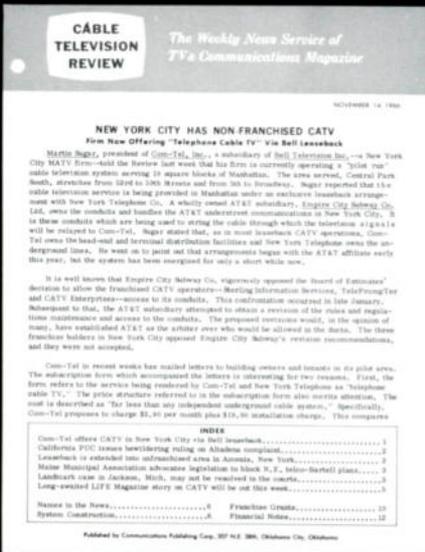


**TELEMATION**

2275 S. West Temple, Salt Lake City, Utah 84115  
Telephone (801) 486-7564



LOCAL ORIGINATION EQUIPMENT



***"I read Cable Television Review because it gets to the heart of CATV news. I feel like it's working for the best interest of the industry. It has the facts."***

**Get the facts in  
Cable Television Review.  
Weekly.**

# LOCAL ORIGINATION EQUIPMENT

The following section includes product listings for components with applications in local programming for CATV systems. Types of equipment included are: Auxiliary Services Equipment; Video Tape Recorders; Cameras; Video Amplifiers; Monitors; and Video Accessories (including film chains, camera accessories, sync generators, etc.). Listings marked with an asterisk (\*) indicate that new information was not supplied by the manufacturer for that listing. For mailing addresses and other information concerning the firms listed in this section, see the "Manufacturers and Suppliers" section located in the front of this Directory.

## AUXILIARY SERVICES EQUIPMENT

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### ALTO FONIC TAPE SERVICE, INC.

Music program services, Mono or Stereo Music on 10" or 14" reels. Program material for background music or entertainment music. All services supplied on monthly lease basis with regular exchange of all material. Prices start as low as \$15.00 per month.

### AMECO, INC.

**Weather-Scan time/weather music package.** Equipped with series 600-W Texas Electronic instruments. 8 1/2-inch dials indicate pressure, time, temperature, rainfall, wind direction and wind velocity. Two blank panels for local announcements. Optional projector and humidity indicator. FMAT-1 audio modulator and Ameco-Tran modulator can be used with an FM tuner to add music from off-air signal. Or use same equipment with good commercial tape deck to originate music locally. Use on any channel, 2-13. Choice of cameras to suit individual operator's needs.

### AMERICAN CABLE ELECTRONICS

**106 C Solid-State Weather Data:** digital read-out display unit for automatic display of time and weather information. This automatic device provides a continuous display of time, wind speed, wind direction, temperature, barometric pressure, and humidity. Unit comes complete with solid state vidicon camera. Accurate weather sensing instrument. Price \$6,995.00.

**#600 Emerg-Alert:** Unit will allow both video and audio messages to be originated on any or all channels of a CATV system. The unit can be remotely controlled via telephone facilities. Ideal alerting system for civil defense, Fire Department, police and other warning systems within a community. Can be remotely controlled from any telephone in a community via tone coding. Can be remotely controlled from any number of locations. Facilities for automatic video insertion during loss of programming. Can be used for local origination and maintenance communications in a CATV system. Price \$4,995.00.

### ASTEROID CORP.

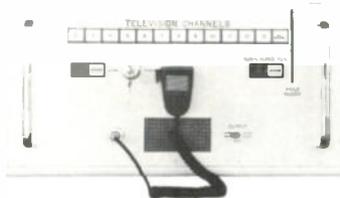
**Model 106 C Weather Data** senses climatic conditions in analog form and converts to all

digital display. All solid-state, no mechanical movement, all climatic conditions displayed simultaneously, easily read, excellent accuracy



and high reliability. Unlimited distance from sensors to unit is standard. Price \$6,995.00.

**Model 600 Emerg-Alert** designed to alert communities with either video and/or sound by breaking into any channel with its own RF power system. Used as a back-up equipment while system is off the air. Can be operated



remotely from many locations simultaneously, or locally. Low cost system for Program Origination. Price \$3,450.00.

### BENDIX ENVIRONMENTAL SCIENCES DIV.

**Weatherman I:** System includes sensors and indicators for Wind Speed, Direction, Temperature, Humidity, Barometric Pressure and Rainfall. Precision designed equipment for reliability, appearance and long life. System includes custom features which will identify your system.

### CAS MFG. CO.

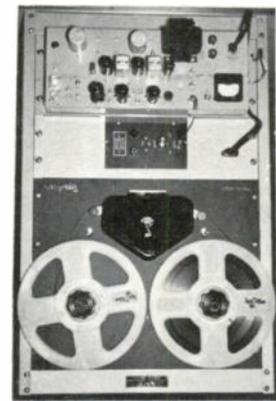
**Direct view weatherboard.** Displays local temperature, humidity, barometric pressure, rainfall, wind direction, wind speed and time all readable at once in large bold print.

### DAVCO ELECTRONICS CORP.

Distributor of time/weather music equipment. A variety of items are offered to meet individual requirements. Contact Davco for information.

**MC-1100 Music Channel.** Rack mounted head-end unit. Includes tape deck with 10" reel

capacity, preamplifier and Entron FMT FM transmitter. Open rack model is 21" x 32". Price \$848.00. Deluxe cabinet model shown above is

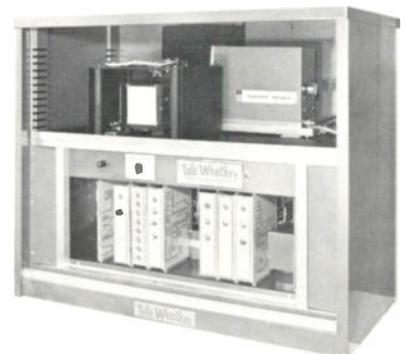


28" x 21 3/4" x 15 1/4". Price \$868.00. Eight hour pre-recorded tapes available.

**Model FMRT-2 FM System.** Pre-wired package delivers two FM channels. Includes two variable FM Tuners which can be crystal controlled on any FM channel. Plus two crystal controlled Entron FM Transmitters on specified frequency from 88 to 108 megacycles. Contains rack mounted remote power supplies for antenna pre-amps (DRPB-FM) along with a multiple outlet. Use as many as desired (For example, if 6 channels are used, you would require 3 FMRT-2's.) Price for the complete unit is \$897.00 FOB Batesville, Arkansas.

### ELECTRONIC SYSTEMS DEVELOPMENT, INC.

**TeleWeather TW 2** time/weather unit showing 5 weather functions, 3 message functions, and



time of day. Non-scanning presentation with "pop on, pop off" dissolve action. Camera is

# SKL

## PLUG-IN AMPLIFIERS

readily removable for other uses. Will shown any typewritten or handwritten message very clearly. Will also shown any pictures or snapshots clearly in the message slots. Messages and pictures can be changed conveniently and speedily. There are skip switches so that any messages and weather functions can be eliminated if desired. Price \$4,185.00.

### GIRARD PROJECTION SERVICE

**Programming Service** for local origination including video-tape transfer and production.

### INTERNATIONAL GOOD MUSIC INC.

Complete background music systems, three price ranges of reel-to-reel transports available. Interspersion to alternate two transports (Model 400) with switching on tone or silence. Price \$600.00 up.

### METROTECH INC.

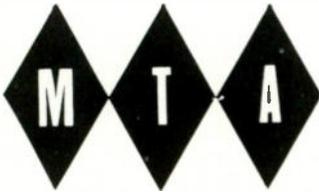
**Series 500:** The Series 500 Reproducers include single players and automatic systems; are avail-



able to operate at any of the normal speeds required in the industry. Available as monophonic and stereophonic systems. Tape Reproducer, From \$775.00. Tape Recorder, From \$995.00. Background Music System, From \$1,795.00.

### TAPE-ATHON CORP.

**Tape player, console type "Librarian."** Has two tape decks with 8-hour 10 1/2" reels. Feeds background music to head-end equipment. Self-con-



**MALARKEY, TAYLOR & ASSOCIATES**

**CATV**

**Brokers/Consultants/Engineers**

1101 - 17th Street, N.W. • Washington, D.C.  
Phone: Area Code 202 • 223-2345

tained 15 watt amplifier monitor speaker and 7-day timing clock. Uses exclusive intersperser for complete CATV programming control. Complete library of tapes provides finest taped background music available. Available in both lease and outright sale plans.

### TELEMATION, INC.

**News Channel** automatically telecasts current news 24 hours a day directly from the wires of The Associated Press. Continuous news service covers international, national and local stories, plus sports markets and bulletins when they happen. The service is leased and includes installation, maintenance and all supplies. The system automatically switches between READ (news presented as the printer spells it out), SCAN (reruns of important stories during transmission lulls) and SCREEN (local promotional material appears on an aperture card). News



Channel service can be combined with Weather Channel equipment into a single channel via Telemation's Sav-A-Channel control and logic system. May be integrated into the new Cable-caster video control and logic concept.

**Weather Channel 97** Automatic high quality video display of complete local time/weather information on six weather instruments and clock, with a card slot and 35mm slide projector for presentation of public service, public relations or advertising messages, and for



weather forecast information. Internal programmer for adjusting dwell time on slides and card slot. G.E. TE-20 camera, with 2:1 interlace binary sync generator. Live telecasting is possible with provisions included for both pan and tilt control of camera view. Built-in provision for remote camera positioning and slide control facilitate use of the '97' as a remotely operated slide source and available accessories convert it to 16mm film operation. Fully compatible with Telemation's Cablecaster Video Control Center and with the control center, is ideally suited for integration with other cable-casting facilities or for separate operation. Price \$5,495.00.

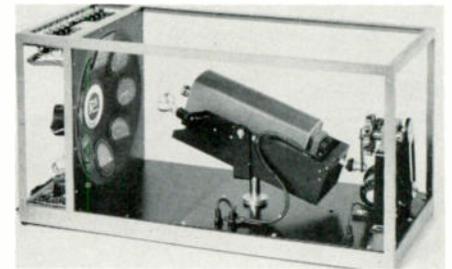
**Weather Channel 75** Table model version of Weather Channel 97, with five time/weather instruments and two card slots, pan/tilt mechanism for limited live telecasting, Grade-A



vidicon camera with random interlace, and facilities for adding 35mm slide projector. 2:1 interlace sync generator available from Telemation, as well as Chroma-Channel, for live color programming. Designed specifically for CATV applications where compactness and low price are major factors, without sacrificing high quality performance. Solid-state Triac motor control, non-glare fiberglass scanning deck, convertibility to EIA specifications, top-quality time/weather instruments mounted to manufacturer's specifications, live telecasting capability provided by built-in pan and tilt mechanism. Price \$3,995.00.

### R. H. TYLER CO.

**Roto-Scan time/weather service.** New design gives six weather gauge readouts plus time and announcement panel. Rotating camera stops



at each of eight positions. Extremely compact unit: 44" x 20" x 21 1/2". Unique rotating device eliminates duplication of viewing, maintains uniform viewing sequence. Choice of TV camera, accommodates any make. Also, operator has choice of number and type of weather instruments.

**Weather-Scan time/weather package.** Uses series 600-W Texas Electronic instruments.



Clock, temperature, barometric pressure, rain gauge, wind direction and wind velocity.



# TELEMATION

where local program origination begins

## Live CABLECASTING EQUIPMENT

Whether your plans call for a simple one-camera set-up or an elaborate full-color, multi-camera facility, TeleMation is your best equipment source. TeleMation engineers have had many years' experience designing studio facilities for TV stations, educational broadcasters, and CATV systems. As both a major distributor (over 150 lines of TV broadcast equipment) and a manufacturer, we are able to buy what we don't manufacture and manufacture what we can't buy. We tailor each package to the purchaser's individual requirements.

Illustrated here is our basic local origination package integrated into a system where a Model '97' WEATHER CHANNEL™ doubles as a film and slide source with smooth, roll-free switching accomplished with TeleMation's revolutionary new CABLECASTER™ Video Control Center. Also pictured is the Ampex Model VR-6000 video recorder which, with its TeleMation-designed accessories, gives you an invaluable tool for studio or field production and for future televising of program material from other sources.

(1) Live camera — The General Electric camera with TeleMation-integrated circuit synchronizing generator is the most popular live camera in CATV use today. Used in the new CABLECASTER™ system, it provides broadcast quality at economy prices.

(2) Zoom lens with 10:1 focal length range for professional production in studio or field.

(3) Snap-on solid state viewfinder — Order your camera factory-equipped or mount it on your present G.E. camera.

(4) TeleMation's new WEATHER CHANNEL™ '97' comes equipped for local or remote control to permit use of its slide projector (5) with live programs. Available accessories include professional 16 mm film projector (6) and CABLE-CASTER™ modification for smooth control of picture sources. The '97', with its exclusive pan and tilt feature, is also ideal as a supplementary live pickup source.

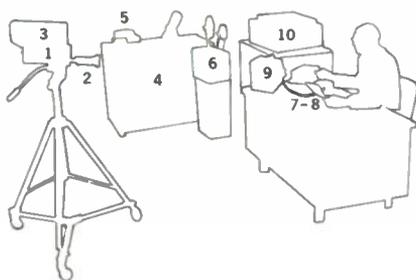
(7) TeleMation's new CABLECASTER™ Video Control Center\* promises to be one of CATV's most significant developments. The CABLE-CASTER™ will permit switching control and video processing of up to six video sources. An audio mixer (8) permits independent selection of audio source with provision for level adjustment.

(9) Solid-state monitors operating from direct video permit at-the-source previewing. Highly portable, they are ideal for double-duty in the field.

(10) Video recorder. TeleMation-supplied AMPEX video recorders are already in use by CATV systems throughout the country. Expected to become the standard of the industry, this recorder permits CATV systems to enjoy the savings and convenience of video recording for local production, while the guaranteed tape interchangeability feature permits use of tapes from other sources to fill in program schedules created by non-duplication.

Special portable quartz-iodine lighting systems complete the TeleMation local origination package — provide that extra touch of professionalism needed for quality CATV productions.

\*Available early spring, 1967



**T M INC.**

2275 South West Temple  
Salt Lake City, Utah 84115  
Telephone (801) 486-7564



# SKL

## PLUG-IN LINE-SPLITTERS

(Humidity indicator optional.) Supplied with or without camera. Offered with Packard-Bell, G.E., Motorola or Sylvania camera. Heavy-duty motor and drive unit. Three blank panels for local announcements. Automatic slide projector optional.

**Weather-Scan II time/weather package.** Economy package permits choice of instrumentation to fit system operator's exact requirements. Any combination of Texas Electronics instruments may be custom-specified; Choice of clock, temperature, barometric pressure rain gauge, wind direction, and wind velocity. Message panels available if less than six instruments specified. Complete with AFCO camera; GE TE-20 camera optional. May be ordered with 88-slide carousel message programmer, for maximum message capacity. Write for prices.

### VIKING INDUSTRIES, INC.

**Weatherama** provides 24 hour time and weather service. Unit has ten stations which are circularly positioned. By means of a TV camera, these stations are viewed and indexed for a period of 4.8 seconds each with a refocusing



time of 1.2 seconds for the next station or gauge, providing one minute cycles between views of any one station.

**News-A-Rama** news service provides 24 hour continuous news from the wires of United Press International. Locally produced news may

## James K. Coleman

### CATV BROKER

Specializing in cable television systems in Southeastern U. S.

### COLEMAN INSURANCE AGENCY

414 - 22nd Ave.—Tuscaloosa, Alabama  
(205) 758-4486

be carried on the News-A-Rama channel by using the same UPI printer machine. UPI service includes 20 minutes per hour of local and



regional news copy. One minute headline news capsules are provided every hour. Contact Viking for complete information.

## VIDEO TAPE RECORDERS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

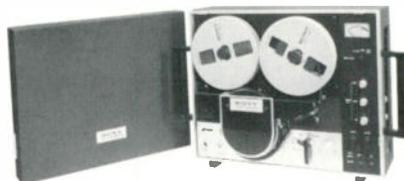
### AMPEX CORPORATION

**VR-660B** heavy-duty, portable, 2" helical-scan video recorder designed for broadcast-quality television recording/reproduction with electronic editing. Broadcast quality (meets FCC standards); includes Electronic Editor for splice free editing of program material; Stop-motion and Slow-motion; two audio channels (one for program, one for cueing/editing); exclusive 5 hours (up to) playing time; absolute tape interchangeability with all other Ampex 2" helical-scan recorders. Price \$8,000.

**VR-1100E** Mobile version of standard Ampex Monochrome Broadcast Studio Videotape Recorder. The VR-1100E is a compact version with a table-top deck and no monitor bridge. It is a record/reproduce machine and is completely compatible with all other quadrex-type recorders. The VR-1100E offers users the opportunity to install a quadrex recorder-reproducer in a studio, with improved mobility a result; or in the smallest van available with a reduction in initial cost and maintenance in terms of the vehicle concerned. Price \$28,900.

### SONY

**EV-200** Videocorder video tape recorder, a rugged portable unit used to permanently record on tape any broadcast or closed circuit television



transmission or closed circuit origination, for immediate or later playback. Roto-Coil (no slip rings and brushes) Variable speed slow motion forward direction, still picture, two audio channels. Additional options available: Rack Mount, Console. Price \$4,200.00

**PV-120U** Videocorder: video tape recorder, a rugged portable unit used to permanently record on tape any broadcast or closed circuit television transmission or closed circuit origination, for immediate or later playback. Roto-Coil (no slip rings and brushes) Variable speed slow motion forward and reverse, still picture, two audio channels, remote control provision. Additional options available: Control of radio frequency, rack mount, and signal stabilizer (to meet FCC direct transmission specifications). Price \$8,950.00.

### TELEMATION, INC.

**VR-6000/VR-7000** Videotape Recorders: Low-cost quality recorders applicable for all program origination applications. Utilizes helical scan recording principle, with slow-moving tape and rotating heads. A stop motion feature permits



examination of a single frame when desired. Superior audio and video quality, sixty-minute playback/recording time, and guaranteed tape interchangeability by Ampex between all present and future 1" machines including color and EIA spec versions. When used with Telemation-furnished accessories, these machines are fully compatible with the new Cablecaster Video Control Center and with Telemation's local origination package. Price, VR-6000 \$1,450.00; VR-7000 \$3,150.00.

## CAMERAS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### AMECO, INC.

**SM-800, SM-VRF400, BT-TTVC-1-1, GE-TE-20, MC:** SM-800 is Sylvania Model 800 camera for "Weather Scan" SM-VRF-400 is Sylvania Model VRF400 for "Weather-Scan"; BT-TTVC-1-1 is Blonder-Tongue camera for "Weather-Scan"; GE-TE-20 is General Electric "Weather-Scan" camera and MC is Motorola Model MC camera.

### BLONDER-TONGUE

**Vidicon camera, Model TC-1.** Completely self-contained camera. Camera adjusts automatically to meet changing light condition. Lens opening and focus are the only controls that the operator normally adjusts. Net: \$855.00.

**Automatic transistorized camera, Model TTVC-1-1.** Self-contained, rugged, portable (15 lbs.), this camera transmits high definition (650 line resolution, 2 to 1 interlace) pictures. Has built-in automatic light compensator that adjusts for continuously changing light over a 4000 to 1 range. Net: \$1,950.00.

**Viewfinder camera, Model EV-1-1.** Compact, portable camera/viewfinder combination. Can be mounted on heavy-duty tripod and friction head. Camera is built together with an 8" electronic viewfinder. HT-10 turret for up to 4 C-Mount lens. 1" F/1.9 lens supplied. Provision for op-

# SKL

## CASCADABILITY

tional intercom and remote control. Net: \$3,440.  
**Model EV-1-SNR.** Same as EV-1 but accepts studio net pulses and is remote controlled. Net: \$4,160.00.

### COHU ELECTRONICS

**2000 Series cameras.** Miniaturized TV cameras designed for televising from fixed or moving camera positions. 3" outside diameter with 4:1 zoom; solid state circuits; 10 mc bandwidth; vidicon protective circuit.

**3000 series COHU TV cameras.** Rugged, solid state circuitry. Meets EIA and FCC specifications.

**3200 Series.** Self-contained, high resolution with bandwidths of 10 to 20 MHz 525-945 line scan-



ning. Solid state plug-in circuitry; automatic light level compensation. Adjustable white peak clipper. Permits manual or automatic remote control. Prices start at \$2,295.00.

### DAGE-BELL CORP.

**520 Broadcast Camera Chain.** 800 line resolution camera and control console with related audio and switching modules and cross-pulse master monitor for program control. System is designed for professional and educational usage with functional design and integrated features for optimum performance. Camera and control priced under \$5,000.00.

**RGS-11 Industrial Camera.** 800 line lightweight transistorized camera available in choice of self-contained 2 to 1 interlace or EIA sync driven version. Options include heavy duty housing and choice of zoom lens kits. Camera priced under \$2,000.00.

### FAIRCHILD CAMERA AND INSTRUMENT CORP.

Complete line of television camera equipment designed for professional studio applications and closed circuit use.

**TC175.** Self-contained, transistorized, low cost camera with 700 lines horizontal. Resolution and industrial sync.

**TC550.** High resolution, transistorized, self-contained with available remote control functions. EIA or industrial sync available.

**TC5950.** Ultra high resolution, transistorized, small camera head and control unit with EIA sync.

### PACKARD-BELL CO.

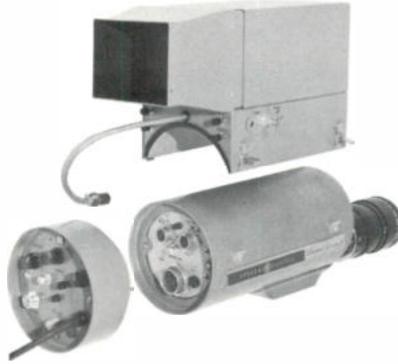
**Model 920.** Self-contained transistorized TV camera featuring all plug-in transistors, 12 mc bandwidth, 650 lines horizontal resolution, video output, automatic light compensation. \$779.00. Also available with positive 2:1 interlace, \$994.00. Complete with vidicon and lens.

CATV Equipment & Services

**9200 Viewfinder Camera:** transistorized viewfinder camera 8" kinescope. 650 lines horizontal resolution, built in pan and tilt mechanism, built-in 20-100 MM motorized zoom. Price \$3,500.00.

### TELEMATION, INC.

**G.E. TE-22 Remote Vidicon Camera:** Factory modified to accept EIA sync and drive from Telemation's TMV-101 Camera Control Unit. Solid-state camera is also compatible with standard camera accessories. Since it can be converted to local control by attaching TCA-1 Local Control Adapter, the TE-22 is economically suited to a one-camera system. An accessory TSG-1 Sync Generator fits inside the camera to provide positive 2:1 interlace.



**TCA-1 Local Control Adapter.** Adapts the G.E. TE-22 remote back camera to local control, eliminating the need to transport a separate camera control unit for "on location" pick-up, and expanding single-camera economy to serve dual functions. Equipped with a video output connector for attachment of a viewfinder, mechanical focus control, and electrical controls including target, focus, and beam. Five and one-half inches in diameter, 2 3/4" long.

### TV CABLE SUPPLY CO.

**Norelco Camera:** A complete listing on all Norelco cameras and featuring the Schoolmaster "100" Educational/Training System.

## VIDEO AMPLIFIERS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### COHU ELECTRONICS INC.

**9800-151 video distribution amplifier.** Solid-state unit amplifies and distributes 1 video input to 4 outputs. Input may be monochrome/color—composite or non-composite with optional sync adding. Unit plugs into rack mountable frame which can accommodate up to 10 units, and has provision for input loop-through.

**9800-161 pulse distribution amplifier.** Solid-state unit; regenerative pulse-amplifier processes and distributes one sync input to four outputs. Input may be horizontal or vertical drive, blanking or sync pulses.

### DYNAIR ELECTRONICS INC.

Self-contained video amplifiers. Complete units with self-contained power supplies, all solid-state.

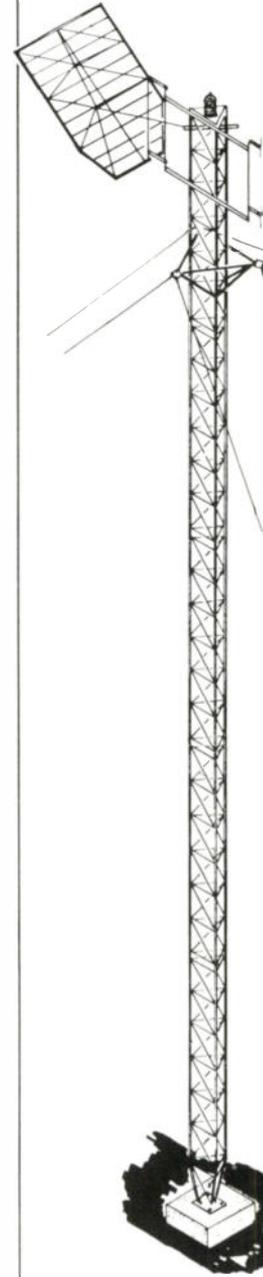
**Model DA-30C.** One looping input, four outputs, 8 db gain, price \$340.00.

**Model DA-60C.** Two channel with one looping input, four outputs per channel, 8 db gain, price \$450.00.

# TCA TOWERS

For Every Purpose Including

- CATV
- MICROWAVE
- TV TRANSMISSION
- RADIO



For more than 22 years, TCA Tower Co., has planned, engineered and built towers for every purpose to serve the fast growing field of communications. Confidence in this "know-how" and ability is evident from the 100 plus installations each year . . . and never a structural failure in TCA Tower history!! That's because TCA Towers are built with quality materials to serve and last . . . built to sustain EIA requirements for Zone A. Every step of the manufacturing operation is carefully supervised. Every facet of the specification is carefully checked . . . all for the purpose of supplying QUALITY TOWERS for years and years of trouble free service. TCA Towers are made of structural U.S. made steel tubing of uniform thickness . . . no seams.

Every TCA Tower is a carefully "engineered" tower and built to exacting specifications. TCA engineers are available to help you. Write, phone or wire today for full information including a helpful well illustrated free brochure.

## TCA TOWER CO. INC.

4325 Bankhead Highway  
MABLETON, GEORGIA, 30059  
Phone (404) 948-3369

# SKL

## SERIES 7260 MULTIVIDERS

Series 1000 modular video amplifiers. Modules include:

FR-1000A Frame: \$150.00.

PS-1006A Power supply: \$150.00.



DA-1060C Video distribution amplifier: \$175.00.

CL-1050B Video clamper. \$350.00.

CL-1056A Video Clamper, 28 db gain: \$350.00.

AGC-3A AGC amplifier, delivers constant 1VPP output with input of 0.25 to 4.0 VPP. Completely self-contained, with own power supply. Operates with broadcast or industrial composite or non-composite video signals. Price \$850.00.

## MONITORS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### AMECO, INC.

4-203UW, 4-20UW Sony 4" transistorized TV monitors are available from Ameco. Model 204 includes portable battery pack.

5-307UW: Ameco distributes the Sony 5" micro TV receiver for monitoring or field engineering purposes. Accessories available include leatherette carrying case, and battery pack.

9-51UW: Ameco carries Sony 9" transistor TV for head-end monitoring, trouble-shooting, etc.

### COHU ELECTRONICS

Monitors feature precision deflection systems and video response up to 10 mc. Accepts composite video-sync signals; operates from video line with a separate sync line furnishing either industrial of EIA pulses. Locked interlace circuit. Available in picture tube sizes from 14 to 27 inches. Model GRM-14, -14R, 17-17R, -21, designed to exceed standards of 700 lines H, 350 lines V resolution.

### CONRAC DIVISION

CZB series. 8, 14 and 17-inch monitors for pro-

fessional signal analysis. Units are tube and transistor type. For mounting in 19" rack; dual matched inputs provided. 8" \$720 14" \$745; 17" \$745.00.

CN88 series 8" monitors in either cabinet or two-unit relay rack. Provides flat (to 10 mc) video response; 700 lines. \$595.00 per pair. CBY17/RS. Rack mounted color monitor. Professional type; uses both tube and solid state circuitry. Incorporates a precision decoder. Available in cabinet model. \$2,450.00.

RNC9 9" solid state monitor provides portable, light weight and low power features. Video response flat to 10 MHz with 700 lines resolution. Rack mount in either single or twin cabinet occupies only 8 3/4". Price \$845.00 per pair.

RKB14-RLB14 14" solid state monitors of same basic design. RKB14 is portable cabinet unit.



RLB14 is rack mounted. Price \$465.00 and \$455.00 respectively.

### DAGE-BELL CORP.

Listing of monitors available on request.

### FAIRCHILD CAMERA AND INSTRUMENT CORP.

Complete line of industrial and professional monitors of all sizes.

## VIDEO ACCESSORIES

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### COHU ELECTRONICS

Lenses for closed circuit television cameras are standard with 16mm "C" mountings. Model AL-1A—12.5mm; 25mm; f/1.4 Model AL-4A—50mm; f/1.4. Model AL-5A—75mm; f/1.4. Model AL-7—101.6mm; f/4.5. Model AL-7A—101.6mm; f/2.7. Model AL-8A—152.4mm; f/2.8. Model AL-15—25.4mm; f/0.95.

COHU also has complete line of zoom lenses available.

2470 series miniaturized rackmounting sync generators and accessories. Prices start at \$945 for single generator.

### DAGE-BELL CORP.

Type FC-11 vidicon film chain. Unit features 4 input prism multiplexer. Has film camera and provisions for 35mm or 16mm projectors. Film camera is transistorized model.

Zoom lens kit, focal range 60-300mm—101393. Zoom lens kit, focal range 30 to 150mm—101392.

Type 1518 broadcast camera control. Control unit for series 520 vidicon camera; fully transistorized with self-contained regulated power supply. Slide rack mount.

### DYNAIR ELECTRONICS INC.

Passive video switchers. Economical units for switching 6 to 12 video input signals into single output. Available with plain or illuminated push buttons. Price \$110.00 to \$150.00 depending on configuration and number of channels.

### FAIRCHILD CAMERA AND INSTRUMENT CORP.

Complete complement of lenses for CCTV and studio equipment. Standard, wide angle, telephoto and 300m types available.

FR-2. EIA sync generator, micrologic construction measures 1 3/4 x 8 1/2 x 9 1/4. Rack or cabinet mounting. Dual unit with changeover switch available.

### FERRANTI ELECTRIC, INC.

Model Nos. 6, 7, 8 & Conveyor Belt Type Bulk Erasers. The Ferranti-Weircliffe Magnetic Tape Bulk Erasers Model Nos. 6, 7 and 8 are portable units used to degauss all recorded data, audio, pulses or any kind of signal, from DC to Video, from reels of magnetic tape to better than 80 db below saturation recording level. The portable models are semi-automatic units capable of erasure from 6 to 15 seconds. The Conveyor-Type units are available capable of handling up to 4560 reels per hour.

### MINNESOTA MINING AND MANUFACTURING CO.

Manufactures complement of video tapes for broadcast, general and special purposes.

Video tape, 377. Designed for use on video recorders for closed-circuit, industrial and educational applications. Longitudinally orientated. This provides optimum output for the long sweep of record and playback heads on this equipment. It otherwise possesses the same qualities of dependability and consistency found in 379 tape. Price dependent upon needs.

Manufacturers a full line of broadcast and closed circuit video tapes and accessories.

Video Tape No. 399 'Color Tape Plus' the ultimate for High Band Quadruplex color video recording. No. 379 for nearly 10 years the standard of the industry for television recording and broadcasting. No. 350 and No. 351 Helical Scan Video Tape designed to meet each individual equipment recorders requirements.

### PACKARD-BELL ELECTRONICS

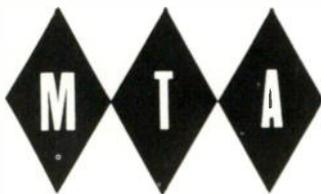
Model MPS-15. Transistorized CCTV modulator for conversion of video to RF on TV channels 2-6, crystal controlled; microphone input allows adding of sound on TV channel. Specify channel 2-6. \$125.00.

### TELEMATION, INC.

Basic Local Origination Equipment Package: Telemation has devised a Local Origination Package, specifically tailored to the needs of CATV operators. Telemation's local origination equipment enables CATV operators to cover local events—live and taped, in a studio or "on location." In addition, the basic package will adapt to any future expansion of facilities and can be modified to conform fully with EIA and FCC broadcast requirements. Price: Basic Package: \$3,795. Basic Package Including VTR and Lighting: \$6,120.80.



Basic Local Origination Package Components: TE-20 G.E. Transistor TV Camera; TSG-1 Telemation 2:1 interlace sync generator, installed;



MALARKEY, TAYLOR & ASSOCIATES

CATV  
Brokers/Consultants/Engineers

1101 - 17th Street, N.W. • Washington, D.C.  
Phone: Area Code 202 • 223-2345



# TELEMATION

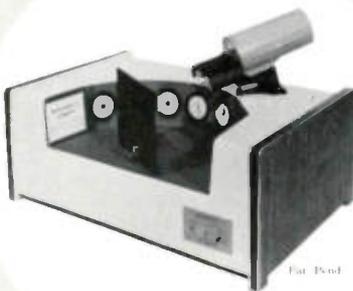
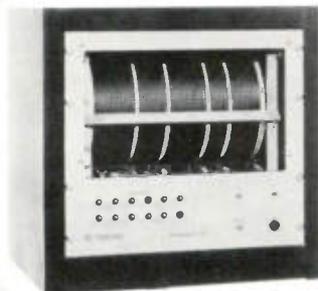
where local program origination begins

## Automated CABLECASTING EQUIPMENT

### NON-DUPLICATION SWITCHER

Newly developed to provide increased capacity with simplified programming — exclusive elapsed-time programming (every switcher event can be used regardless of time) makes this compact programmer equivalent to a 96" x 96" pinboard. Twelve channel capacity and one minute resolution to handle the most difficult schedules.

If you don't know switchers know your supplier — Tele-Mation has manufactured more non-duplication switchers than all others combined!



Pat. Pend.

### WEATHER CHANNEL™ '75'

New low-cost companion to the '97'. Designed for smaller systems needing a less expensive unit but at no sacrifice in quality — same shadowless Texas Electronics' instruments — same G.E. camera — same decorator styling — same pan and tilt feature. New low cost

**\$3995.00** complete



Pat. Pend.

### NEWS/CHANNEL™

by TeleMation/AP

The TeleMation/AP NEWS CHANNEL™ is YEARS AHEAD with smooth, readable presentation of top stories from the AP news wire; "Electronic Brain" controls operation to provide viewers with most interesting, most recent news. Field proven in scores of installations.



Pat. Pend.



## TELEMATION INC.

2275 South West Temple  
Salt Lake City, Utah 84115  
Telephone (801) 486-7564

### WEATHER CHANNEL™ '97'

Beautifully styled successor to the famous TMW-2B — All new with these all new and exclusive features:

- No meter shadows
- Pan and tilt for live local origination
- Built-in slide programmer
- Adjustable L & R dwell
- Binary sync generator
- Long scale (250°) Texas Electronics' dials

Greater value for less money.

**\$5495.00** complete

# SKL

## SERIES 7160 LINE SPLITTERS

RE-575 5" viewfinder, installed; Angenieux 10:1 zoom lens; Samson tripod, dolly, and pan head; Ampex 9" transistor monitor; S-58 Lavalier Microphone; Bogen preamplifier with VU meter and 2 microphone inputs and input adapter; camera cable with connector; monitor cable with connectors.

**Basic Package W/VTR and Lighting:** Ampex VR-6000 Videotape Recorder; 1-year service contract; 2 video recording tapes; complete quartz-iodine lighting kit; stands, cables, carrying kit; desk stand for S-58 microphone.

**General Electric TE-20 Television Camera:** Transistorized vidicon camera, compatible with most standard camera accessories. Horizontal resolution, 650 lines. Random interlace, but camera may be fitted with TeleMation 2:1 interlace sync generator. Rugged, heavy duty aluminum H-frame for modular circuit boards and vidicon pickup tube assembly.

**TSG-1 Sync Generator:** Six-inch long circuit board which fits all G.E. TE-20 and TE-22 cameras to provide positive 2:1 interlace sync/drive signals, eliminating moire patterns, increasing picture stability, improving vertical picture resolution, and making the TV camera more compatible with home TV receivers. Can be used to drive a multiple camera system. Price: \$350.00.

**AMPEX VR-6000 Videotape Recorder:** Low-cost quality recorder, applicable for all program origination applications. Utilizes helical scan recording principle, with slow-moving tape and fast-moving head. A stop motion feature permits examination of a single frame when desired. Superior audio and video quality, sixty-minute playback/recording time, and guaranteed tape interchangeability between VR-6000 and VR-7000 recorders. Price \$1,450.00.

**TMC-214 portable broadcast camera chain.** Reliable, low cost studio, film or portable camera chain, ideal for use in conjunction with video recorders. Comprised of GE camera head, RE-575 viewfinder and TMV-101 camera control.

**RE-575 viewfinder.** Specifically manufactured to mount on GE TE-20 and TE-22 television cameras, extremely reliable solid state construction, 5" screen, 450 line picture resolution, converts GE camera for professional studio operation.

**TMV-101 Camera Control Unit** Adapts factory-modified G.E. TE-22 cameras to provide compliance with EIA and FCC specs. 100% solid-state with optional video level meter. Used with a TeleMation-modified General Electric TE-22 or TE-14 camera, the unit converts Weather Channel, News Channel, or live pick-up cameras to full broadcast (EIA) standards. @ \$995.

**Cablecaster Video Control Center** for CATV Local Origination systems which permits broadcast-like multiple camera switching with smooth, roll-free performance. The Cablecaster has inputs for a minimum of five video sources, such as live cameras, Weather Channel, News Channel, VTR's, and TV tuners. The three video outputs provide processed 2:1 sync and controlled video and sync levels.

**TMV-501 Processing Amplifier:** To insure quality playbacks of video tapes, the Proc-Amp completely reshapes sync pulses, clips both modulation products and switching transients. Reduces instability in home TV receiver caused by drop-outs, mistracking and slow or stop motion. Can be connected for both video tape recording and playback. Available in three versions: Direct VR-660 retrofit, and self-powered—with and without a 19" rack panel. All models are 100% solid-state. Price \$595.00.

**TSG-2000 Broadcast Sync Generator:** Full EIA and FCC specs. The design represents a radical departure, being all digital, with all waveform transitions — both leading and trailing edges — derived from clock pulses. Rise times are typically 10 n sec. or better. Color versions available with crystal and/or Genlock operating modes.

**TMM-203A Optical Multiplexer:** Allows CATV operators to switch up to two 16mm film projectors and one slide projector into a single

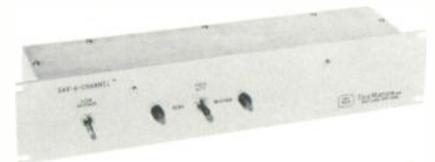
vidicon camera through the use of motor-operated, front-surface mirrors. May be controlled either locally or with an optional remote control panel. The control panel selects the optical source, controls lamp intensity, and sequences slides. A pedestal frame supports a slide projector at one end of the pedestal table, a television camera at the other, and a two-mirror optical transfer assembly in the



middle. On each side of the pedestal assembly, a 16mm film projector is aligned with the mirror assembly, which directs one of the three projectors into the camera. Lamp intensity controls on each projector may be adjusted to accommodate whatever light intensity level is necessary. Price \$995.00.

**Chroma-Channel** Provides weather forecast information and storm warnings by adding bands of color to normal black and white video sources. Specifically designed to operate with TeleMation's Weather Channel and News Channel systems. Generates three bands of color, each controlled by a three-position switch, to program general weather information, temperature forecasts, and wind conditions. Severe storm warnings are forecast by means of two additional switches which cause the upper and lower bands to flash off and on between color and monochrome. Price \$1,495.00.

**Sav-A-Channel** Automatically combines the signals from the Weather Channel and News Channel to produce a single video output. Manual override switches are provided to permit selec-



tion of either Weather Channel or News Channel at any time. The unit is designed for rack mounting and can be mounted in space provided in the News Channel or Weather Channel or in separate 19" equipment rack. Price \$3,950.00.

### TEXAS ELECTRONICS, INC.

Manufacturers of weather board instruments for time/weather service equipment.

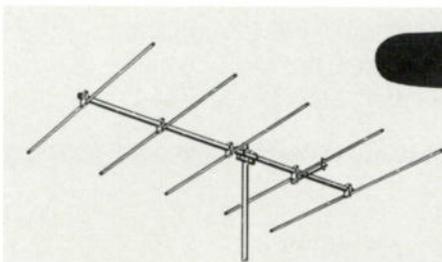
### VIDEO COMPONENTS INC.

**SM-101A** Camera mount that allows pan and tilt via single handle control. Medium duty up to 40 lbs. Complete line of close up lenses for Canon Zoom lenses.

**VET 5040.** Complete set of extension tubes for vidicon cameras. Available in 5, 10, 20 and 40 mm.

### VITRO ELECTRONICS

Manufacturers of jack panels (12 to 52 jacks), and patch cords.



Elements and booms are .058 wall seamless, hard drawn aluminum tubing with end caps. Element to boom supports are one piece, machined from solid aluminum bar stock. The bracket center hole completely encircles the boom, with stainless steel fasteners ensuring a positive mechanical and electrical bond. There are no holes in either the booms or elements. Boom to mast support is aluminum plate with heavy u-bolts to take any mast up to 2" outside diameter. Internal fibre vibration dampers are sealed into all elements exceeding 4'-0" in length. "Reddi Match" is an improved design gamma matching system which provides direct ohm coaxial feed with no external matching baluns or networks. Proline is available with all type connectors.

## PROLINE CATV ANTENNAS

A complete line of performance-proven single channel yagi antennas. Prolines are available in five and ten element models for the VHF/UHF television channels and the FM bands.

### PERFORMANCE

|                              | 5<br>Element   | 10<br>Element            |
|------------------------------|--|--------------------------|
| Forward Gain                 | 9.5 db   | 12.5 db                  |
| F/B Ratio                    | 23 db  | 27 db                    |
| Beamwidth<br>at 1/2 Pwr. Pt. | 48°  | 38°                      |
| VSWR                         | 1 to 1 at frequency,<br>less than 2 to 1 at<br>band edges. | 2 to 1 at<br>band edges. |
| Bandwidth                    | 6 Mc.  | 6 Mc                     |

### PROLINE AVERAGE NET PRICES\*

|                                |          |                                |         |
|--------------------------------|----------|--------------------------------|---------|
| PL-CATV Lo channels 5 element  | \$70.00  | PL-CATV Hi channels 10 element | \$80.00 |
| PL-CATV Lo channels 10 element | \$135.00 | PL-All channel 7 element       | \$46.50 |
| PL-CATV Hi channels 5 element  | \$50.00  | PL-FM5 FM Band 5 element       | \$64.50 |

\*For complete price schedule see latest net price lists.

# CUSHCRAFT

621 HAYWARD ST.  
MANCHESTER, N. H.

# TYLER TIME/WEATHER BONANZA FOR 67!

Now the most complete line of time/weather systems in CATV offers a unit to fit every system need! R. H. Tyler Weather-Scan, Weather-Scan II and Roto-Scan units are designed to give you a real choice . . . with varied features to meet individual requirements. Check these popular units . . . see which one fits your system's needs.

**1. WEATHER-SCAN** Widely popular CATV time/weather system. Features famous Texas Electronics instruments plus the high-performance General Electric TE-20 camera. Includes 6 time/weather instruments, 3 large message panels. Camera is easily adapted for local origination programming. 80-slide carousel message programmer optional. Weather-Scan gives you top performance in any size system.

**2. WEATHER-SCAN II** All-new time/weather economy package. May be custom-ordered with up to six Texas Electronics instruments. High performance AFCO camera; General Electric TE-20 camera optional. Camera easily adjusted for local origination. Custom-select the features that will give your system maximum service . . . at the price best suited for you. Weather-Scan II - great new CATV economy package!

**3. ROTO-SCAN** Unique design for special requirements. Camera rotates, scanning circular instrument panel once per cycle. Compact size - 44" x 20" x 20" - makes Roto-Scan easy to install and move. All-around louvered paneling keeps out dust and light for better scanning. Same quality instruments; several camera options. Roto-Scan - the unique time/weather system.

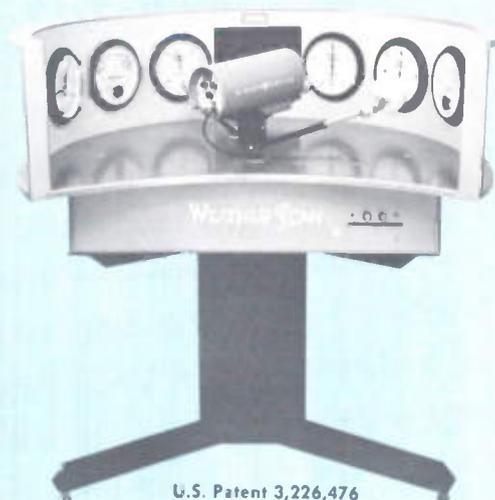
Which one of these precision-manufactured units fits your system? Enjoy highest quality from the pioneer manufacturer of time/weather systems for CATV . . . get flawless performance from an R. H. Tyler unit!

CONTACT YOUR DISTRIBUTOR TODAY - OR WRITE OR CALL

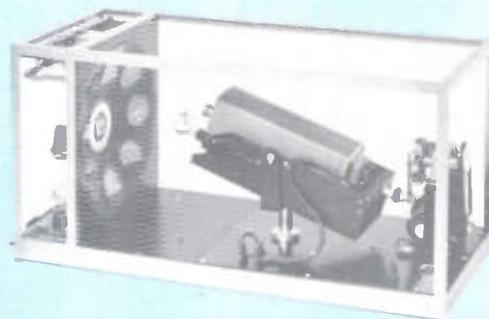
## R. H. TYLER CO.

1405-15TH STREET • WELLINGTON, TEXAS • (806) 447-5841

ORIGINATOR OF TIME/WEATHER EQUIPMENT FOR CATV



U.S. Patent 3,226,476



**CABLE  
TELEVISION  
REVIEW**

The Weekly News Service of  
TV's Communications Magazine

NOVEMBER 14, 1966

**NEW YORK CITY HAS NON-FRANCHISED CATV**

From News Offering "Telephone Cables TV" Via Bell Leaseback

Monty Roper, president of Com-Tel, Inc., a subsidiary of Bell Telephone Inc., a New York City CATV firm, told the Review last week that his firm is currently operating a "pilot run" cable television system serving its service blocks of Manhattan. The area served, Central Park South, stretches from 53rd to 59th Streets and from 5th to Broadway. Roper reported that the cable television service is being provided in Manhattan under an exclusive leaseback arrangement with New York Telephone Co., a wholly owned AT&T subsidiary. Empire City Subway Co. Ltd. owns the conduit and handles the AT&T underwritten communications in New York City. It is these conduits which are being used to string the cable through which the television signals will be relayed to Com-Tel. Roper stated that, as in most leaseback CATV operations, Com-Tel owns the head-end and terminal distribution facilities and New York Telephone owns the underground lines. He went on to point out that arrangements begun with the AT&T affiliate early this year, but the system has been merged for only a short while now.

It is well known that Empire City Subway Co. vigorously opposed the Board of Estimates' decision to allow the franchised CATV operators—Marketing Information Services, TeleFrontier and CATV Enterprises—access to its conduits. This confrontation occurred in late January. Subsequent to that, the AT&T subsidiary attempted to obtain a revision of the rules and regulations governing access to the conduits. The proposed revisions would, in the opinion of many, have established AT&T as the arbiter over who would be allowed in the ducts. The three franchise holders in New York City opposed Empire City Subway's revision recommendations, and they were not accepted.

Com-Tel in recent weeks has mailed letters to building owners and tenants in its pilot area. The subscription form which accompanied the letters is interesting for two reasons. First, the form refers to the service being rendered by Com-Tel and New York Telephone as "Telephone Cable TV." The price structure referred to in the subscription form also merits attention. The cost is described as "the least than any independent underground cable system." Specifically, Com-Tel proposes to charge \$2.50 per month plus \$15.00 installation charge. The company

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Published by Communications Publishing Corp., 207 N.E. 10th, Oklahoma City, Oklahoma

*"I'm too busy to spend a lot of time gathering industry news. Cable Television Review solves my problem. Solid CATV news. And it's the important news."*

**Cable Television Review  
is for busy men.  
Read it every Monday.**

# CATV TEST EQUIPMENT

The following section includes product listings for test equipment and accessories with application to CATV system installation and operation. Listings marked with an asterisk (\*) indicate that new information was not supplied by the manufacturer for that listing. For mailing addresses and other information concerning the firms listed in this section, see the "Manufacturers and Suppliers" section located in the front of this Directory.

## TEST EQUIPMENT

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### AMECO

**Precision switch type attenuator, Model AA-2.** Used in level measurements. Frequency range, 12-250 mc. VSWR 1.2:1. 75 ohm impedance. "F" or "UHF" type connectors. For bench use. 62 db attenuation in seven steps. Price \$39.95.

**Alignment & VSWR detector, Model ADD-1.** Function: voltage doubling, has built-in markers for 50 mc and 220 mc. Direct chassis mount or for inline sweep. 10 to 300 mc frequency range.

**MT-1 Marker T,** designed to prevent excessive marker loading when used at the input of a device. May be used for Marker addition in alignment of any CATV equipment. Available in UHF or AM connectors, with choice of any connector at the marker junction. Specify connectors.

**T-412-CH-AM test adapter** fits .412-CH-75 connector only. Used for testing amps and splitter, etc. Use with any AM series male connector. T-500-CH-AM: Same as T-412-CH-AM except for .500 connectors.

**T-750-CH-AM test adapter,** same as the T-412-CH except that it fits 8-CH-75 connector. Prices on request from Ameco.

**5-307UW:** Ameco distributes the Sony "5" micro TV receiver for monitoring or field engineering purposes. Accessories available include leatherette carrying case, and battery pack. Portable.

### ANACONDA ASTRODATA CO.

**Model 990 Electronic System Analyzer (CATV):** All solid state, 75 ohm portable, sweep frequency test instrument for gain, attenuation and return loss measurements. All measurements are made simultaneously, using sweep comparison techniques, and are displayed on a large screen scope. Up-to eight crystal controlled markers, can be plugged in. No jumper wires. Complete unit housed in 15½" x 17" x 16¾" case. Electronically controlled variable sweep rate. Built-in variable impedance precision RF bridge and attenuators.

**Model 912 Signal Level Meter:** RF voltmeter to measure signals in a CATV system. Detent tuning, built-in Automatic Frequency Control by phase-lock system. Locks in frequency variation of plus or minus 500 KHz. Plug-in RF probe. When AGC lock on, signal bandwidth becomes narrow (10 KHz) True peak reading. Has rechargeable nickel-cadmium batteries. May be carried with shoulder strap. Taut band meter movement.

**Model 916 CATV Level Standard:** XTAL oscillators for every TV picture frequency, fully amplitude controlled and stabilized. All solid

state. Output level +60dbmv plus or minus 0.25 db. Frequency stability 0.01%. Spurious output more than 50 db down. Power 117 VAC. Internal factory preset level controls. Individual on-off switches and output connectors.

**Scope Calibrator, Model 908:** The Scope Calibrator is used in the precision sweep frequency alignment of CATV and related equipment operating over a frequency range from 50 to 220mc. The Scope Calibrator, Model 908, provides oscilloscope traces at +1, 0 and -1 db and allows elimination of some of the errors inherent in sweep alignment set-ups.

### BENCO

**Field strength meter, Model FSP-3B.** All transistor unit with rechargeable batteries and charger.

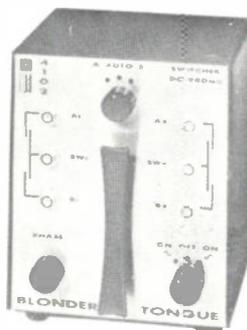


Has 5 section built-in attenuator. Includes MT-FS matching transformer for use with 300 ohm balanced transmission line. Frequency range is 52 to 220 mc in one range.

### BLONDER-TONGUE

**75/300 ohm balun, Model 4105.** "Lab-Line" series features toroidal circuitry and frequency range of 10-216 mc. 1.14 is maximum VSWR. Comes with 75 ohm coax push-on connector, POB-59. CATV: \$30.00.

**High speed solid-state switcher, Model 4102.** Can be used to compare any two signals from 0 to



900 mc. Switch rate: 30 cps. VSWR: 1.08 max. 0-216 mc; 1.15 max. 216 to 90 mc. isolation: 0 to 216 mc—40 db min.; 216 to 900 mc—27 db minimum. CATV: \$250.00.

**Test amplifier, Model 1232.** Flat response, neutralized triode input for excellent noise fig-

ure and wide band stability. Automatic individual tube bias control compensated to equalize variations between tubes. 75 ohm impedance with 25 db minimum voltage gain. Features manual gain control. CATV: \$150.00.

**Model 4122 U/V sweep generator** solid-state unit has two switch selected, electronically swept ranges: the entire UHF TV spectrum in one range and the entire VHF TV spectrum including sub-channels in another range. Sweep widths are continuously variable from 5 mc to



the entire VHF or UHF range in one sweep. Automatic Level Control on both ranges assures constant output. The sweep oscillator is varactor tuned. The horizontal sweep rate of 60 cps is derived from the power line and is available as a sine wave at the front panel for connection to the oscilloscope. The RF output level is continuously adjustable over a 60 db range by using the output level attenuator in conjunction with the ALC control. All voltages are regulated for stable operation with fluctuating line conditions. \$595.00.

**4114 UHF Sweep Generator:** Similar to model 4122. Price: \$325.00.

**75 ohm detector, Model 4104.** Features voltage doubler circuit with frequency range of 10-900 mc, maximum VSWR 1.1 and impedance of 75 ohms. Sensitivity of approximately 0.1 vdc out for 100 mv input (CW); plus or minus 1 db over frequency range. Band pass is 3 db down at

## JERROLD

**FIRST IN CATV  
TEST EQUIPMENT  
Complete line of Test  
Equipment for CATV**

CATV Systems Division  
**JERROLD ELECTRONICS CORPORATION**  
401 Walnut St., Phila., Pa.

# SKL

## FIRST INTEGRATED CIRCUIT

100 kc with 100 mmf, total capacitance connected to output. CATV: \$40.00.

**Variable attenuator, Model 4121.** 0 to 62 db in 1 db steps. Type F connectors; 75 ohm input and output. CATV: \$40.00.

**Variable attenuator, Model SA-3.** 0 to 38 db. Steps of 6 db, 12 db, and 20 db. 75 ohm input and output. QD connectors. CATV: \$11.50.

**Model 4124 VHF return loss bridge** enables fast, accurate wide-band measurement of return loss. It is especially useful when the return loss is high where other methods of measurements become difficult and inaccurate. Frequency range: 30-216 mc; terminations: 75 ohm Model POB-75TP, matched pair supplied; connectors: Type BTF; price \$50.00.

**Variable attenuator, Model MAT.** 0 to 45 db in 3 db steps. 75 ohm input and output. UHF type connectors. CATV: \$17.50.

**FSM-2 UHF/VHF field strength meter** convertible from VHF to UHF with the flip of a switch, accurate yet light and portable for field work. Measures RF signals at 75 ohms impedance (VHF/UHF balun supplied for 300 ohm measure-



ments) in two ranges: VHF (52-216 mc) and UHF (470-890 mc). Sensitivity variable from 100 uv to 3 v full scale meter deflection. Reads both average and peak level. Fully solid-state circuitry. Battery or power line operation. Fully regulated power supply, no adjustments necessary. \$395.00.

**4132 Sub-Channel Converter:** for Field Strength Meter FSM-2; 5-54 MHz, battery powered. Price: \$175.00.

**4134:** Large handle for Field Strength Meter Model FSM-2. Price: \$20.00.

**4135:** Rain cover for Field Strength Meter Model FSM-2. Price: \$10.00.

**Model 4103 50-75 ohm transformer:** Wide band VHF (10-216 MHz) 50 to 75-ohm transformer for critical laboratory applications. Used to match test equipment with 50 ohms impedance to 75-ohm equipment.

**Model 4106 Lab-Line 75 ohm two-way hybrid splitter/mixer:** A VHF (10-216 MHz) 75 ohm two-way hybrid splitter/mixer. Useful for critical lab test set-ups where low VSWR and high isolation are needed.

**Delay Line Model 4107:** A precision 75-ohm coaxial delay line for use as a match cable for impedance measurements and other laboratory applications where a standard cable of superior quality is required. Designed primarily for use in conjunction with the Blonder-Tongue Model 4102 RF Switcher, the 4107 delay line provides an accurate impedance standard to make fast and accurate VSWR measurements over a very wide bandwidth. Designed to be one-half wave length at 5 MHz, the line allows convenient

measurement of bandwidth, sweep width and sweep linearity.

**Model 4111 Lab-Line Fixed Attenuators:** The Model 4111's are precision attenuator pads for 75 ohm applications. They are available in values of 1 db, 2 db, 3 db, 6 db, 10 db and 20 db attenuation.

**Model 4112 UHF Matching Transformer:** A precision-matched, low-loss, wide band, 470-900 MHz, 75 to 300 ohm transformer (balun). Matches balanced UHF signals at 300 ohms impedance, to unbalanced signals at 75 ohms impedance, or vice versa.

**Model 4113 50/75 ohm Matchpad:** A precision resistive, minimum loss, 50 to 75 ohm matchpad for the frequency range DC-900 MHz. This product is used to match other test equipment with 50 ohm impedance to 75 ohm equipment.

**Model 4123 High Output Detector:** The Model 4123 Detector is a VHF voltage multiplying detector which will operate over 20-216 MHz range. It features 10 db better sensitivity than the Model 4104 Detector. The extra sensitivity makes it possible to measure the VSWR of some devices without using an external amplifier as well as give useable output for input signals too small for observing with a Model 4104 Detector. It terminates the source in a 75-ohm impedance. The general Lab-Line appearance is incorporated in this detector.

**Model 4130 Coaxial switch, DPDT;** DC-900 MHz; manual rotary; isolation greater than 60 db; ganged 8PDT switch wafer for auxiliary circuits (dc-audio); 3" h x 3 1/2" w x 3 1/2" d. BTF type connectors. Price: \$55.00.

**4133 Marker Generator:** 6-220 MHz, 470-890 MHz crystal controlled and variable. Price: \$495.00.

### COHU ELECTRONICS INC.

**DBG-2 dot bar generator** generates H and V bars, crosshatch and dots, black or white, Adjustable for width, number and position, all scan patterns 525 to 1029 lines to match RETMA linearity chart. Usable with internal or external sync. Price \$450.00 F.O.B. San Diego.

### DYNAIR ELECTRONICS, INC.

**TS-100B Solid-State Sideband Analyzer:** Solid-state sideband analyzer for use in alignment



of CATV modulators. Tunable through all 12 VHF channels. Provides complete facilities for video modulation of unit under test plus analysis of RF output.

### DAVCO ELECTRONICS CORP.

Complete selection of test equipment for CATV installation and maintenance work. Field strength meters, sweep generators, oscilloscopes, volt-ohm-milliameters, tube testers, and line testers are available from stock. Sadelco, Simpson, Kay, Telonic, Delta, Entron, Mercury, and Triplett are among lines carried. Write for complete catalog and price information.

### ENTRON

**Line tester, Model LT-1.** Provides a simple means of isolating common trunk and distribution line troubles with a direct reading, portable meter. Battery operated. Tests for: line termination, line splitter termination, open line and shorted line. Price: \$35.00.

### HEWLETT PACKARD

Manufactures a complete line of oscilloscopes, analyzers, measuring instruments, cable testers, leak (corona) detectors. Short form catalog is available on request.

**140A/1415A Time Domain Reflectometer:** An

instrument for locating faults and impedance mismatches in coaxial cable. Can test polyethylene cable to 600 feet with 5% accuracy. Output jacks for x-y recorder. Price: \$1,050.00 plus \$575.00 for 140A main frame.

**Model 4901A Cable Fault Locator:** The 15-pound battery-operated instrument incorporates an ohmmeter. Locates the path and depth of buried or underground cable, and shorts, crosses, and grounds in buried, aerial or block cable. Price: \$695.00 complete with probes and comprehensive instructions.

**Model 191A Television Oscilloscope:** This is an oscilloscope for measuring the standard vertical interval test signals (VITS). It includes precision amplifiers and filters for precise measurement of test signal waveforms. A positive line-select circuit selects any line from number 16 through 21 for display, or displays the entire field or any part of it. New cathode-ray tube for bright display of a single horizontal line at the 30Hz frame rate. Price: \$1,295.00.

### HICKOK ELECTRICAL INSTRUMENT COMPANY

**Digital Measuring System Model DMS-3200:** System consists of a main frame Model DMS-3200 which will accept a number of "plug-in" units to measure a variety of electrical parameters. The main frame provides display of the reading; the plug-in determines the application. Price: \$495.00.

**Tube Testers Models 6000A, 752A, 539C:** Tube Testers for industrial CATV use. Price: \$260.00 to \$545.00.

**Transistor Tester Model 870:** Transistor Tester for making performance test on all types of transistors. Price: \$375.00.

### JACOBSEN ELECTRONICS

**Mini-All Meter. Pocket Field Strength meter:** Test equipment in pocket meter includes DC voltmeter, AC voltmeter, Ohmmeter, and VHF TV and FM levels, field strength meter, 100 to 5000 microvolts and can be used with external attenuator to read higher levels. Designed for use by CATV housedrop installers, for selecting the right taps, and trouble shooting. Steel case. Available with C or F type connectors. Operates on 9 volt transistor radio battery. Channels 2 thru 13, plus FM. Price: \$75.00.

### JERROLD ELECTRONICS CORP.

**MTP-20 2-way splitter.** Designed to match the trunk line in and out as well as the tap. Insertion loss: 2 db. Tap loss: 20 db. F-61 fittings. Bandwidth: 0 to 216 Mc. Price \$6.00.

**Models FA-1, 2, 3, 6, 10, or 20** fixed attenuators providing the amount of attenuation specified by the particular model number. Frequency range: 0 to 2000 mc. Price \$20.00 each.

**Model 727** deluxe solid-state field strength meter. Lightweight and portable, it uses a nickel-cadmium battery capable of 10 hours



continuous use between recharges. Can also be powered from AC outlet or from external 12-V, 50-ma battery. Frequency range: 5 to 220 mc in 4 ranges (plug-in UHF adapter Model UH-727 extends range to cover 470 to 890 mc). Meter ranges: 10 microvolts to 3 volts in ten ranges. Accuracy:  $\pm 1.5$  db. Video output jack: Separate video amplifier and detector. Meter

# SKL

## SERIES 7500 COLORTAPS

range indicator. Frequency and meter dial lights. Price \$595.00.

**Model A-750F** slide-switch attenuator providing from 0 to 82 db attenuation in one-db steps. Equipped with Jerrold F connectors. Price \$54.50.

**Model AV-75F** rotary switch attenuator featuring eight longlife, rotary switches with dual-wiping, self-aligning, silverplated contacts. Precise attenuation from 0 to 62.5 db in 0.5 db steps. Frequency range: 0 to 500 mc and useful to 800 mc. VSWR at 230 mc of 1.2:1 with a 0.3 db insertion. Price \$160.00.

**Model UH-727** plug-in UHF adapter for Model 727. Price \$112.50.

**Model 720** battery-operated transistorized field strength meter, ideal for field applications. Printed circuit construction makes it compact



and portable. Frequency range: 54 to 108 mc; 174 to 220 mc. Four sensitivity ranges: 10 microvolts to 1 volt; 33 to +60 db. Accuracy:  $\pm 1.75$  db. Input impedance: 75 ohms. Connectors: Type F. Batteries: 2 standard 9 volt. Price \$295.00.

**Comparators.** Each of these models provides for the simultaneous display on an oscilloscope of the output voltages of electronic devices under test and reference voltages from another source for immediate and simple comparison.

**Model FD-30-7F** two-position RF coaxial switch equipped with 75-ohm F connectors which permits simultaneous viewing of two traces (test and reference) on oscilloscope. Price \$195.00.

**Model UH-720** solid-state UHF adapter which, while especially designed for the Model 720 field strength meter, can be connected to any FSM. Contains a built-in power supply, can be operated at a distance from the FSM. Further, plug-in UHF antenna, for UHF signal probe. Input frequency: 470-890 mc. Output frequency: 64 mc nominal. Accuracy:  $\pm 2$  db. Minimum input: 5 microvolts. Maximum input: .1 volt. Accessories supplied: 300-75 ohm matching transformer, plug-in UHF antenna. Universal mounting bar. F-59 connectors for cable link, 9-volt alkaline batteries. Price \$120.00.

**Model TC-3-7F** solid-state three-position of coaxial switches which provides the switching to permit simultaneous viewing of three separate traces on a scope. Specifications: range, DC to 1200 mc; isolation 30 db min. (1200 mc); VSWR, 1.1:1 max. (1000 mc), 1.2:1 max. (1200 mc); insertion loss, 0.1 db; fittings, 75 ohm F.

**Deluxe Model 900-B-7F** supplies 10 kc to 400 mc sweeps which satisfy both narrow and wide sweepwidth requirements. Built-in test equipment: attenuator, harmonic maker generator, scope pre-amplifier, plug-in RF detector, and RF

output meter. Large illuminated dial provides center-frequency reference. Additional features include VHF/UHF switch, marker amplifier, provision for inserting external markers and means for connecting other accessory equipment. Specifications: ranges—VHF, 500 kc to 400 mc and UHF, 275 mc to 1200 mc; response—flat with  $\pm 0.5$  db up to 800 mc and  $\pm 1.5$  db from 800 to 1200 mc; output capability—VHF, 0.25 v rms and UHF, 0.5 v rms. Price \$2,045.00.

**Model CM-6-TV** portable unit similar to CM-10 in circuitry. Instrument provides up to 6 crystal controlled marker signals between 2 and 100 mc. Price \$365.00.

**Model TK-704** adapts Model 704B for use with sub-VHF frequencies (4-50 bc). Price \$105.00.

**Model D-75-UF** is an RF detector covering frequencies from 0.5 to 120 mc. Prices \$55.00.

**Model D-86-7F** is an RF detector covering frequencies from 0.5 to 23 mc. Price \$25.00.

**Models RLBV-7F and RLBV-6H-7F** bridges with respective return losses of 40 db and 60 db. Prices \$175.00 and \$250.00 respectively.

**Field strength meter, Model 704B.** Portable unit covering range of 54 to 220 mc. Range of the instrument is 5 uv to 3 volts in eight ranges. Six of the ranges are fundamental and two are selected by RF attenuators. Accuracy: plus or minus 3 db, phone and video jacks are provided. Sensitivity: 5 uv. 75 ohm input impedance (300/75 ohm matching transformer provided). Adjacent channel rejections: 45 db down from received signal. Aluminum cabinet with carrying handle and shoulder strap. Price \$395.00.

**Sweep generator, Model 601-7F.** For test and alignment of RF circuits. Generator has 11 overlapping ranges. Sweepwidth in any range is continuously variable from a minimum of plus or minus 1/2% of center frequency, to a maximum of approximately plus or minus 60% of center



## CATV EQUIPMENT CLOSURES

**TV-600**

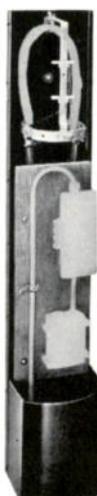


**280 Cubic inches**

Mounting Bracket furnished for multi tap mounting.

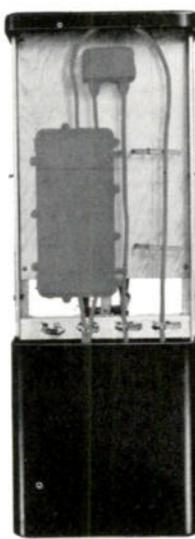
**2360 Cubic inches**

Backboard can be used to mount CATV components on one side, telephone termination on other side. Separate entry for either CATV or Tel. Termination.



**TV-800**

**TV-1600**



**2700 Cubic inches**

Backboard can be used to mount CATV components on one side, telephone termination on other side. Also available in 4320 Cubic inches. Separate entry for either CATV or Tel. Termination.

**WRITE FOR CATALOG AND PRICES**



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# SKL

## ONE-PACKAGE HOUSING

frequency. Means are provided for complete phasing of horizontal output through 360 degrees. Switch control of return trace blanking is provided. Incorporates a detector tilt control



for matching external detectors to the frequency characteristics of the internal AGC detector for accurate oscilloscope presentations. Model 601-7F covers 12 to 225 mc. RF output response is 1.0 volts rms, within .5 db. Portable, rugged case. Price \$355.00.

**Marker Generator Model CM-101TV** provides choice of up to ten crystal-controlled marker signals between 100 kc and 100 mc. In the higher frequencies, up to the 20th harmonic will be visible (up to the 10th in the lower frequencies). Proper choice and mixing will provide harmonic sideband markers across wide band width. Features include individual amplitude control, marker-shape control, scope pre-amplifier, choice of AC or DC marks, and provision for the addition of external markers. Price \$525.00.

**Model 890-7F** supplies 100 kc to 200 mc sweeps. VHF or UHF is selected by interconnection of jumper cables to front panel fittings. Other fea-



tures include marker amplifier, reference dial, provisions for inserting an external marker, and means for connecting an external RF detector. The UHF range (275 mc to 1100 mc) and maxi-

mum sweep width (200 mc) are slightly less than those provided by the 900-B. Other applicable specifications are the same for both units. Price \$895.00.

**Model STD-75** comprises a detector test probe Model STP-75 and an adapter Model STA-75. Units are used together at a head-end to establish a reference on an oscilloscope overlay for subsequent sweep testing of Starline amplifiers. In sweep testing, only Model STP-75 is used. Price \$14.75.

### KAISER-COX

**KCMD marker detector.** Battery-powered detector with 20 db voltage gain (video) and internal



markers, provision for external markers, if desired. Portable (10 oz.). Frequency range 15-400 mc. Price available on request.

### SPENCER-KENNEDY LABS

**493.** Sound attenuator. Available for all VHF channels. Insertion loss: less than 1 db up to .75 mc below sound carrier. Attenuation of sound carrier: 6, 9, or 12 db selected by switch.

**Model 701 reflectometer,** used in measurement of return loss of any component of an RF sys-



tem having a nominal impedance of 75 ohms. Range: 0.5 to 220 mcs. Measures to over 30 db return loss. Both ends of bridge accessible. Price on request.

**7220 Co-channel Filter:** Enables orientation of antenna arrays and selection of calibrated cable lengths for maximum cancellation of co-channel interference. Observable cancellation, 40 db.

**7215 Probe:** Monitor test probe for SKL Colorburst/7000 trunk, bridging, and line extension amplifiers. Attenuation, 30 db. Frequency range: 54-216.

### TV CABLE SUPPLY CO.

**FM-1 Field Strength Meter:** A completely transistorized field strength meter complete with carrying case and batteries. Dial amps on both the frequency scale and PB scale. Channels 2-13 including FM. Price: \$295.00.

**C-1 Field Strength Meter Calibrator:** Provides an output level of 26, 20, 6, or 0 db throughout the entire frequency range and allows a field strength meter to be checked at as many points throughout its range. Battery powered and portable. Price: \$250.00.

### TELE-SIGNAL ELECTRONICS LTD.

**STA-82 Step Attenuator:** Provides up to 82 db attenuation in precise 1 db steps. Input impedance is 75 ohms. VSWR is 1.2:1. Available with F61 type connectors or as requested. Price: \$42.50.

### VIDEO LABS

Manufacturers of field strength meters and field strength meter calibrators. Model C-1 FSM calibrating instrument. Battery-powered, highly portable unit designed specially for CATV use. Internal precision attenuators provide output levels of 26, 20, 6, and 0 db from one point across the entire frequency range of 54-216 mcs. This allows field strength meter to be checked at many points throughout its range. Accuracy is assured through use of a stabilized passive power detector, read out on an internal micro-ammeter at one point for all frequencies. All RF circuits are double shielded. Price on request.

### VIKING

**RF Detector Model 5905.** Used primarily for test bench evaluation, this bridge-type RF detector has a range of 1 to 900 mc. converts RF energy into DC voltage for direct application to an oscilloscope recorder, or other test equipment.

**Return loss bridge-variable model 5902:** Designed for measurements of 75 ohm equipment, cables and fittings, this variable return loss bridge has a frequency range of 5-250 mc. "Precision" series unit measures return losses to 45 db (VSWR-1.01).

**Switchable attenuator model 5908:** Switch type variable RF attenuator. This model provides 0 to 62½ db attenuation in ½ db steps, providing exact attenuation from 5 to 250 mc. "F" connectors included. AC/DC blocked.

**Head-end band pass filter Model 5909:** Is designed to give total channel response together with high adjacent channel rejection.

**Head-end notch filter (trap) Model 5911:** Is used for trapping narrow band or single frequency interference. The notch filter can provide two separate notch traps of lower attenuation or one trap of greater than 60 db attenuation. Two models are available: Low-band (Channels 2-6, FM) and High-Band (Channels 7-13).

**Combination marker/detector Model 5910:** Combination Marker/Detector provides crystal controlled markers in the TV-FM bands, together with about 20 db gain over a single detector. External markers may also be added.

**Signal Strength Meter Model 5907:** Two frequency measurement ranges are available, 54-88 mc.



or 174-216 mc. and are selectable by switch. Pull on power switch that shuts off automatically when the cover is closed. Frequency range is 54-88 mc. or 174-216 mc. separately selectable by switch.

### VITRO ELECTRONICS

**Type 107A Field Intensity Meter:** A field-intensity meter for measurements in the 54 to 250 mc ranges. It consists of a receiver and signal generator. Operates from automobile batteries or standard 117 vac line. Performance data includes a 54 to 250 mc receiver range, and 1.0 uv sensitivity. Signal Generator frequency range is 54 to 240 mc and the output level is adjustable from 1 uv to 0.1 v. Price: \$3,750.00.

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Complete line of Test  
Equipment for CATV

CATV Systems Division  
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401 Walnut St., Phila., Pa.



# Gear up now for **C.A.R.S.**

with Jerrold **440** solid-state **C.A.R.S.** microwave

With the new Community Antenna Relay Service (C.A.R.S.), CATV operators can relay distant programs to the head-end on their own microwave system.

Here is the first multi-channel *solid-state* microwave system designed specifically for use in the C.A.R.S. band (12.7-12.95 GHz). Using the same proven solid-state circuitry as the 6-8 GHz common-carrier 440, the new Jerrold CARS 440 provides sharp, true color and black-and-white pictures over even the longest hops. Transmitters and receivers are designed for stacking to a single antenna without auxiliary equipment. With CARS 440 you're assured maximum stability, high output, minimum maintenance—at a surprisingly low price.

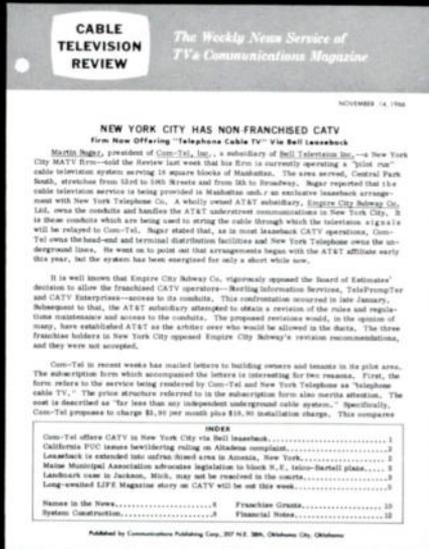
It's not too early to plan your CARS system. Start by talking with Jerrold, the people who know CATV best. Write today for complete information.

## 440 features (12 GHz)

1-watt (min.) transmitter output • 12 MHz base-band, flat within  $\pm 0.25$  db • Frequency stability  $\pm 0.005\%$  • Individually self-contained power supplies • Modular construction throughout • Solid-state receiver and local oscillator • Vapor-stabilized transmitter klystron • Compact—only 10½ inches high.

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Communication Systems Division  
4th & Walnut Sts., Philadelphia, Pa. 19105



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Weekly.**

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# MICROWAVE EQUIPMENT

The following section includes product listings for microwave antennas and transmitting and receiving equipment with application to relay service to CATV systems. Listings marked with an asterisk (\*) indicate that new information was not supplied by the manufacturer for that listing. For mailing addresses and other information concerning the firms listed in this section, see the "Manufacturers and Suppliers" section located in the front of this Directory.

## MICROWAVE ANTENNAS & HARDWARE

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### ADVANCE INDUSTRIES

**Microwave Passive reflectors:** Five standard sizes or any special size available. Sizes 8' x 12' and larger furnished with octagon shaped face and smaller sizes have rectangular faces. Designed for wind load of 65 lbs. per square foot.

**Parabolic Antenna Covers:** Provide protection against accumulations of leaves, sand, snow, ice, sleet and water. Designed for a windload of 50 lbs. per sq. ft. Available for 4, 6, 8 and 10 foot covers or special sizes.

### ANDREW CORP.

Microwave Antennas and Heliac flexible elliptical waveguide for frequencies 450 MHz to 13.2 GHz. Antenna positioners for microwave relay equipment.

### FORT WORTH TOWER CO.

Manufactures complete line of passive microwave reflectors. Write factory for size, price, specifications and literature.

### GRASIS FABRICATING CO.

EP1015 & EP812: elliptical parabolic microwave reflectors offer a cupping action as opposed to centerline curvature only. This action is accomplished by designing the face structure so that a pull on the main support members results in true parabolic curvature in both directions while maintaining excellent face uniformity. The balanced design of this unit provides stable adjustment characteristics required at high frequencies by eliminating permanent deformation of the reflecting surface normally resulting from repeated adjustment.

### GABRIEL ELECTRONICS\*

Manufactures a complete line of parabolic antennas for microwave communications systems. Selection includes plane and dual polarized dual frequency, split transportable and high performance antennas.

### JERROLD ELECTRONICS CORP. GOVERNMENT & INDUSTRIAL DIV.

Jerrold-Taco carries a complete line of over one hundred microwave antennas. Write for complete information.

**TACO microwave antenna mounts.** A series of antenna mounts for all type of Taco spun and mesh reflectors is available. The series includes: pipe mounts for standard service; heavy-duty pipe mounts for areas with severe wind loading; roof mounts of the three point type with adjustments of plus or minus 5 degrees; tilt mounts for sloping roofs or where an antenna cannot be located directly below a passive reflector; special mounts for specific requirements. Write for additional details.

**TACO microwave anti-icing equipment.** Radomes for all size dishes are available for applications where antenna must perform under adverse conditions. Heater units are available to prevent the accumulation of ice and snow on the radome-dish assembly. Individual heaters are available also to heat the dish and feed units where the use of a radome is not desired.

### MICROFLECT CO. INC.

Manufactures a complete line of microwave passive repeaters, tower mounted reflectors, swing pipe towers, pylons, S tripods, roof mounting towers, K frames for roof mounting antennas, and a variety of towers for all microwave applications. Contact the manufacturer for complete specifications and prices for your requirements.

**Waveguide Hatches.** Fabricated of steel or aluminum. Designed for waveguide entry at roof or building side.

**Antenna Ice Shields.\*** Shed type. Fabricated steel structures for tower mounting. Affords protection from ice falling on tower mounted components.

### PRODELIN

**Spun aluminum parabolic antennas** for the range of 400 MHz to 13 GHz. Antennas provide azimuth and elevation adjustment of plus or minus 10 degrees. Adapted to 3 or 4 point mounting. All parts made of steel are hot-dipped galvanized after fabrication. All aluminum parts are painted and brass parts are plated. Write for complete information on microwave dishes and reflectors.

**Parabolic antenna radomes.** Molded fiberglass reinforced resins provide inexpensive protection against adverse climatic conditions, ice and snow accumulation. Low signal attenuation through the 10,000 Mc/S signal range. Features simple high strength aluminum clamp assembly. Also available in heated models. Heated radomes include thermostat, relay and junction box. Write for prices on heated models.

### ROHN MANUFACTURING CO.

**Microwave passive reflectors.** Made of Reynolds aluminum interlocking extrusions. Three standard sizes: 6' x 8', 8' x 12' and 10' x 15'.

### UTILITY TOWER CO.

**Microwave reflectors:** Designed for ruggedness,

versatility, ease of installation and shipping. Available in one piece or complete knocked down. All have a completely adjustable face, including a face curvature attachment. All sizes available from stock.

## MICROWAVE TRANSMITTING & RECEIVING EQUIPMENT

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### COLLINS

**MW-808D:** Remodulating microwave, 12.7 to 13.2 gc, solid state except for 1-watt klystron.



Available in non-standby, frequency diversity, and multichannel configurations for short haul transmission of color video signals.

## JERROLD

**FIRST IN CATV**

**HEAD-END EQUIPMENT**

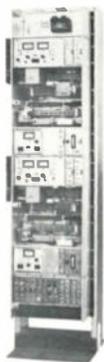
**CHANNEL COMMANDER**

**PROGRAM COMMANDER**

---

CATV Systems Division  
**JERROLD ELECTRONICS CORPORATION**  
 401 Walnut St., Phila., Pa.

**MW-108D:** Remodulating microwave, 5.925 to 6.425 gc, solid state except for 1-watt klystron. Available in non-standby, frequency diversity,



and multi-channel configurations for short haul transmission of color video signals.

**MS-109E:** I-F heterodyne microwave, 3.7 to 4.2 gc, solid-state except for 5-watt traveling wave tube amplifier. Available in non-standby, frequency diversity, and multi-channel configurations for long-haul transmission of color video signals. Sub-system packaging, crystal controlled transmitters and receivers. Intended for long-haul networks. Prices on request.

**MW-609E:** I-F heterodyne microwave, 10.7 to 11.7 gc, solid-state except for 2.5-watt traveling wave tube amplifier. Available in non-standby, frequency diversity, and multi-channel configuration for long-haul transmission of color video signals. Sub-system packaging, crystal controlled transmitters and receivers, intended for use in long-haul network. Price on request.

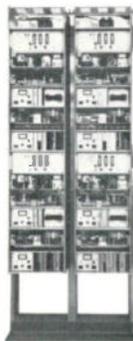
**MW-408D:** Remodulating microwave, 6.825 gc

to 7.125 gc, solid state except for 1-watt klystron. Available in non-standby, hot-standby, and space diversity configurations for short-haul transmission of color video signals.

**MW-608D:** Remodulating microwave, 10.7 to 11.7 gc, solid state except for 1-watt klystron. Available in non-standby, frequency diversity, and multi-channel configurations for short-haul transmission of color video signals.

**MS-108D:** Remodulating microwave, 3.7 to 4.2 gc, solid-state except for 1-watt klystron. Available in non-standby, frequency diversity, and multi-channel configurations for short-haul transmission of color video signals. Subsystem packaging, vapor-cycle cooled klystrons, linearized transmitters, crystal controlled transmitters and receivers. Price on request.

**MW-109E:** I-F heterodyne microwave, 5.925 to 6.425 gc, solid state except for traveling wave



tube 5-watt amplifier. Available in non-standby, frequency diversity, and multi-channel configurations for long-haul transmission of color video signals.

## FERRANTI ELECTRIC, INC.

**VCA/L14 Parametric Amplifier:** An Ultra-Low Noise Receiver for Reception of VHF TV Channels. The amplifier has a gain of 20 db and a noise figure of less than 1 db. It is supplied with a solid-state pump source and is suitable for unattended mast head operation. Price \$5,000.

## JERROLD ELECTRONICS CORP.

**440 Series Color Video Relay Microwave:** Solid-state circuitry and compact modular design pro-



vides a complete transmitter or receiver in 10 1/2 inches of rack space. High transmitter output (minimum of 1 watt), and frequency stability (plus or minus .005%) for reliable performance. Differential Phase of  $\pm 0.25$  degrees, and Differential Gain of  $\pm 0.25$  db. Available in models for 6-8 GHz common carrier and 12-13 GHz C.A.R.S. bands.

## LENKURT ELECTRIC CO., INC.

**76 TV microwave** combines high performance color capability with reliability, low power consumption and reduced maintenance of transistorized equipment. Completely solid-state ex-

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# TV COMMUNICATIONS

207 Northeast 38th  (405) 528-3523

Oklahoma City, Oklahoma 73105

TV & Communications  
CATV Directory  
Cable Television Review  
Communications

COMMUNICATIONS PUBLISHING  
CORPORATION

Stanley M. Searle, Patrick T. Poque  
Publishers

January 1, 1967

## AN OPEN LETTER TO CATV SYSTEM OWNERS AND OPERATORS:

As in past years, the great Cable Television Industry continued its pattern of dynamic growth during 1966. It has had problems, to be sure... problems created mostly by outsiders who would stem the natural growth of the industry in its service to the American public. But Cable Television continues to grow because of the unique and valuable service it offers. Demand for it across the Continent is greater than ever, and its potential in the near and distant future is almost unlimited.

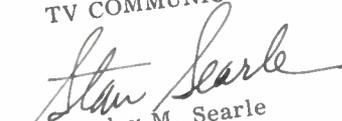
Substantial technical progress has also been made. Solid state equipment has become standard, and gear for multi-channel operation has become more sophisticated. Local origination service has been spotlighted as a vast new area of system service.

TV Communications and Cable Television Review have followed this progress closely as the only publications devoted entirely to CATV... and we will continue to do so. Our goal is to be of the greatest possible service to the industry through complete news coverage, feature articles and management information, plus a thorough review of technical developments.

We enjoy being a part of this tremendous industry, and we take seriously our role of giving you complete coverage of CATV growth and development. We invite you, during 1967, to enjoy the hundreds of additional pages of pure CATV editorial material which will be becoming your way. If it helps you to better manage and operate your system, we will have received our satisfaction.

Sincerely,

TV COMMUNICATIONS

  
Stanley M. Searle  
Publisher

# JERROLD

## FIRST IN CATV

### HEAD-END EQUIPMENT CHANNEL COMMANDER PROGRAM COMMANDER

CATV Systems Division  
**JERROLD ELECTRONICS CORPORATION**  
401 Walnut St., Phila., Pa.

cept for klystrons. 5.9 to 13.2 gc. Price on request.

**75A/75B** microwave. Heterodyne repeater



microwave system suitable for long haul color TV transmission. Completely solid-state except

for TWT amplifier. 5.9 to 7.2 gc. Price on request.

**Model 76E.** Same as Model 76TV except for 12.2 to 13.25 gc operation.

**Model 75A** microwave radio. For 5925 through 6425 mc common carrier band. Meets CCIR and NTSC requirements for monochrome and color. Solid state design, the unit features frequency stability of plus or minus .002% less than 1 degree differential phase and less than 0.5 db differential gain.

#### LM ERICSSON ELECTRONIC TUBES

**6028/408A** longlife replacement tube for use in CATV microwave equipment, features life expectancy of over 40,000 hours; constant trans-conductance; minimal insulation failure; and shock and vibration resistance. Price \$3.65.

**407A** longlife replacement twin triode tube for use in CATV microwave equipment. Price \$5.85.

**5847/404A** longlife replacement tube for use in CATV microwave equipment. Price \$14.70.

#### MICROMEGA

**RF preamplifiers.** Low noise, low signal level. Eliminates fades and permits greater spacing between microwave repeater stations. Price range \$3,900 to \$4,500.00.

**U-1000/1.** 1990-2110 MHz; 10 MHz bandwidth. UHF tuning range.

**R-1000/1.** 1990-2110 MHz; 15 MHz bandwidth. Range 300 MHz.

**C-1000/1.** 6875-7125 MHz; 25 MHz bandwidth. Range to 250 MHz.

#### MOTOROLA\*

**MV-30** Color microwave relay. Transmitter for 5925-6425 mc common carrier and 6875-7125 mc STL. Designed for 75 ohm unbalanced video input and output for color or black and white. Optional equipment will provide balanced input

and output. Transmitter/receiver provides differential gain of .5 db maximum (average picture level); 1.0 degrees differential phase with 6 db pre-emphasis. Price is available from manufacturer.

#### RADIO CORP. OF AMERICA\*

**TV microwave relay system, Type TVM-1C.** High power (1-watt) conduction cooled transmitter Klystron. Frequency range: 5925 to 7425 mc. Video frequency response flat within 0 to 0.5 db from 60 cycles to 7 mc. Less than 0.3 degree differential phase and 0.1 db differential gain using 12 db pre-emphasis. Wide IF bandwidth provides ultra-stable system-minimizes effects of tube gain. Removable sub-chassis construction and numerous circuit test points for easy maintenance. Provision for multi-plexing high quality sound channels. Video input: 0.75 to 4.0 v p-p composite (adjustable by modulation level control). PNS.

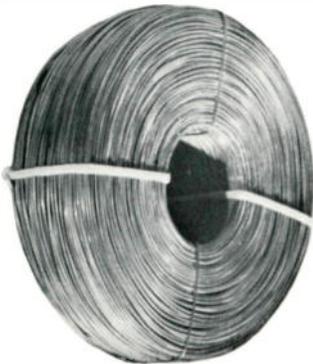
**Type CW-60V.** Solid-state unit with heterodyne repeaters. For color or monochrome and is powered directly from 48 v battery. Receiver provides 13.5 db gain before mixing. Unit is multi-channel, terminal type.

**TV microwave relay, Type TVM-38.** Operates in 10.5 to 13.25 gc microwave band with full color capability. Unit is modular construction designed for rack or portable use. Provides nominal power output of 350 milliwatts and has flat response over 30 mc bandwidth. Noise figure is 12 db overall. Write RCA for pricing.

#### SUPERIOR CABLE CORPORATION

Automatic refrigerant and chemical type Dehydration equipment designed for pressurizing wave-guide. Component equipment includes flow meter panels, alarm panels, airflow indicators, and related pressurization accessories. All equipment designed for indoor or outdoor application.

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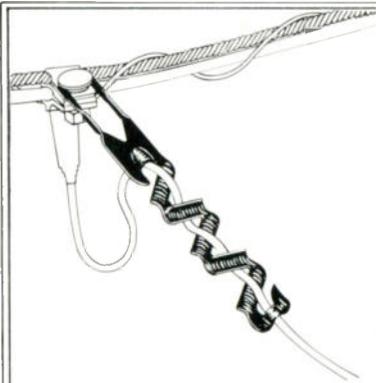
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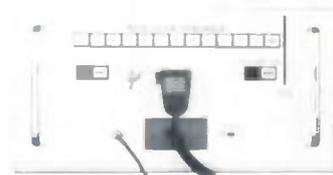
In keeping with the company's policy of offering a fresh new approach to proven concepts, Asteroid presents a new line of highly reliable, solid state equipment that assures lower maintenance costs for the operator, and improves service. These products are the result of serious inquiry into fulfilling the needs of the CATV industry, and are based upon Asteroid's successful background in designing and manufacturing complex digital, signal control, and communication equipment.

**NOW  
READY**



### MODEL 106 WEATHER-DATA

An all solid state, with no mechanical moving parts, automatic weather data system that provides a continuous and simultaneous display of time, wind speed and direction, temperature, barometric pressure, and humidity in bright, easily read digital form. Written messages can be inserted on a card below the display. Since neither the camera nor the weather data moves, this provides a strong focal point for special event, or public service announcements. Available with solid state vidicon television camera (Model 106C). Model 106 \$5575 Model 106C \$6125



### MODEL 600 EMERG-ALERT

Emerg-Alert is a total communication system for a community. It provides the mayor, police or fire chiefs, and other civil authorities with an immediate means of gaining the attention of CATV subscribers by merely lifting a "hot line" telephone. Using Emerg-Alert, voice and video message warnings or community news is immediately broadcast. Maps of distressed areas or other graphic information can be shown simultaneously with emergency announcements. Emerg-Alert also provides a means of notifying subscribers of technical difficulties in their channel so they are aware that the problem is not in their set, and that normal operation will be quickly resumed. Model 600-B \$3400 + \$150 per channel.



### MODEL 202-X AUTO VIDEO LOSS DETECTOR

If loss of video or sound occurs, the crystal-controlled solid state Model 202 automatically switches the Model 600 Emerg-Alert from a standby condition to display a message and provide music (if available). Upon corrective action, the Loss Detector and Emerg-Alert automatically switch back to standby. Switching time is adjustable. The Model 202 also provides contact closures for triggering an alarm system, and can be obtained as a tunable unit for channels 2-13 (Model 202-T). Model 202-X \$520 Model 202-T \$575



### MODEL 300-X VIDEO DEMODULATOR

This is the first CATV crystal-controlled solid state demodulator to provide both picture and a waveform display for monitoring quality of picture, sync level, composite signal, color burst identification, and sound for any channel. This inexpensive instrument also provides test points for video and waveform signal analysis, and is equipped with a front panel video output voltmeter. Can be obtained as a tunable unit, channels 2-13 (Model 300-T). Model 300-X \$1400 Model 300-T \$1480

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PROFESSIONAL SERVICES

**CABLE  
TELEVISION  
REVIEW**

The Weekly News Service of  
TV's Communications Magazine

NOVEMBER 14, 1966

**NEW YORK CITY HAS NON-FRANCHISED CATV**  
**Firm Now Offering "Telephone Cable TV" Via Bell Leaseback**

Martin Nager, president of Com-Tel, Inc., a subsidiary of Bell Telephone, Inc., says New York City CATV firms could be the biggest business that has been in operation in the city since the cable television system serving 25 square blocks of Manhattan. The area served, Central Park South, stretches from 33rd to 35th Streets and from 3rd to Broadway. Nager reported that the cable television service is being provided in Manhattan under an exclusive leaseback arrangement with New York Telephone Co. A wholly owned AT&T subsidiary, Empire City Subways Co., Inc., owns the conduits and handles the AT&T underground communications in New York City. It is these conduits which are being used to string the cable through which the television signals will be relayed by Com-Tel. Nager stated that, as in most nonfranchise CATV operations, Com-Tel owns the head-end and terminal distribution facilities and New York Telephone owns the underground lines. He went on to point out that arrangements began with the AT&T affiliate early this year, but the system has been interrupted for only a short while now.

It is well known that Empire City Subways Co. vigorously opposed the Board of Estimates' decision to allow the franchise CATV operators—having information increases, Total Long-Term and CATV Enterprises—access to its conduits. This confrontation occurred in late January. Subsequent to that, the AT&T subsidiary attempted to obtain a revision of the rules and regulations maintenance and access to the conduits. The proposed revisions would, in the opinion of many, have established AT&T as the affiliate over who would be allowed in the future. The three franchise holders in New York City opposed Empire City Subways' revised recommendations, and they were not accepted.

Com-Tel in recent weeks has mailed letters to building owners and tenants in its pilot area. The subscription form which accompanied the letters is interesting for two reasons. First, the form refers to the service being rendered by Com-Tel and New York Telephone as "telephone cable TV." The price structure referred to in the subscription form also merits attention. The rate is described as "the lowest that any independent underground cable system." Specifically, Com-Tel proposes to charge \$1.50 per month plus \$18.00 installation charge. This compares

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Published by Communications Publishing Co., 207 N.E. 28th, Oklahoma City, Oklahoma

***"Cable Television Review is my main link to the California Telco situation. If my system is going to make money, I've got to know what's happening."***

**Learn what's happening in CATV  
with Cable Television Review.  
Weekly.**

# DIRECTORY OF CATV SERVICES

This Directory of CATV Services lists firms in the following categories: Brokerage, Consulting, Financial, Legal, Management, Advertising and Insurance Counselors (under "Professional Services"), Subscriber Promotion, and Engineering Construction. The publishers of the Directory do not give or imply an endorsement of particular companies. Complete addresses for these firms are listed in the "Manufacturers and Suppliers" section located in the front of this Directory.

## BROKERAGE

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### **BLACKBURN & CO., INC.**

Brokerage firm handling CATV system transactions. Offices in Washington, D. C., Chicago, Atlanta and Beverly Hills.

### **COLEMAN INSURANCE AGENCY**

Complete CATV system brokerage service. Specializing in the Southeastern United States. Based in Tuscaloosa, Alabama.

### **DIVERSIFIED BROKERS, INC.**

Complete professional brokerage service for CATV clientele. Methods are of highest professional techniques and standards. Contact John Buchanan. Office in Scottsdale, Ariz.

### **DANIELS & ASSOCIATES, INC.**

Negotiators, consultants, appraisers and brokers for the CATV industry. Offering a wide range of interested buyers for CATV properties, this firm is normally retained by a CATV owner desiring to sell his property or commissioned by a buyer to purchase CATV properties. Appraises CATV properties for banks, other lending institutions, estates and owners. In sales of property, the firm works on a 5 percent commission, payable by seller. Appraisals on a flat fee basis, depending on size of system. Consulting fees are negotiated. Firm has handled over \$130,000,000 of CATV transactions. Principals include Bill Daniels, president; Monroe Rifkin, exec. v.p.; Alan Harmon, Ross MacGregor, Bill Ross, John Saeman, vice-presidents. Established in 1958. Headquarters: Denver, Colo.

### **HOWARD S. FRAZIER, INC.**

Appraisals for all purposes and confidential negotiations for CATV sales or purchase. Washington, D. C.

### **LA RUE MEDIA BROKERS, INC.**

Handles CATV system transactions. Principal is Hugh Ben La Rue. Office: New York City.

### **MALARKEY, TAYLOR & ASSOC.**

Preparation of comprehensive, documented sales prospectus with presentation of knowledgeable, bona-fide CATV investors from

broadcast, major industrial concerns and the financial community. Principals include Martin F. Malarkey, president; Archer S. Taylor, vice president for engineering; Martin R. Smith, vice president for finance and Gerard J. Looby, director of system operations. Office: Washington, D. C.

### **EDWARD SHAFER & CO., INC.**

Company files include current list of firms seeking CATV systems and, or franchise opportunities. Records include information on types of system, capital available, equity position desired, etc., making possible immediate referral of system seller or franchise holder. Commission on sale of existing system is 5 percent payable by seller. Commission for locating financial participant in new franchise related to individual situation. Appraisals prepared for firms considering sale of system and for prospective buyers. Office: Washington, D. C.

### **EDWIN TORNBERG & CO., INC.**

Brokerage service for cable systems. Offices in Washington, D. C. and Pacific Grove, Calif. Contact Edwin Tornberg, Edward Wetter or Doug Kahle.

### **WILLIAMS & ASSOCIATES**

Cable system brokerage and investments. Offices in Denver, Colorado. Contact Carl M. Williams.

## CONSULTANTS

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### **GEORGE P. ADAIR ENGINEERING**

Complete consulting and supervisory engineering services. Office: Washington, D. C.

### **ALDER ASSOCIATES**

Counseling on all phases of franchise procurement, CATV potential studies, investment projections, system purchasing, construction, management, operations, advertising and sales promotion. Office: Washington, D. C.

### **ATWELL & ASSOCIATES**

Consultation on technical, management and

personnel for systems. Located in Phoenix, Ariz. Contact Don Atwell.

### **CABLE TV CONSTRUCTION, INC.**

Serving as cable consultants since 1959. Located in Iola, Kan.

### **CAL-TEL CONSTRUCTION CO.**

Consultation on all phases of CATV construction and management. Headquarters in Signal Hill, Calif.

### **WILLIAM B. CARR & ASSOCIATES**

Complete professional engineering services, feasibility studies, site surveys, aerial or underground systems design and construction coordination. Office: Ft. Worth, Texas.

### **CHANNELL COMMERCIAL CORP.**

Consulting on aerial or buried cable systems utilizing hermetic housings and closures to protect splices, amplifiers, splitters and tap-offs. Office in Glendora, Calif.

### **PETE COLLINS CO.**

Complete consulting service, all phases of CATV. Headquarters in Denver, Colo.

### **DANIELS & ASSOCIATES, INC.**

Experienced consultants. Assistance in thorough evaluations of potential CATV areas and appraisals of current operating systems. Complete consultation on every CATV matter. Office: Denver, Colo.

### **HOWARD S. FRAZIER, INC.**

System planning, pro-forma financial projections and assistance in the securing of franchises. Office in Washington, D. C.

### **LEEDER CONSULTANTS, INC.**

System appraisals, economic surveys, population studies and geographic studies in relation to the 100 markets. Signal surveys, CATV investment analysis, percentage of saturation studies and expansion requirements studied. Headquarters: New York City.

### **MALARKEY, TAYLOR & ASSOC.**

Full spectrum of CATV services including valuations and appraisals; financing sources and placements with investment groups; head end, system and microwave engineering; custom construction program; system management; research and feasibility analyses for proposed operations; sales promotion and public relations. Washington, D.C.

# SKL

7220 CO-CHANNEL FILTER

## MICROFLECT CO., INC.

Assistance on special problems involving passive reflectors, tower and antenna installation. Located in Salem, Ore.

## RF SYSTEMS, INC.

Consultation on special antenna requirements. Complete design, manufacture and test facilities. Plant in Cohasset, Mass.

## NORAM CABLE CONSTRUCTION

Over 13 years experience in system design, construction and maintenance. Parabolic antenna design and installation. "Jake" Milligan, CATV consultant. Office in Rexdale, Ont.

## SCIENTIFIC-ATLANTA, INC.

Consultation on difficult co-channel problems. Special antenna systems for unique reception problems. General antenna site survey. Complete head-end evaluation; objective evaluation of existing equipment problems. Officed in Atlanta, Ga.

## EDWARD SHAFER & CO., INC.

Aid in establishing investment program in CATV. Preparation of criteria to be used in evaluating and selecting existing systems or new system, location, determining present and potential system value. Preparation and presentation of franchise applications to city councils. Negotiation of pole attachment agreements. Solicitation of proposals and bids for turnkey construction and/or purchases of equipment. Negotiations with contractors. Recruitment of personnel including preparation of job descriptions. Washington, D. C. office.

## STAN SOCIA CORP.

Consultation and engineering services including feasibility studies, strand map, and electronic layout maps. Headquarters: Tyler, Texas.

## STROMBERG-CARLSON CORP.

Theoretical analysis of TV reception which should be available to the community through a CATV system. The Stromberg-Carlson financial feasibility survey takes into account the progressive stages of system development. Office: Rochester, N. Y.

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Tower and ground mounted

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Complete construction and erection capabilities

## MICROFLECT CO. INC.

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Salem, Oregon 97303  
503 (363-9267)

## TELESIGNAL ELECTRONIC LTD.

System rebuilding and signal transportation problems. Located in Vancouver, B. C.

## EDWARD TORNBERG & CO., INC.

Consultation, brokerage, financial and leasing services. Contact Edward Wetter or Edwin Tornberg in New York, or Douglas Kahle in Pacific Grove, Calif.

## TRANS COM, INC.

Professional service for the communications system. Microwave system planning, including frequency planning and coordination, path profiling by stereo photography, propagation studies, system design and routing, path plotting and analysis, equipment evaluation. Office in Denver, Colo.

## FINANCIAL SERVICES

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

## ADLER ASSOCIATES

Appraisal and financial advice. Washington, D. C. office.

## AMECO ACCEPTANCE CORP.

Complete financing service to present and prospective system owners including all types of leasing and conditional sales contracts. A cash flow analysis provided. Leasing program for rebuilds, extensions or complete turnkey jobs.

## ANACONDA ASTRODATA

Assistance in system financing. Office: Anaheim, Calif.

## BOSTON CAPITAL CORPORATION

Provides equity capital for CATV. Offices located in Boston, Mass.

## CAS MFG. CO.

Advice and assistance in obtaining financing and leasing plans at reasonable interest rates. Located in Dallas, Texas.

## CASCADE ELECTRONICS, LTD.

Financing available for all types of CATV construction and expansion projects. Loan applicant must have franchise and pole attachment contract. Prompt processing of applications. Headquarters: Port Moody, B. C. Branch offices: Harrisburg, Pa., Cape Canaveral, Fla., and Seattle, Wash.

## DANIELS & ASSOCIATES, INC.

Assistance in obtaining financing, both short and long term, equity and/or debt financing. Counseling on tax considerations. Denver, Colo.

## ECONOMY FINANCE CORP.

Provides full service financing for all needs of the cable television industry including new system construction, expansion and modernization, turnkey installations, equipment purchases, and system purchases. Contact Gail E. Oldfather. Headquartered in Indianapolis, Ind.

## ENTRON, INC.

Will provide budgetary and financial planning including arrangements for construction

funds. Also prepare pro forma to show system costs and estimated rate of return on funds invested

## FT. WORTH TOWER CO.

Towers, equipment, buildings, reflectors, etc., leased or financed at bank rates to CATV operators. Contact Mr. T. W. Moore for information. Plant and offices: Ft. Worth, Tex.

## LEEDER CONSULTANTS, INC.

Help in obtaining funds for new construction, conversions and expansions. Proposals prepared for Financial Institutions; long range projections. Office: New York City.

## MALARKEY, TAYLOR & ASSOC.

Long-range financial projections and economic appraisals prepared for refinancing purposes. Established contacts with extensive number of responsible financing sources offering either equity or debt capital or a combination of both. Capital sources include broadcast and CATV interests, financial institutions and major industrial concerns. Office: Washington, D. C.

## PENN. GROWTH INVESTMENT

Equity and capital financing of new and established systems. Office: Pittsburgh, Pa.

## ROHN MFG. CO.

Budgetary information relative to towers, obstruction lighting and head-end structures, and their installation. Plant in Peoria, Ill.

## EDWARD SHAFER & CO.

Firm maintains continuous contact with financial sources for CATV; can direct company in need of financing to proper source. Evaluates various financial programs which investor may be offered. Preparation of financial projections and appraisals for submission to banks, insurance companies and other lending institutions. Office in Washington, D. C.

## SPENCER-KENNEDY LABS

Will assist in obtaining system financing.

## STROMBERG-CARLSON CORP.

Based on years of experience and more than 1000 loans to operating telephone companies, Stromberg-Carlson offers financing tailored to the operating company's requirements. Firm makes a financial feasibility study and provides a financial plan that takes into consideration the progressive stages of development of the CATV enterprise. If desired the plan includes installation costs and working capital as well as equipment and material purchases. Office: Rochester, N. Y.

## TAPE-ATHON CORP.

Background music library available to CATV systems on lease exchange plan. Periodic rotation of library. (See Local Origination Equipment.) Located in Inglewood, Calif.

## EDWIN TORNBERG & CO., INC.

Financing for CATV. Offices in New York City, Washington, D. C. and Pacific Grove, Calif.

## VIKING INDUSTRIES

Provides assistance in obtaining financing for old and new systems, including expansion or turnkey operation.

**BURIED SYSTEMS  
EQUIPMENT SPECIALISTS**  
TELEPHONE - CATV  
**CHANNELL**  
COMMERCIAL CORP.  
620 W. Foothill Blvd. • Glendora, Calif. • (213) 963-1694

## SYSTEM MANAGEMENT

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### CABLE TELEVISION REVIEW

Weekly news service for system managers and investors. Contains detailed reports and analysis of business and political developments affecting CATV. New franchise grants reported; also progress reports on system construction. The only independent weekly cable industry publication.

### CABLE TV CONSTRUCTION, INC.

Providing management services since 1959. Headquarters: Iola, Kan.

### CONTINENTAL CATV

Complete management services for systems. Technical direction, advertising and sales promotion. (Subsidiary of Viking Industries, Hoboken, N.J.)

### DANIELS & ASSOCIATES, INC.

Special management division operates more than 30 cable systems. Advises and assists cable operators with accounting, sales promotion, personnel training and system construction. Office in Denver, Colo.

### JERROLD ELECTRONICS CORP.

Conducts schools for CATV system managers. Consultation on all management problems.

### MALARKEY, TAYLOR & ASSOC.

Management group directed by Gerard J. Looby offers continuing management or retainer on a project basis. Services include sales promotion, advertising and public relations; recruitment, training and supervision of personnel; supervision of system engineering and construction; establishment and implementation of operating methods and practices; development of accounting, billing and reporting procedures. Headquarters: Washington, D. C.

### TELESYSTEMS CORP.

Provides management for CATV companies. Sales promotion services. Technical direction and assistance. Operates systems in 32 cities. Headquarters: Philadelphia, Pa.

### TV COMMUNICATIONS MAGAZINE

The only monthly trade publication devoted entirely to cable television. Each issue includes exclusive articles on system management, promotion, financing and technical subjects, in addition to monthly summary of vital industry news. Special coverage of NCTA convention and state and regional association meetings. Subscription price: \$8.00 per year.

## PROFESSIONAL SERVICES

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### ASSOCIATED AGENCIES

Insurance counseling to meet cable system operators' exact requirements. Broad background in providing complete insurance programs to protect property and business income. Liability coverages tailored to CATV industry needs. Offices in Chicago, Ill.

### ATWELL & ASSOCIATES

Personnel placement service. Locate and place qualified management and technical men in CATV. Nation-wide contacts. Located in Phoenix, Ariz.

### CATV DIRECT MAIL MTG.

Direct mail agency that designs direct mail campaigns to produce new subscribers for CATV systems. Located in Hicksville, N. Y.

### COMMUNICATIONS PUBLISHING CORPORATION

Professional assistance available for preparation of advertising copy and layouts for display and classified advertising in TV Communications, Cable Television Review and the CATV Directories

### MALARKEY, TAYLOR & ASSOC.

Personnel recruitment, hiring, training and



## ADD SUBSCRIBERS TO YOUR SYSTEM

Increase subscriber saturation of existing cable systems . . . or Pre-Sell customers during new system construction.

Whether your system is several years old, or still under construction, we can improve your percentage of saturation. Your monthly income will go up . . . Your opportunities for an attractive capital gain will be substantially improved.

Increase your current number of cable subscribers or start your new turnkey system with a solid, pre-sold group of subscribers.



1202 Lakeview Towers • 6001 N. Brookline  
Oklahoma City, Okla. 73112 • (405) 843-6263

## INSTANT OPERATOR-CREW COMMUNICATIONS

*Ratelco*  
MOBILE INTERCOMS



Ratelco Mobile Intercoms increase safety, efficiency. Transistorized, two-way-talk systems allow "hands off" communications between operators and crews on booms, ladders, aerial platforms; industrial, construction and farm equipment. Compact, low drain, simple controls.

See your dealer or write for folder.

*Ratelco* INC. / ELECTRONICS MANUFACTURERS  
612 Pontius Ave. N., Seattle, Wash. 98109

# SKL

## 7210 THERMAL EQUALIZER

evaluation. Managerial and technical. Washington, D. C.

### MILLS-DOHERTY

Insurance specialists with experience in writing policies designed to protect cable system owners.

### UNIVERSAL ASSOCIATES, INC.

Aerial photography, engineering and survey for CATV and microwave sites. (Div. of Universal Field Services, Inc.) Headquartered in Tulsa, Okla.

## SUBSCRIBER PROMOTION

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### ADLER ASSOCIATES

Complete planning and execution of advertising and sales promotion programs. Office: Washington, D. C.

### AMECO, INC.

Provides subscriber promotions via monthly review of successful promotions by CATV systems. The "Business Booster" which details these promotions is available free.

### AMERICAN SALES PROMOTION CO.

Direct sales promotion package for CATV systems. Successfully used by systems nationwide for the past 5 years. Supplies know-how, plus everything needed to conduct a successful campaign. Headquarters: Beverly Hills, Calif. (Div. of Jack Kent Cooke, Inc.)

### BARASH ADVERTISING

Complete advertising and public relations service to TV cable companies and associations. Includes preparation of advertising, budget, creation of all advertising. Includes preparation and release of news items related to system. Service available as a complete package plan on yearly basis or individual items can be purchased as needs arise. Market surveys conducted in specific locales to set up door-to-door sales program to be tied in to overall advertising and sales effort. Located in State College, Pa.

### CABLE PROMO. SERVICES, INC.

Subscriber solicitation, system promotion and complete marketing service. Enhances cable services, eliminates past-due accounts, cuts down disconnects. Office in Nashville, Tenn.

### HEATH PRODUCTION

Promotional programs for adding subscribers to cable system. Special incentives. Located in Safford, Ariz.

### SAMUEL HENRY & ASSOCIATES

Advertising, promotion and publicity planned

and produced for new and established CATV systems, manufacturers and equipment suppliers. Office in Phoenix, Ariz.

### MALARKEY, TAYLOR & ASSOC.

Implementation of proven techniques as adapted to individual market circumstances. Effective programs available for any or all media. Washington, D. C.

### EDWARD SHAFER & CO., INC.

Market studies to project subscriber growth in new systems and to budget promotional expenditures. Evaluations to determine cost of adding new subscribers in existing systems. Consumer studies to determine local market factors. Advertising and promotion programs geared to realistic budgets, designed for individual market. Located in Washington, D. C.

### SUBSCRIPTION BUILDERS, INC.

Years of successful selling experience applied to cable subscriber promotion. Effective direct mail, newspaper and radio advertising used in conjunction with proven incentive programs and personal selling to produce new customers. Pre-selling for new systems. Complete design and preparation of all promotional materials. Located: Oklahoma City, Okla.

### TV GUIDE

Furnish copies of TV Guide on limited basis for system open house and subscriber solicitation. Philadelphia, Pa. (Triangle Publications.)

## ENGINEERING & CONSTRUCTION

See "Manufacturers and Suppliers" section for addresses and information on firms listed in this section.

### GEORGE P. ADAIR ENGINEERING CO.

Complete consulting and supervising engineering services. Office: Washington, D. C.

### ADLER ASSOCIATES

Expert counseling on CATV system planning and construction. Washington, D. C.

### AMECO ENGINEERING CORP.

Will engineer and design electronic gear for normal or specialized application. Knowledgeable in every CATV area from head-end to customer connection. (A subsidiary of Ameco, Inc.)

### ANACONDA ASTRODATA CO.

Any and all phases of system engineering: from signal survey, technical analysis, site selection, trunk and distribution routing through final installation and check-out of complete system. Offices: Anaheim, Calif.

### ARMADILLO MFG. CO.

Build and install head end buildings. Includes pre-installing of head-end equipment racks, fittings, etc. in fiberglass structures. Plant in Denver, Colo.

### J. C. BARNARD AND ASSOC., INC.

Consulting engineering, feasibility studies, field strength surveys for CATV. Officed in St. Louis, Mo.

### BENCO TELEVISION ASSOC.

Complete system design at no charge to CATV owner. Includes detailed layout and estimates. Rexdale, Ont. and Jacksonville, Fla.

### BLONDER-TONGUE

Complete engineering, any type of installation, Newark, N. J.

### BROADWAY MAINTENANCE CORP.

CATV design, installation, and maintenance. Located in New York City.

### BURNUP AND SIMS, INC.

Specialize in the construction of CATV systems for any size area. Complete services include power and telephone plant rearrangement and tree trimming. Crews have tel-elects, bucket trucks, winch trucks, trenchers, cable plows, and all other tools and equipment necessary to handle construction complete from tower to subscriber. Headquarters: West Palm Beach, Fla.

### CABLE CONSTRUCTION CO.

All types of CATV system construction and installation. Located in Tacoma, Wash.

### CABLE T-V CONSTRUCTION, INC.

CATV construction services performed for CATV operators. Iola, Kansas office.

### CAL-TEL CONSTRUCTION CO., INC.

Firm handles all phases of CATV construction. Located in Signal Hill, Calif.

### CAS MFG. CO.

Experienced design, engineering and construction capabilities for new system turnkeys and expansion or modernization of existing systems. Consulting on problems of adapting microwave or FM signals to cable systems. Dallas, Tex.

### CASCADE ELECTRONICS LTD.

System engineering and design. Survey of pole routes, preparation of system maps and cable routes, complete system design. Offices in Port Moody, B. C., Harrisburg, Pa., Cape Canaveral, Fla. and Seattle, Wash.

### CASCADE LINE CONSTRUCTORS

Turnkey engineering. Specialists in CATV system design and construction. Location: Wenatchee, Wash.

### CATV EQUIPMENT CO.

Specialists in all-band systems, providing complete construction services, layout, equipment and installation. Seattle, Wash.

### CATV SERVICES CO.

All kinds of cable system engineering and construction, both new and rebuild. Also microwave engineering and construction. Headquartered in Worland, Wyo.

### C-COR ELECTRONICS, INC.

CATV engineering and construction services.

### CHANNELL COMMERCIAL CORP.

Engineering and consulting for aerial or buried cable system utilizing hermetic housings and closures to protect splice-points, amplifiers, line-extendors, splitters and tap-offs. Recommend cable sleeves, pedestal housings, direct buried housings, cable pressurization, and "Rapid-Lash Helix" cable lashing method. Glendora, Calif.

# SKL

## NEW, ADVANCED CIRCUITS

### CO-AX CONSTRUCTION CO.

Provides thorough engineering, planning and installation. Specializing in complete "turnkey" completions. Complete design of CATV systems from customer maps. Bill of materials provided with bid price, including all necessary components to build system on a turnkey basis. Construction representatives provided on all turnkey jobs. Technical assistance for design of head end, including tower information. Tower site survey using helicopter and contour mapping to determine availability of signals. Requirements for all head-end equipment determined. Microwave systems also designed. (Ameco subsidiary.)

### PETE COLLINS CO.

Denver-based firm does engineering, construction and maintenance on cable systems. Office: Denver, Colo.

### COLLINS RADIO CO.

Collins Radio Company offers complete "E, F & I," capabilities for surveying, engineering, construction, installation, testing and maintenance for microwave relaying of color video and aural signals from "off-the-air" pickup locations to head-end distribution locations.

### COMMUNICATION SYSTEMS CORP.

Complete turnkey engineering for CATV systems. Located in Huntington, N. Y.

### CRAFTSMAN ELECTRONICS

Complete engineering for any type of installation.

### CUSH CRAFT ANTENNA PROD.

Design, engineering and consultation service for CATV antenna systems. Manchester, N.H.

### DANIELS & ASSOCIATES, INC.

Complete engineering for cable system layout, turnkey, estimates, engineering studies. Office in Denver, Colo.

### DAVCO ELECTRONICS CORP.

Complete services include consulting, engineering, feasibility analysis, signal surveys, system layout, equipment and installation. Experienced line crews and technicians aid in getting a new system underway or modify an existing one. Complete warehouse stock of all components and supplies. "Tech-Wagon" laboratory on wheels services head-ends and systems.

### EITEL ELECTRONICS

Design, manufacture and install equipment. FCC licensed engineering qualifications on file. Office in Prescott, Ariz.

### ELECTROLINE TELEVISION EQUIPMENT, INC.

Engineering and construction services. Located in New York City.

### ENTRON

Engineering services for potential systems. Includes actual on-site signal surveys with recording instruments; utility pole make-

ready studies; strand surveys and map preparation, and detailed system layout. Provides theoretical engineering analysis of TV reception in a community. Study is made from detailed topographical maps, TV station projected signal contours, etc. Cost of the service is voided if turnkey contract is awarded to Entron.

### E-Z WAY PRODUCTS, INC.

Design, fabricate and erect all types of towers and antenna supports, including lighting, painting and installation of antennas. Tampa, Fla.

### FAIRCHILD CAMERA AND INSTRUMENT CORP.

Offers systems engineering for professional studio operation required by the CATV operator. Complete line of CCTV cameras. Paramus, N. J.

### FORT WORTH TOWER CO., INC.

Fabrication and erection of towers, reflectors, equipment, buildings, booms and associated equipment.

### GRIFFITH LIBERTY TOWER MFG.

Complete steel tower service. Manufacturing, erection and maintenance. Effingham, Ill.

### HARRIS-McBURNAY CO.

Complete construction services for CATV. Location: Jackson, Miss.

### HENKELS & McCOY, INC.

Specialists in system and design engineering with a heavy background in engineering distribution for CATV system. Competently staffed and completely equipped; ready for any construction job. Headquarters: Elkhart, Ind.

### FEDERAL ELECTRIC CORP.

TV signal survey van for use by CATV operators. Paramus, N. J. (ITT affiliate.)

### JAMPRO ANTENNA CO.

Antenna design for difficult TV pickup areas. Antenna design experience includes extremely weak signal pickup, as well as solving co-channel, and adjacent channel interference problems. Location: Sacramento, Calif.

### JERROLD ELECTRONICS CORP.

Offers "turnkey" construction, engineering and surveys. Jerrold is engaged in systems management and participates in ownership of several CATV operations. Complete services available anywhere in the country.

### KAISER-COX CORP.

Provides detailed systems design through the use of professionally prepared strand maps. Experienced engineers evaluate each situation individually. Assistance provided for head-end design and tower information by qualified technicians. Construction of partial or complete systems, including complete turnkey. Services guaranteed to fully satisfy the customer.

### KILLOREN COMPANY

Construction and maintenance services for CATV systems. Appleton, Wis.

### LENKURT ELECTRIC CO., INC.

Complete "engineer, furnish and install" services, providing microwave equipment and systems for cable systems. Experienced engineers design and install to meet operator's requirements.

### LINDSAY ELECTRONICS

Antenna systems engineered for CATV re-

quirements and for particular reception problems. Located in Lindsay, Ont.

### ARTIE M. LOFTIS CONSTRUCTION

Complete CATV construction services. Office in Malakoff, Texas.

### MALARKEY, TAYLOR & ASSOC.

Professional engineering services; evaluation and testing of plant and equipment; proof of performance tests; engineering statements and experienced, qualified testimony in FCC proceedings or court as expert witness. Head-end and system design; preparation of pole-line and strand maps; assistance in negotiating pole-line attachment agreements. "Custom Construction Program" which involves custom design of system and service as owner's agent throughout construction with complete responsibility for securing bids, selection of equipment, scheduling, supervision of construction, system testing and final acceptance. Office in Washington, D.C.

### MASTER TOWER CO.

Engineer and install towers and passive reflectors. Sioux City, Iowa.

### MICROFLECT CO., INC.

Engineering of stub towers, roof mounts and self-supporting towers to 300 ft. Passive repeaters, ground mounted or tower mounted. Custom fabrication of communications structures for special applications. Crews and equipment available for passive repeater and tower erection, and antenna installation. Salem, Ore.

### MULTI MEDIA ENGINEERING, INC.

Cable television construction and engineering services. Rockville, Md.

### NORAM CABLE CONST. LTD.

System design and construction by qualified CATV personnel. Backed by hundreds of miles of installation experience. Rexdale, Ont.

### ROBERT G. OWENS, INC.

Construction, installers and engineering; Nation wide. Signal Hill, Calif.

### PLANT SERVICE CORP.

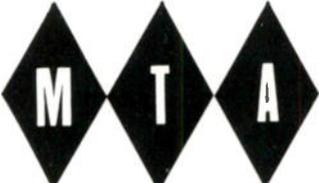
Strand surveys, mapping, line construction. Located in Erie, Pa.

### RF SYSTEMS, INC.

Engineering of antennas and antenna networks. Located in Cohasset, Mass.

### RICHARDS & ASSOCIATES, INC.

Fully capable and experienced in CATV construction. 25 years experience in installation of communications facilities. Carrollton, Ga.



**MALARKEY, TAYLOR & ASSOCIATES**

**CATV**

**Brokers/Consultants/Engineers**

1101 - 17th Street, N. W. • Washington, D. C.  
Phone: Area Code 202 • 223-2345

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## SERIES 7160 LINE SPLITTERS

### ROHN MANUFACTURING CO.

Complete engineering service is available for tower installations and complete systems, including lighting, structures, antennas and coax. Peoria, Ill.

### SCIENTIFIC-ATLANTA, INC.

Turnkey head-end engineering and construction custom antenna engineering for difficult reception problems. Atlanta, Ga.

### EDWARD SHAFER & CO., INC.

Engineering feasibility studies including signal surveys, tower site location and headend designs. Preparation of strand maps. Design of distribution systems on the basis of established performance specifications. Solicitation and negotiation of construction contracts. System "trouble-shooting." Qualified CATV engineers available to review technical difficulties and make recommendations to correct them. Office: Washington, D. C.

### STAN SOCIA CORP.

Complete engineering and construction of CATV systems on turnkey basis or construction only. Experienced engineers and installation crews. Nationwide. Tyler, Texas.

### SONY CORP. OF AMERICA

Application engineering and systems engi-

neering to assist in the planning of systems utilizing video tape recorders. Inglewood, Calif. (Industrial Products Division.)

### SPENCER-KENNEDY LABS

Staff of TV systems engineers maintained to perform signal and pole line surveys, strand mapping, system layout and design plus installation supervision for antenna site and distribution plant construction. Complete turnkey construction and installation contracts let. Includes initial system design, materials and equipment supply, building of plant.

### STROMBERG-CARLSON CORP.

Complete end-to-end systems capability providing engineering and services from preliminary system estimate to turn-key system construction. The system will be engineered and built by personnel with years of experience in CATV and telecommunication systems. Turn-key construction from tower and antennas through distribution system, ready for subscriber connections. Rigid standards govern all phases of installation. Provision is made for preparing and filing all technical exhibits required under federal, state and local laws.

### SYSTEMS, INC.

Complete turnkey services. Design, engineering and construction. Feasibility surveys, site and signal surveys, strand maps and system layouts, equipment requirements and financial analysis. Miami, Okla. (Subsidiary of National Teline Corp.)

### SURFACE CONDUCTION, INC.

Engineering and installation of VHF or UHF transmission line systems employing low loss, light weight broadband G-line. New York City.

### SYSTEM CONSTRUCTION CO.

Complete facilities to construct CATV systems including surveys, engineering and planning. Complete turnkey operations. Special assistance in obtaining financing and leasing programs. Hoboken, N. J. (Subsidiary of Viking.)

### TELECTRIC CONSTRUCTION CORP.

Complete coaxial plant construction, electronic equipment installation, tower erection, antenna mounting and maintenance of systems. Kirkwood, Mo.

### TELE-SIGNAL ELECTRONICS LTD.

Layout and design of CATV systems. Office: Vancouver, B. C.

### TELESYSTEM SERVICES CORP.

Offers design, engineering and complete construction services for CATV systems. (Subsidiary of TeleSystems Corp.)

### T.I.C. ENGINEERS, INC.

CATV systems design. Aerial photography and plotting by telecommunications engineers. Offices in U. S. and England, with headquarters in Billings, Mont. (Subsidiary of Lear Siegler, Inc.)

### UTILITY TOWER CO.

Design, fabricate and erect CATV radio television and microwave towers all over the United States. Accessories include reflectors and a complete selection of antenna booms. Plant and offices: Oklahoma City, Okla. Division office: Mayfield, Ky.

### WILLIAMS CONSTRUCTION CO.

Specializing in CATV construction and installation. Office in Glasgow, Ky.

# DIRECTORY OF COMMUNICATIONS ATTORNEYS

The following section includes names and addresses of all attorneys currently practicing before the Federal Communications Commission. Also listed are their affiliations with law firms, if any. The membership of the Communications Bar Association is a matter of record, and unlike other sections of this Directory, the material listed below is neither solicited from nor supplied by the persons or firms listed. Therefore, these listings in no way constitute a solicitation of business by these individuals or firms.

## - A -

Adams, Miss Eva, Apt. 1221 West, The Towers, 4201 Cathedral Ave., N.W., Washington, D.C. 20016, Ph. (202) WO 4-2133

Affleck, Gordon Burt, Beehive Bank Building, Salt Lake City, Utah 84111, Ph. (801) 364-2511 Ext. 2241

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Ashley, George E., 32 Avenue of the Americas, New York, N.Y. 10013, Ph. (212) 393-6708

## - B -

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Bahakel, Izas, 729 - 21st St. North, Birmingham, 3, Ala., Ph. (205) 324-1574

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Baker, Warren E., Suite 640, Shoreham Building, Washington, D.C. 20005, Ph. (202) RE 7-8050

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Barnes, Maurice R., Barnes & Neilson, Munsey Building, Washington, D.C. 20004, Ph. (202) ST 3-7670

Baron, Theodore, Scharfeld, Bechhoefer & Baron, 5th Floor, 1710 H St., N.W., Washington, D.C. 20006, Ph. (202) 298-6030

Barrick, William H., Barrick & Jackson, 228 South Main Street, Rockford, Illinois, Ph. (815) 962-6611

Bartell, Lee B., 205 E. 42nd St., New York, N.Y. 10017, Ph. (212) LE 2-9050

Bechhoefer, B. G., 2943 Benton Place, N.W., Washington, D.C. 20008, Ph. (202) AD 4-1709

Bechtel, Gene A., 1815 H St., N.W., Washington, D. C. 20006, Ph. (202) 347-8500

Becker, A. Harry, 1001 Pennsylvania Building, Washington, D.C. 20004, Ph. (202) EX 3-3003

Becker, Mortimer, Becker and London, 300 Park Avenue, New York, N.Y. 10022, Ph. (212) 421-6340

Beelar, Donald C., 800 World Center Bldg., 16th & K Sts., N.W., Washington, D.C. 20006, Ph. (202) ST 3-3200

Belaval, Edgar S., Dept. of Justice of Puerto Rico, Box 1902, San Juan, Puerto Rico 00903, Ph. 723-2213

# SKL

## COLORBURST

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**Bell, James F.**, 1001 Connecticut Ave., N.W., Washington, D.C. 20036, Ph. (202) EX 3-5333

**Bellon, Joseph P.**, 19 Leeds Drive, Port Washington, N.Y. 11050, Ph. (516) 767-4897

**Berfield, Morton L.**, Cohen and Berfield, 711 - 14th Street, N.W., Washington, D.C. 20005, Ph. (202)-737-1761

**Berk, S. Bernard**, 853 Copley Road, Akron, Ohio 44320, Ph. (216) 762-8811

**Berkman, Jack N.**, 708 Sinclair Building, Steubenville, Ohio, Ph. (614) AT 2-9766

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**Bernard, Lawrence J., Jr.**, 1000 Ring Bldg., Washington, D.C. 20036, Ph. (202) FE 8-2566

**Bernton, William P.**, Mallick & Bernton, Colorado Building, Washington, D.C. 20005, Ph. (202) ST-3-7371

**Bilger, Donald E.**, Smith & Pepper, 1101 17th St., N.W., Washington, D.C. 20036, Ph. (202) 296-0600

**Black, Wayne V.**, Keller & Heckman, 1712 N St., N.W., Washington, D.C. 20036, Ph. (202) 296-2700

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**Blake, Jonathan Dewey**, Covington and Burling, 701 Union Trust Building, Washington, D.C. 20005, Ph. (202) RE 7-5900

**Blooston, Arthur**, 908 - 20th St., N.W., Washington, D.C. 20006, Ph. (202) FE 7-8020

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**Blum, William, Jr.**, 1815 H Street, N.W., Washington, D.C. 20006, Ph. (202) RE 7-6333

**Blume, Jack P.**, Fly, Shuebruk, Blume & Gaguine, 1612 K St., N.W., Washington, D.C. 20006, Ph. (202) ME 8-6190

**Bohn, Robert H., Jr.**, 808 Munsey Bldg., Washington, D.C. 20004, Ph. (202) 638-2193

**Booth, Robert M., Jr.**, Booth and Lovett, 1100 Vermont Avenue, N.W., Washington, D.C. 20005, Ph. (202) 296-9100

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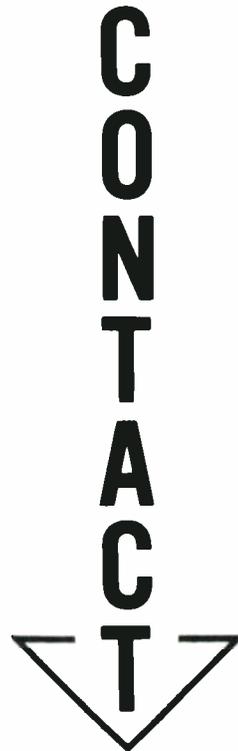
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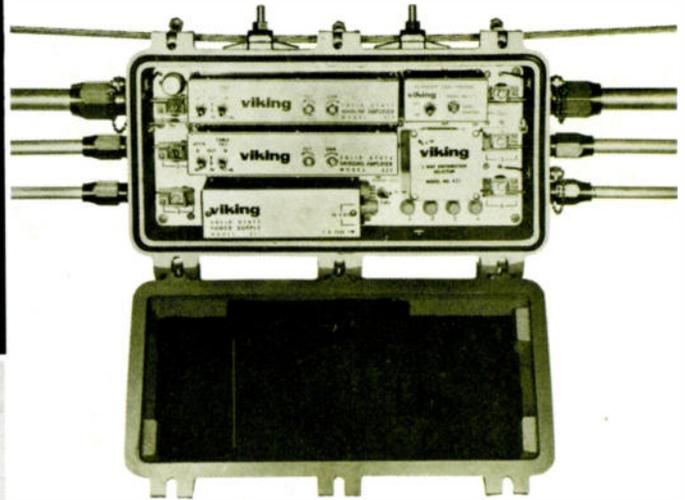
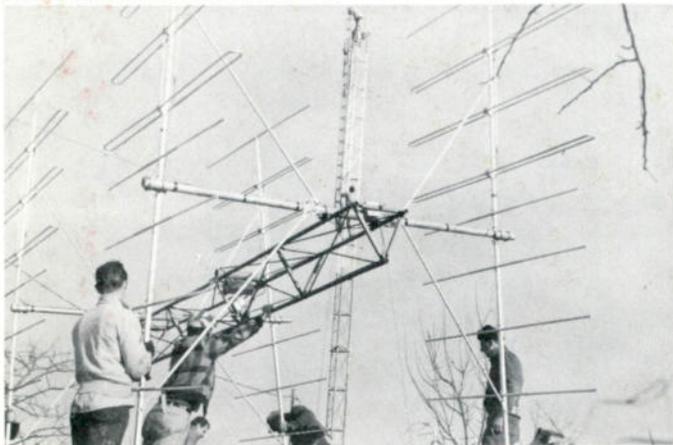
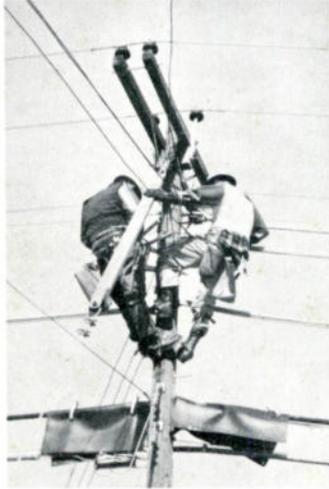
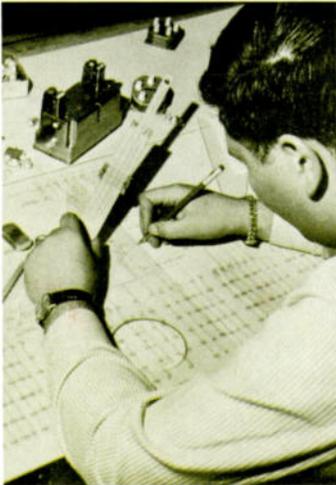
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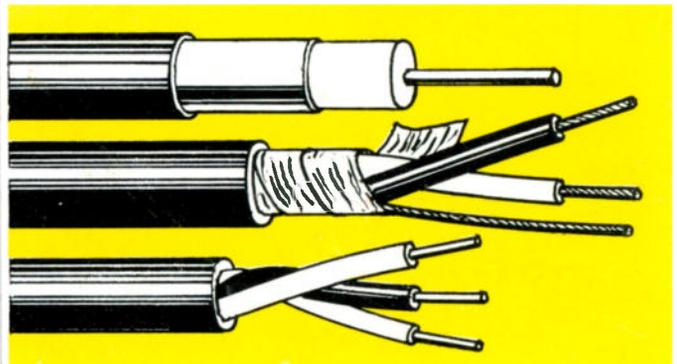
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