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SPECIAL ANNUAL DIRECTORY ISSUE

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The Professional Television Journal

FEB.

1963

TV horizons

ENGINEERING-BUYING GUIDE TO EQUIPMENT FOR

- * CATV
- * MATV
- * CCTV
- * FRINGE TV
- * BROADCAST TV



- Permits adjacent-channel operation on high and low bands
- Single unit processes, controls, and delivers antenna signal on any channel—including same channel

You can now offer CATV reception on all twelve VHF channels with no adjacent-channel interference! By adding a Jerrold Channel Commander to your head end for each adjacent channel desired, you achieve 12-channel operation with minimum equipment.

The Channel Commander is a complete, compact unit which processes, controls, and delivers clear, interference-free signals on any desired VHF channel, including direct operation on the received frequency in both the high and the low bands. In conjunction with Jerrold microwave and all-band-system equipment, the Channel Commander gives you command of the entire VHF band, lets you offer CATV subscribers the widest choice of entertainment possible over their present TV sets.

Channel Commander's compact modular design and compatibility with your present headend equipment lets you "go 12 channels" immediately or in channel-at-a-time stages. Call your Jerrold factory representative or write for complete technical data.



ELECTRONICS CORPORATION Community Systems Division, Dept. ICS 102 A subsidiary of THE JERROLD CORPORATION

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FCC SEEKS REGULATION OF CATV MICROWAVE

The FCC has released a proposed rule making docket which would provide the Commission with regulatory powers over the granting of CATV system microwave feeder systems.

The rule making docket was released on December 14th with comments due by February 15th. Reply comments are due by March 1.

In its rule making proposal, the Commission noted "The problem of competition caused by CATV systems (as well as by boosters, translators and satellite stations) to television stations in remote small communities has been of concern to the Commission for some time. As an outgrowth (of this concern) the Commission recommended to Congress legislation which would give the Commission the express authority, with respect to the operation of CATV systems, to issue rules and regulations in the situations where local television stations are operating under inequitable disadvantages in competition with CATV sytems. This legislation was introduced in the 87th Congress was S.1044 and H.R. 6840 but was not enacted."

The Commission now seeks specific authority over CATV systems which seek to bring in on microwave the signals of outlying telecasting stations. It is proposed that a rule making allow the commission to grant microwave authorizations to CATV systems with the following conditions attached to the grants:

(A) If the CATV system to be served (by the microwave) is in an area served by an existing local TV station, such authorization would be granted on the condition that the CATV to be served would not duplicate any program being carried by the local station, and on the condition that if the licensee or permittee of such local station so requests, the CATV would carry the signal of the local station without material degradation.

(B) Similar conditions would be imposed if there is a local tele-



vision station authorized, but not constructed or operating, and also if there is a television channel assigned or subsequently assigned to the area served by the CATV system.

The above conditions would be imposed if the CATV serves within the Grade A contour of a television station.

CLOSED CIRCUIT TV WOULD GET MICROWAVE

Comments were due on January 31 on a proposal filed by the National Educational Television and Radio Center (NET) which seeks to allow the transmission of material intended solely for distribution by closed circuit facilities over the normal STL (studio-transmitter links) and TV intercity relay microwave systems.

The proposal asks for a modification of Parts 4 and 11 of the Commission's rules whereby an educational telecaster could direct specific ETV program material to other cities or school systems via its normally licensed STL and inter-city microwave links for distribution on closed circuit systems in lieu of regular re-transmission by another or additional ETV telecasters. The Commission proposed modification of sections 4.631 and sections 11.2.

A WIRED TV SYSTEM FOR NEBRASKA ETV'S?

Governor Frank B. Morrison of Nebraska and Nebraska state legislators met recently with J. H. Bowman, Vice President of Superior Cable Corporation, Hickory, North Carolina. The North Carolina firm was in Nebraska to discuss a means of achieving a statewide ETV system using closed circuit techniques wherever possible.

Superior's Bowman noted that while he advocates making as full use as possible of broadcast television techniques, he is quick to point out the benefits of closed circuit wired television when it is used to supplement an existing broadcaster system.

Part of the new Governor's platform called for full use of the five channels allocated to the state for ETV purposes. Following the meeting between Superior Cable and the Governor, Governor Morrison stated he would be investigating the advantages of a closed circuit system with a special eye towards the advantages of multi channel transmission and distribution that cable offers.

LARGEST EVER CANADIAN CATV SALE

A complex CATV system actually incorporating 8 separate distribution systems fed from a common head end has sold in British Columbia for \$2,000,000.

Vancouver Cablevision, Ltd. has purchased the 8 systems, which are made up of Quadra Cable Vision Ltd., TruVu Television Ltd., Welsh Cable Vision Ltd., Can Video Cable Vision Ltd., Variety Cable Vision Ltd., Castle Cable Vision Ltd., Farwest Cable Vision Ltd., and Pacific Cable Vision Ltd.

The area served has a potential of 40,000 homes and the current subscriber total is 14,000. The new firm plans an expansion project this spring with the addition of two new channel making a total of nine channels plus FM available on the system.

The sale price, in excess of two million dollars, is believed to be the largest price ever paid for a CATV network in Canada.

TELEVISION HORIZONS

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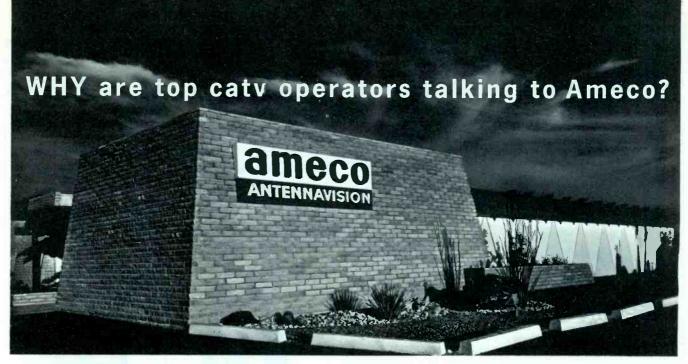
THIS MONTH'S COVER: Antenna photographs on the cover of our Annual Equipment Directory Issue has become a tradition at TVH. This amazing photo shows a workman for Fort Worth Tower Construction Company, Fort Worth, riding to the top of a tall CATV tower at McAlester, Oklahoma. Antennas by TACO, pre-amplifiers by Jerrold Corporation. Our industry at work!

EDITORIAL

A very recent microwave proposal made by the FCC smacks of complete disregard for learned opinions voiced by some of the country's top men. The proposal simply makes the use of some of the microwave frequencies prohibitive unless certain conditions are agreed to. The conditions as specified amount to regulation of the CATV industry. This is a power that the FCC would like to have but has so far been denied by higher authority. So, in order to obtain the end that the FCC desires, they have evidently decided that a series of 'conditions' may be imposed to give them regulatory advantage. Also, another recent ruling which allows translators into the same area as an existing CATV system, makes it clear that the FCC is intent upon creating it's own interference. At least it appears so. At this stage it looks like the FCC is acting to satisfy anyone but the television viewer and at the same time disregarding the fact that no provision is set forth for the regulation of CATV systems. If the proceedings of the past are sufficient indication, it looks like a bit of discrimination is being practiced.

I would heartily recommend that if you are interested in preserving the rights given to you, that you contact the NCTA at the earliest possible time and lend them your support. If you do not belong to the NCTA at this time, by all means join them.

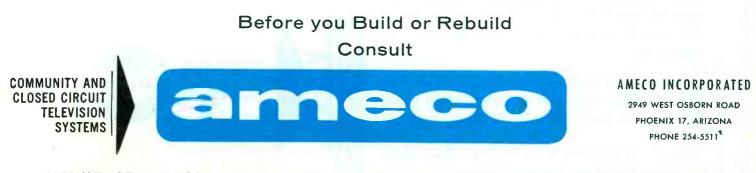
RLM



BECAUSE Ameco experience assures them Profits!

AMECO . . . Experienced in every phase of CATV . . . System Operation . . . Microwave Operation . . . Equipment Manufacturing . . . System Design . . . System Construction . . . Offers the Most Balanced . . . Most Integrated Service Available to the Industry!

AMECO Men are Specialists. They became Specialists by doing a better job. For over ten years, we at AMECO have done a better job of designing and manufacturing CATV equipment. AMECO Quality Equipment means efficiency and economy for your system. AMECO Men are system-trained to build the best system for the lowest cost. Manufacturing is at highest quality level and the newly expanded AMECO plant assures you prompt delivery. If you are in CATV, or planning to enter CATV, we can show you how to have a smooth running profitable operation.



MANUFACTURER OF QUALITY BUILT PRECISION ENGINEERED EQUIPMENT FOR CATV

STL, ETV, CATV, CCTV and Data

COLLINS OFFERS MICROWAVE FOR <u>EVERY</u> VIDEO APPLICATION



What are your requirements? Educational TV systems? Intercity TV relay? Network transmission systems? Whatever they are, you can depend on Collins to meet your specific requirements for microwave video relay systems.

Collins offers you a complete microwave equipment line. You'll find equipment for short haul systems. Long haul systems. Microwave in the 6 kmc and 12 kmc frequency bands. Equipment with power from 50 mw to 5 watts. Receiver IF bandwidth of 15 or 25 mc. Complete ac or dc operation. Remodulating or heterodyne repeaters.

Our complete product line is just one reason why you should call Collins for microwave TV transmission systems. The other is systems engineering experience.

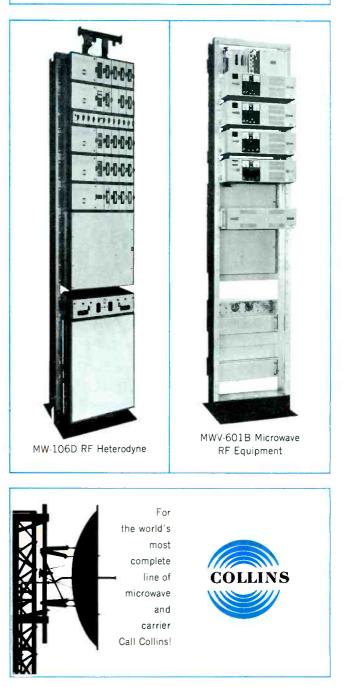
Collins engineers have designed and built microwave systems for video applications of all kinds. Some have been relatively simple. Others have been complex and highly sophisticated. When you call Collins, this wide range of experience in microwave systems design and application is brought to bear on your particular system needs.

Before you invest in any microwave equipment for your video application, call Collins. Let us show you what our experience in design, engineering, manufacturing and application can do for you. In economy. In systems flexibility. In reliability.

Call Collins in Dallas for the most complete line of microwave equipment for every video application. Area Code 214, AD 5-2331.

COLLINS RADIO COMPANY, Microwave Systems Division, Dallas, Texas.

POWER	IF BANDWIDTH
100 mw	15-25 mc
1 w	15-25 mc
5 w	15-25 mc
50 mw	15-25 mc
$500 \mathrm{mw}$	15-25 mc
	100 mw 1 w 5 w 50 mw



1963 DIRECTORY ISSUE

BROADBAND EQUIPMENT

Head-End Amplifiers

BLONDER TONGUE - BENCO

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 twinlead; solderless "quick-disconnect" terminals for 75 ohm co-ax. Amplifier uses low noise framegrid tubes. Complete with remote power supply. Net: \$66.00.

Low noise amplifier, Model HAB. 25 db minimum gain. Both 300 ohm inputs and outputs. Separate high and low band gain controls. Uses frame-grid tubes. Maximum output (across 75 ohms): 0.9 volts for less than 1% cross-modulation (low band); 0.6 volts for less than 1% crossmodulation (high band); 2.5 volts for less than 3% cross modulation (low band); 1.0 volts for less than 3% cross-modulation (high band). Net: \$43.65.



Pacemaker 35 db TV/FM amplifier, Model PM-2. Broadband amplifier with low band gain of 35 db and high band gain of 30 db. Noise figure 6 db average; maximum output 2 volts per band Separate gain controls for each band allowing up to 10 db change. PNS.

DAVCO ELECTRONICS CORPORATION

Functional design head end. Handles five adjacent channels (low band). Complete control of audio and video carrier levels. 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 4 racks which are bonded together. Comes fully aligned and ready for service. All connecting cables are pre-assembled. All conversions are crystal-controlled. Tubes are selected, long-life types. Each system is custom designed to your specifications and uses rugged Entron equipment. Write for further information.

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 offchannel 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 multichannel rack mount provides complete head end installation at minimum space requirements. PNS. (*Specify channel.)

Line Blonder tongue - Benco

Trunkline amplifier, Model 1221. Flat response, low noise figure, low distortion amplifier utilizing frame-grid tubes operated at less than 70% of rated maximum. Tubes are fixed biased with cathode degeneration to assure minimum change in response with tube changes. Unit includes built-in, factory set line attenuation equalizer. Low harmonic distortion. Net: \$280.00.



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. Net: \$93.50.

COMMUNITY ENGINEERING CORP.

Low and sub-band amplifier, Model 100-C. Covers 10 to 110 Mc. Gain: 25 db. Designed for cable powering from 24 vac source. Messenger mounting. Output: 40 dbmv recommended for operation with tapered levels. Weatherproof enclosure. 75 ohm input and output. UHF connectors. Price: \$149.00.

Low and sub-band amplifier, Model 100-C-ALC. Same characteristics as 100-C except has automatic level control feature. Price: \$199.00.

Low and sub-band amplifier Model 108, CECO print. Covers 10 to 108 Mc. 40 db gain amplifier. 75 ohm input and output. Price: \$139.50.

Low and sub-band amplifier, Model 108-E, CECO print. Covers 10 to 108 Mc 40 db equalized amplifier 75 ohm input and output. Price: \$149.50. Low and sub-band amplifier, Model 110. Gain: 45 db minimum at 110 Mc. Noise figure: 7.5 db. Manual gain control range of 15 db. 75 ohm input and output. UHF connectors. Built-in power supply. Available in several mounting configurations. Price: \$250.00.

Low and sub-band amplifier, Model 110-ALC. Same characteristics as 110 except has built-in automatic level control. Also available in several mounting configurations. Price \$280.00.

All-band amplifier, Model 220. Covers 30 to 220 Mc. Flat response. Minimum gain of 25 db at 220 Mc. Noise figure: 10 db. Slope: 12 db, 54 to 216 Mc. 10 db manual gain control range. 75 ohm input and output. Built-in power supply. UHF connectors. Available in several mounting configurations. Price: \$250.00.

All-band amplifier, Model 220-ALC. Same characteristics as 220 except has automatic level control. Available in several mounting configurations. Price: \$280.00.

ENTRON



Broadband amplifier, Model FA-283. Covers Channels 2 thru 13 plus FM. Noise figure 8 db. Separate high and low band gain controls. Gain: 38 db high band and low band, 32 db FM. 75 ohm input and output impedance. Net: \$149.25.

Broadband amplifier, Model SA-23. Covers Channels 2 thru 13. Noise figure 7.5 db. Gain: 38 db on both high and low band. Separate high band and low band gain controls. Flat frequency response. Designed for apartment buildings, motels, hotels, hospitals and schools. Net: \$120.00.



Low band trunkline amplifier, Model LRA-40C. Operates as low band VHF repeater. Incorporates ALC circuit. Gain at Channel 6: 40 db. Tilh: 7 db (Channel 6 over Channel 2). Noise figure: 7.5 db. Maximum output level: +50 dbmv (single amplifier--Channel 6). Uses 10,000 hour tubes and regulating transformer. "Sister" amplifier to Entron's HRA-400 for expansion to allband operation. Net: \$299.25.

Low band trunkline amplifier, Model LRA-40D. Operates as low band VHF repeater. Incorporates ALC circuit. Gain at Channel 6: 35 db. Tilt: 4 to 6 db (Channel 6 over 2). Maximum output level: (single amplifier) +52 dbmv at Channel 6. Uses 10,000 hour tubes and regulating transformer. Net: \$255.00.

High band trunkline amplifier, Model HRA-400. Operates as high band repeater amplifier. Incorporates ALC circuit. Gain at Channel 13: 34 db. Till: 3 db (Channel 13 over 7). Maximum output level: + 47 dbmv (single amplifier). Uses 10,000 hour tubes and regulating transformer. Flat frequency response. Net: \$405.00. All-band trunkline amplifier, HRA-406. Low and high band repeater. Used as trunkline midspan compensator. Adjustable tilt. Flat frequency response. Gain: 4 db, low band; 34 db, high band. Maximum output level: + 30 and + 47 dbmv for low and high band respectively. High and low band gain controls. High band ALC maintains 1 db change in output level with 10 db input variation. Net: \$431.25.

All-band trunkline amplifier, HRA-6406. Same characteristics as HRA-406 including regulating transformer except designed for remote powering. PNS.

HOLT ELECTRONIC RESEARCH

Low band line extender amplifier, Model LEA. 5 to 8 db variable tilt. Manual gain control. Output: 40 db. Gain overall: 40 db at Channel 6. 75 ohm input and output. Self-contained power supply. Net: \$59.95.

Low band line amplifier, Model LBB-MAN-40. 4 to 9 db variable tilt. Manual gain. Output: 40 db. Gain: 40 db at Channel 6. Utilitizes an electronic regulator to minimize output changes with changes in line voltage. 75 ohm input and output. Self-contained power supply. Net: \$95.00



Low band line amplifier, Model LBB-MAN-50. 4 to 9 db variable tilt. Manual gain. Output: 45 db. Gain: 50 db at Channel 6. Utilizes electronic regulation. 75 ohm input and output. Self-contained power supply. Net: \$150.00

Low band line amplifier, Model LBB-AGC. Manual or automatic gain control. Output: 40 db. Gain: 40 db at Channel 6. Tilt variable from 4 to 9 db. 75 ohm input and output. Self-contained power supply. Net: \$204.00

All-band line amplifier, Model LH-BB-MAN. Low and high band gain controls. Variable tilt, low and high band, 3 to 6 db. Gain: 40 db, low band; 48 db, high band. Insertion pad for low band. Covers all channels plus FM. Output: 40 db, low band; 48 db, high band. Selfcontained power supply. Net: \$165.00. All-band line amplifier, Model LH-BB-AGC. Sepa-

All-band line amplifier, Model LH-BB-AGC. Separate AGC circuit for low and high bands. Manual or automatic gain control. Tilt: 4 to 9 db, Channels 2-6; 2 to 4 db, Channels 7-13. Gain: 40 db at Channel 6; 46 db at Channel 13. 75 ohm input and output. Self-contained power supply. Net: \$425.00.

Low band line amplifier, Model LBB-AGC-50. Manual or automatic gain control. Output: 40-45 db. Gain: 50 db at Channel 6. Tilt variable from 3 to 6 db. Self-contained power supply. 75 ohm input and output. Designed for 0 db input levels. Net: \$225.00.

All-band line amplifier, Model LH-BB-MAN. Separate low and high band amplifiers. Also separate gain controls. Covers all channels plus FM. Gain: 10 db, low band; 45 db, high band. Output: 40 db, low band; 45 db, high band. Tilvariable from 3 to 6 db on low band, 3 db high band. 75 ohm input and output impedance. Self-contained power supply. Net: \$165.00.

High band line amplifier, Model HBB-AGC, Designed to match with low band equipment. Unit has internal filters for low and high band. Tilt: 3 to 6 db variable. Gain: 46 db at Channel 13. Output: 45 db. Manual or automatic gain control. 75 ohm input and output. Selfcontained power supply. Net: \$225.00.

All-band terminating amplifier, Model LH-BA7-4. Will drive four feeder or trunk lines. Gain: 21 db (Channel 6) and 25 db (Channel 13). Input and output impedance 75 ohms. Variable tilts. Net: \$175.00

INTERCONTINENTAL ELECTRONICS CORP.

Low band amplifier, Model ABB-14. Covers Channels 2-6 and FM. Combines with ABB-13 for allband conversions. Has automatic overload control that can hold +2 db output for +10 db input. Slope adjustable from 2 to 5 db. Output level: .25 v/channel maximum, or .1 v/channel cascaded. 75 ohm input and output impedance. Self-contained power supply. Gain. 35 db at 88 Mc. Net: \$135.00.



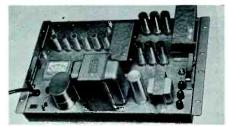
Low band amplifier, Model ABB-16, Covers Channel 2-6 and FM. Self-contained power supply. Gain: 35 db midband. Adjustable slope 0 to 4 db rising. Output: .3 volts per channel or 2 volts composite. 75 ohm input and output impedance. Flat bandpass. Net: \$75.00.

All band amplifier, Model ABB-17. Covers Channels 2-13. Self-contained power supply. Low noise input. Gain: 35 db midband, both upper and lower bands. Output level: .3 volts/channel or 2 volts composite. 75 ohm input and output impedance. Adjustable slope 0 to 4 db rising. Adjustable gain controls. Net: \$95.00.

JERROLD ELECTRONICS CORP.

High band line extender, Model HDX-713. Designed to reamplify TV channels 7 thru 13. Incorporates a low band, by-pass filter which passes signals from 0 to 95 Mc around the amplifier. Can be powered from 117 vac or 24 vac. Gain: 20 db. Flat response. Noise figure: 12 db. Output: 40 dbj. 75 ohm input and output. Use CPS-4 power supply for remote powering. PNS.

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 inline or for line-bridging applications. Built-in power supply. Uses P.I.P. or B.T.C. pads. PNS.



Low and sub-band amplifier, Model LSA-795. Built-in variable line equalizer. Built-in voltmeter. Response: 7 to 95 Mc. Voltage regulated power supply and "Stabi-Life" feature. Built-in distribution amplifier. Gain: 36 db maximum at 90 Mc. Noise figure: 8 db. Manual gain control variable over 0-4 db range. Output: 42 dbj at 90 Mc. PNS. 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 weatherproof with iridite finish. Quick mount back plate and twist lock AC disconnect plug. PNS. RF distributed 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 @ 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. Order AGC-213 for model with AGC. PNS.



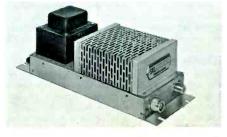
Push-pull sub-channel amplifier, Model SDX-440. Covers 4 to 47 Mc. 60 db second order beat suppression. Voltage stabilized transformer. Built-in AGC. Manual gain and tilt control. Builtin filter by-pass. Gain: 25 db (at 47 Mc). 6 db gain control range. Output: 36 dbj (operating). 75 ohm input and output impedance. F-61 fittings. Self-contained power supply. PNS.

SPENCER-KENNEDY LABORATORIES



Low band amplifier, Model 211C. Covers 10-100 Mc. Gain: 33 db at 88 Mc. Choice of gain control, either manual or automatic using external 830 ALC or thermatic using external 832A Thermatic Gain control. Regulated, self-contained power supply. Cup core type transformers at the input and output provide excellent impedance match to the line. Rack or cabinet mounting. Net: \$328.00

All-band amplifier, Model 222A. Covers 40 to 216 Mc. Sloped response to square root of frequency. Gain: 28 db at 216 Mc. Two position slope control switch. Choice of gain control, either manual (12 db), thermatic (3 db) using external 832A Thermatic Gain control or 830 ALC unit. Regulated power supply. Cascadable mainline unit. Rack or wall mounting. Net: \$336.00



All-band line extension amplifier, Model 2098. Frequency range: 20 to 216 Mc. Gain: 27 db at 216 Mc. Cabinet mounting. Noise figure under 14 db over entire band. 10 db manual gain control. Low cost distribution amplifier with mainline dependability. 115 vac powered. Net: \$127.00



WHY JERROLD BUILDS MORE CATV SYSTEMS on a "turn-key"* basis than all other manufacturing-contractors combined!

There's ample reason: Jerrold simply gives the owner moretakes every bit of responsibility along the way:

Check this typical Jerrold CATV "turn-key" package:

- 1. Antenna-site signal survey.
- 2. Pole-line survey (and assistance in dealing with utilities).
- 3. Complete systems engineering.
- All equipment and materials, both construction and electronic—from the "antenna shack" to the "house drop".
- 5. Construction by the largest, most highly skilled force in the industry.
- 6. Activation of the new system.
- 7. Thorough checkout.
- 8. Training of your personnel in system operation and management.

Some of the new CATV systems built by Jerrold

Chippewa Falls, Wisc. Eau Claire, Wisc. Escanaba-Gladstone, Mich. Glasgow, Mont. Haskell, Texas Johnstown, Pa. Longport, N.J. Manhattan, Kan. Marseilles, III. Maysville, Ky. Meuntain Home, Ark. Myntle Beach, S.C. Ocala, Fla. Ottawa, III. Portsmouth, Ohio Roswell, N.M. Salisbury, Md. Somerset, Ky. Stamford, N.Y. Stamford, Texas Tyrone, Pa. Wilmington, N.C.

9. Delivery of the fully operating system—on schedule. 10. COMPLETE FINANCING—on terms to meet your needs.

Small wonder, then, that system owners have found it simpler, faster—and cheaper—to rely on Jerrold from beginning to end rather than attempt to pull all the elements together themselves. Small wonder that Jerrold start-to-finish installations during the past year alone added facilities to service over a quarter million new CATV subscribers (see list below).

If you want the peace of mind that comes of dealing with a thoroughly integrated organization that knows your needs—leave it to Jerrold.

"turn-key": You order the system built—we turn the key over to you when it's running full-tilt.



ELECTRONICS CORPORATION A subsidiary of The Jerrold Corporation Community Systems Division Headquarters Office, The Jerrold Building

Philadelphia 32, Pa. Telephone 215-BAidwin 6-3456

Bridging

AMECO

All-band bridging amplifier, Model ATB-10. Available with either 2 or 4 outputs. Gain: 10 db. Maximum output level: 40 db. Plug-in pads in 3 db steps for control of amplifier gain. Noise figure: 8 db with 0 db pad. Tilt control range: 15 db. Bandwidth: 40-220 Mc. Provides minus 15 vdc on each output for cable powering line extenders. Net: \$135.15.

All-band bridging amplifier, Model ATB-10-C-Same characteristics as ATB-10 except designed for remote cable powering from 24 vac source. PNS.

Low band bridging amplifier, Model ABL-911. Four distribution line outputs. Gain: 20 db. Plug-in pads in 3 db steps and 3 db manual gain control. External tilt control. Noise figure 5.5 db. Maximum output level: 46 db. Utilizes regulating transformer. Isolation: 20 db. Net: \$107.75.

Low band bridging amplifier, Model ABL-811. Same characteristics as ABL-911 except weatherproof version. Net: \$124.47.

Low band bridging amplifier, Model ABL-611. Unity gain amplifier with matched 4-way output. Low insertion loss. Maximum output: 0.31 volts/ 5 channels. Utilizes 10,000 hour tubes. Selfcontained power supply. Net: \$65.75.

Low band bridging amplifier, Model ABL-711. Same characteristics as ABL-611 except weatherproof version. Net: \$75.00.

ENTRON



Low band bridging amplifier, Model BA-4C. Four distribution line outputs. Factory aligned to provide higher gain on low channels to compensate for normal tilt in the preceding trunkline amplifier. Gain: 3 db at Channel 2 and unity gain at Channel & ... channel bandwidth. 75 ohm thru line and 75 ohm distribution line output. RF isolation between input and output is 45 db. Net: \$112.50.

Low band bridging amplifier, Model BA-4CL Same characteristics as the BA-4C except uses 10,000 hour tubes. PNS.



Low band bridging amplifier, Model BA-254. Four distribution line outputs. Gain: 20 db (bridging gain to each output). Maximum output level—5 channel operation: +42 dbmv (noncascaded). Manual gain control and plug-in attenuators provide ample control of gain. Self-

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contained power supply. Net: \$179.25.

Low band bridging amplifier, Model BA-254R. Same characteristics as the BA-254 except utilizes regulating transformer. PNS.

Low band bridging amplifier, Model RBA-6254. Same characteristics as the BA-254 except utilizes regulating transformer and is designed for remote powering (power requirement-60 vac at 0.7 A.). PNS.

All-band bridging amplifier, LHB-154. Four distribution line outputs. Gain: 15 db. Maximum output level: +40 dbmv. Low and high band controls. Thru line attenuation less than 1 db. 10,000 hour tubes. Self-contained power supply. Net: \$266.25.

ALL-band bridging amplifier, LHB-154R. Same characteristics as the LHB-154 except utilizes regulating transformer. PNS.

All-band bridging amplifier, LHB-6154. Same characteristics as the LHB-154 except utilizes regulating transformer and is designed for remote powering. PNS.

All-band bridging amplifier, Model LHB-254. Four distribution line outputs. Gain: 25 db. Maximum output levels: +40 dbmv. Low and high band gain controls. Thru line attenuation less than 1 db. 10,000 hour tubes. Self-contained power supply. Net: \$292.50.

All-band bridging amplifier, Model LHB-254R. Same characteristics as LHB-254 except utilizes regulating transformer. PNS.

All-band bridging amplifier, Model LHB-6254. Same characteristics as LHB-254 except utilizes regulating transformer and is designed to be remotely powered. PNS.

Low band bridging amplifier, Model BA-134-Four output distribution amplifier. Gain: 13 db at Channel 2 (factory aligned for 4 db tilt Channel 2 over 6). Maximum output level: (5 channel operation) +43 dbmv noncascaded. Manual gain control. Self-contained power supply. Net: \$157.50.

Low band bridging amplifier, Model BA-134-R. Same characteristics as BA-134 except utilizes regulating transformer. PNS.

Low band bridging amplifier, Model BA-6134-Same characteristics as BH-134 except utilizes regulating transformer and is designed for remote powering. PNS.

HOLT ELECTRONIC RESEARCH



Low band bridging amplifier, Model BA-1-4. Low output loss, transformer coupling on output, variable till. Gain: 3 db at Channel 6. Self-contained power supply. Output: 45 db, Channel 6. Designed to drive 4 sub-trunk lines. Net: \$80.00.

Low band bridging amplifier, Model BA-2-2. Low output loss, transformer coupling on output, variable tilt. Gain: 21 db at Channel 6. Self-contained power supply. Output: 46 db, Channel 6. Designed to drive two sub-trunk lines. Net: \$89.00.

Low band bridging amplifier, Model BA-2-4 Same characteristics as BA-2-2 except has gain of 17 db and designed to drive four sub-trunk lines. Net: \$98.00.

Low band bridging amplifier, Model BA-3-4 Same characteristics as BA-2-2 except has gain of 25 db and designed to drive four sub-trunk lines. Net: \$115.00

All-band bridging amplifier, Model LH-BA4-4. Covers channels 2-13. Variable tilts, low and high band. Designed to drive 4 feeder lines. Gain: 8 db at Channels 6 and 13. Output: 40 db, Channel 6; 47 db, Channel 13 Self-contained power supply. Net: \$135.00.

INTERCONTINENTAL ELECTRONICS CORP.

All-band bridging amplifier, Model AB-4. Covers Channels 2 to 13. Separate high and low band amplifiers. Separate controls for high and low bands—4 db range plus input pads. Output level. 0.25 v per carrier for 5 low channels and 4 high channels. Adjustable 0 to 3 db slope. 4 isolated outputs. Built-in cable powering circuitry. Net: \$105.00 (Available with ruggedized tubes also.)

Distribution

AMECO

Low band amplifier, Model AV-7a. Maximum output: 0.31 volts/channel for 5 channels per amplifier; 0.5 volts /channel for 3 channels per amplifier. Maximum gain: 46 db at 88 Mc. Noise figure: 6 db. Manual gain control adjustable over 27 db range. Tilt: compensated for 1500' of RG-11/U. May be compensated for 500 to 2000' of RG-11/U. AGC maintains output within 1.5 db with 20 db input variation. Utilizes regulating transformer. Net: \$222.95.

Low band amplifier, Model AV-6a. Same characteristics as AV-7a except weatherproof version. Net: \$245.78.

Low band amplifier, Model AV-7m. Same characteristics is AV-7a except no AGC. Net. \$196.33. Low band amplifier, Model AV-6m. Same characteristics as AV-7a except weatherproof version and no AGC. Net: \$206.73.

Low band amplifier, Model AV-3. Maximum output: 0.31 volts/channel for 3 channels; 0.20 volts/channel for 5 channels. Maximum gain: 30 db at 88 Mc. Noise figure: 5 db. 9 db manual gain control. Tilt: compensated for 750' of RG-11/U. May be compensated for 500 to 1500' of RG-11/U. Utilizes regulating transformer. Net: \$120.00.

Low band amplifier, Model AV-2. Same characteristics as AV-3 except weatherproof version. Net: \$127.63.

BLONDER TONGUE - BENCO

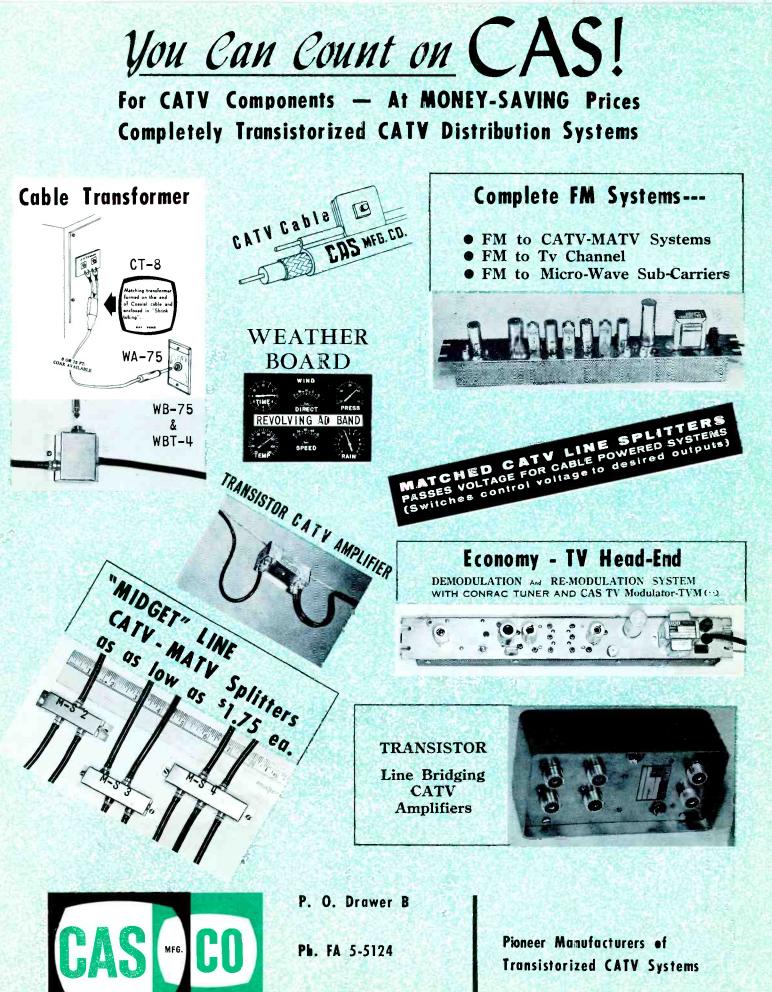
Eight output distribution amplifier, Model DA8-B. Provides 8 amplified, isolated TV outlets from one input. Choice of 75 ohm or 300 ohm input and output. 10 db minimum gain. Gain control. Net: \$63.00.

ENTRON



Low band line extender, Model DLX-26. Will extend distribution lines up to 2,000' using low loss cable or 1,000' using standard cable such as RG-11/U. Gain: 20 db. Noise Figure: 9 db. Self-contained power supply with power requirement of either 115 vac, 12 watts or 19 vac, 12 watts. (For remote powering use RPS-B power supply.) Output level: ± 41 dbmv. Net: \$120.00.

Distribution line amplifier, Model ABX-40R. Covers Channels 2 thru 13. Separate high and low band



Mineral Wells, Texas

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gain and tilt controls. Uses 10,000 hour tubes and regulating transformer. Flat frequency response. Gain: 38 db on both high and low band. Maximum output level: +46 dbmv. Noise figure: 8.5 db. Net: \$255.00.

Distribution line amplifier, Model ABX-640. Covers Channels 2 thru 13. Weatherproof aluminum housing. Maximum output: +46 db on high and low band. Gain 33 db low band, 34 db high band. 20 db gain control range. Power requirements: 60 vac at .8 A. Separate gain controls. Net: \$255.00.

HOLT ELECTRONIC RESEARCH

Distribution bridging amplifier Model L-D2. Will drive 2 feeder lines. Covers Channels 2 to 6 and FM to 95 Mc. Variable tilt, low and high band. Gain: 6 db. Output: 40 db at Channel 6. 75 ohm input and output. Self-contained power supply. Net: \$42.00.

All-band distribution bridging amplifier, Model LH-D2. Will drive two feeder lines. Covers all channels. Gain: 5 db at Channel 6 and 13. 75 ohm input and output impedance. Output: 40 db, Channel 6; 46 db, Channel 13. Self-contained power supply. Net: \$45.00.

Low band distribution bridging amplifier, Model L-D3. Same characteristics at L-D2 except has 4 db gain and designed to drive 3 feeder lines. Net: \$52.50.

Low band distribution bridging amplifier, Model L-D4. Same characteristics as L-D2 except has 4 db gain and designed to drive 4 feeder lines. Net: \$69.95.

All-band distribution bridging amplifier, Model LH-D4. Same characteristics as LH-D2 except gain 2 db and designed to drive 4 feeder lines. Net: \$79.95.

Low band distribution bridging amplifier, Model L-D6. Same characteristics as L-D2 except has 3db gain and designed to drive 6 feeder lines. Net: \$105.00.

All-band distribution bridging amplifier, Model LH-D6. Same characteristics as LH-D2 except gain 2 db and designed to drive 6 feeder lines. Net: \$125.00.

Low band distribution bridging amplifier, Model L-D8. Same characteristics as L-D2 except has 3 db gain and designed to drive 8 feeder lines: Net: \$125.00.



All-band distribution bridging amplifier, Model LH-D8. Same characteristics as LH-D2 except gain 2 db and designed to drive 8 feeder lines. Net: \$150.00.

Low band distribution bridging amplifier, Model LD10. Same characteristics as L-D2 except has 3 db gain and designed to drive 10 feeder lines. Net: \$150.00.

All-band distribution bridging amplifier Model LH-D10. Same characteristics as LH-D2 except gain 2 db and designed to drive 10 feeder lines. Net: \$175.00.

JERROLD ELECTRONICS CORP.

High output distribution amplifier, Model SDA-4. Covers all VHF channels plus FM. Low-loss bridging input (under 1 db). Rack mounting with selfcontained power supply. Gain: 14 db (four outlets). Flat response. Maximum output: 44 dbj per channel for 12 channels 4 outlets. 75 ohm input and output impedance. Separate high and low band gain controls with 4 db range. PNS.



All-band amplifier, Model 2880. Designed for distribution service in apartment buildings, hotels, schools and similar installations. One volt output on both low and high band. Gain: 45 db (minimum). Manual gain control and receptacle for plugging in automatic overload control, Model OC-238. Plug-in pads. Covers all VHF channels and FM. Manual gain control has 14 db range. Built-in 4 db low band cable equalization and 3 db high band equalization. Relay rack mounting. Self-contained power supply. PNS.

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 dbj (maximum) both low and high band. 75 ohm input and output impedance. PNS.

Accessory pads for BDA-213, Model BTD-OL to 15L for the low band amplifier and Model BTD-OH to 30H for the high band amplifier. Attenuation range at Channel 6 is 0, 3, 6, 9, 12 and 15 db for BTD-OL to 15L and 0, 5, 10, 20, 25 and 30 db for BTD-OH to 30H. Insertion loss is 1.0 db maximum. PNS.

All-band distribution amplifier, Model 2300-A. Designed for service in apartment buildings, hotels, schools and similar installations. Accommodates automatic overload control. 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. PNS.

All-band distribution amplifier, Model ABD-1A. Accommodates new 8-way splitter. Heavy duty construction. Output: 3 v (50 dbj). 75 ohm input and output. Response flat within ± 1.25 db. for contained power supply. Gain: 22 db, low bound; 20 db, high band. Covers all VHF channels blue FM. Ideal for all systems. PNS.

Ideal for dealer showrooms and deluxe hor installations. High overload capability. 75 cr 300 ohm output selected by a slide switch. Gain: 20 db, low band; 19 db, high band. 300 ohm input impedance. Response within 1 db. Self-contained power supply. Output: .15 v, low. band; .10 v, high band (at 75 ohms). PNS.



Line-bridging distribution amplifer, Model UBC-26B. Covers low band plus FM. Gain: 30 db minimum. Flat response. Maximum output: 47 dbj* for 5-channel operation. Less than 0.3 of 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. PNS.

(*0 dbj=1,000 uv into 75 ohm load)

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. PNS.

TELESYSTEM SERVICES CORPORATION



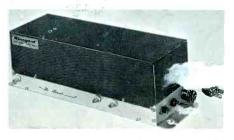
All-band distribution amplifier, Model TSC-4200. Gain: 30 db (minimum) low band, 37 db (minimum) high band. Maximum output: 1.7 volts low band (Channels 2-6 for 1% cross modulation), 1.7 volts high band (Channels 7-13 for 1% cross modulation). Tilt control range: 6 db low band, 4 db high band. Covers FM band. Separate high and low band gain controls. Ruggedized tube types. Net: \$71.00.

VIKING CABLE COMPANY



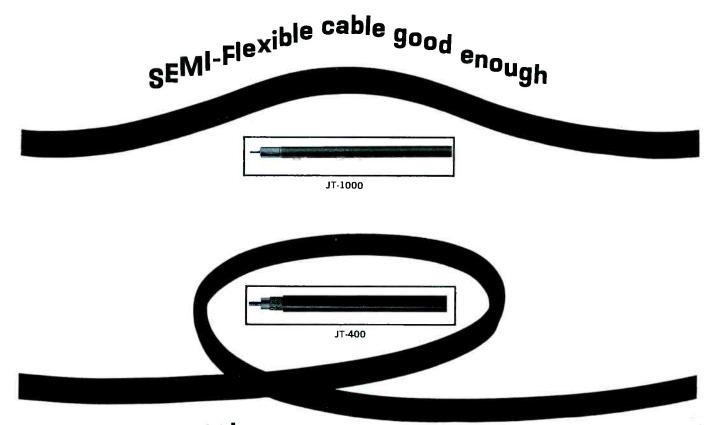
nigh band gain controls. Low mum. Covers all VHF channels plus FM. Output: 64 dbm (1.7v) total per band for less than 1% crossmodulation. Available with either F or UHF fittings at no extra cost. Add \$10.00 to price for 10,000 hour tubes. Price: \$65.00.

WINEGARD



All-band distribution amplifier, Model A-700. Will drive up to 150 TV/FM sets. Designed for hotels, large motels, apartments, cable systems. Gain: 44 db on low band and FM; 44 db, high

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Today more than 420,000,000 ft. of Times CATV cable is in use throughout the nation. Times has produced most coaxial cable for CATV than any other manufacturer, and has been at it since the ind segment provement, Times has a tribule or TV transmission cable. The JT-40C series and and in strip-braided flexible coaxial cable.

		Nom. Outs	A	ttenuatio (db/1	Ship. Wt. (Ib/			
Туре	Con- ductor	Dielec- tric	Shield	2nd Shield	Jacket	Channel 6	Channel 13	1,000 ft)
JT-400S	0.114	0.525	0.536	2014	0.632	0.77	1.3	147
JT-400D	0.114	0.525	0.536	0.547	0.632	0.77	1.3	167
JT-404S	0.064	0.285	0.296		0.407	1.31	2.2	64
JT-404D	0.064	0.285	0.296	0.307	0.407	1.31	2.2	73
JT-408S	0.081	0.373	0.389		0.460	1.01	1.6	89
JT-408D	0.081	0.373	0.389	0.400	0.460	1.01	1.6	101

JT-400 STRIP-BRAIDED FLEXIBLE COAXIAL CABLE

JT-1000 SOLID-SHEATH	SEMIFLEXIBLE	COAXIAL	CABLE
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	Nom.	Outside	Diameter (Attenuati (db/1	Ship. Wt. (incl. reel)		
Туре	Con- ductor	Dielec- tric	Un- Jacketed	Jacketed	Channel 6	Channel 13	(lb./ 1,000 ft
JT-1750	0.1400	0.680	0.750		0.60	1.03	280
JT-1750J*	0.1400	0.680	0.750	0.850	0.60	1.03	330
JT-1500	0.0980	0.450	0.500		0.84	1.40	130
JT-1500J*	0.0980	0.450	0.500	0.580	0.84	1.40	160
JT-1412	0.0752	0.362	0.412		1.05	1.65	100
JT-1412J*	0.0752	0.362	0.412	0.480	1.05	1.65	120

*Cable overall jacketed with Xelon.

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HOLT Advanced Engineering

Presents the Model LH-BB-MAN LOW-HIGH-FM LINE AMPLIFIER

This perfection engineered high-gain all-channel amplifier was designed to make all-band system conversions easier or equip new systems with allchannel features. The Holt Electronic Research LH-BB-MAN amplifier is built to really take it! This rugged amplifier fully meets the demanding requirements of continuous commercial service.

FEATURES:

Wide bandpass, channels 2 to 13, plus FM to 108 mc. Variable tilts, separate gain controls, low and high band. Input insertion pads to eliminate the use of equalizers. Designed for continuous service, long life, economy of operation, excellent stability, matched inputs, and low power drain.



	SPECIFICATIONS
Frequency range	53 to 108 and 173 to 217 Mc.
Gain	40 db, low band; 48 db, high band
Input impedance	75 ohms
Output impedance	75 ohms
Channels	2 to 13 plus FM
Output — low band	40 db
Output — high band	48 db
Power consumption	55 watts
Power requirements	115 V., 50 to 60 cycles
Size	7 x 9 x 5½ inches
Tube complement	2-6922's, 3-6EV5's, 2-12BY7's

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band. Flat frequency response. 75 ohm input and two 75 ohm outputs. Noise figure: 3.8 db maximum, low band and FM; 5.2 db maximum on high band. Output: 1 volt maximum. Separate low and high band gain and tilt controls. RG-59/U connectors. List: \$154.95

All-band distribution amplifier, Model A-400. Flat frequency response, 300 ohm balanced input and 75 ohm unbalanced input. Two 75 ohm outputs for 2 trunk lines. Designed for motels, apartments, large home systems and fringe areas. Will drive up to 30 TV/FM sets. Gain: 26 db on low band and FM; 26 db, high band. Noise figure: 3.9 db, low band and FM; 5.4 db, high band. List: \$79.95

All-band amplifier, Model WBC4-X. Designed for use as a low-cost home antenna system amplifier-coupler. Will drive up to 4 TV/FM sets. Gain: up to 12 db when used with one TV/ FM set; up to 6 db on each of four TV/FM sets when used as an amplified coupler. Noise figure: 3.8 db, low band; 5.2 db, high band. Flat frequency response. Self-contained power supply. List: \$27.50

UHF Amplifiers

BLONDER TONGUE - BENCO

UHF mast-mounted amplifier, Model UB. Six standard models cover specific UHF channels from 14 to 83. Uses two low-noise EC88 /6DL4 frame-grid tubes. Gain of 14 db. Remote AC power supply. Stripless 300 ohm terminals Net: \$62.00.

UBP—Similar to UB but 300 ohm input, 75 ohm output: Net: \$102.00.

UBC—Custom UB. Choice of frequency ranges and connectors. PNS.

JERROLD ELECTRONICS CORP.



UHF preamplifier, UAP series. Six models to cover entire UHF range. Model UAP-7276 especially designed for MPATI areas and has 75 ohm input plus two 75 ohm outputs. Other models have 300 ohm input and output. Gain: 16 db at each of 2 outputs on UAP-7276 and 15 db on other models. Units have remote power supply. RF head is enclosed in rugged, irridited housing. Stabi-Life circuit for long tube life. PNS.

AMECO



Combining filter, Model CN-5. Frequency response: 50 to 90 Mc. Isolation: 27 db average. Insertion loss: 7.5 db average. Allows 6 channel mixing. Net: \$35.00.

Combining filter, Model CN-3. Same characteristics as CN-5 except for 3 channel mixing. PNS.

BLONDER TONGUE - BENCO

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. Net: \$5.75.

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. Net: \$5.75.

MX-LB—Lo band mixing base for mounting MX series filters. Accommodates up to 4 low band filters. Up to three hi band filters can be mixed; insertion loss increases with more than two hi band filters. Net: \$11.90.

MX-HB-HS band mixing base mounts up to 4 hi band filters only. Net: \$11.90.

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. Net: \$5.35.

Unimix Filter N₉, work—Can combine or separate 7 VHF channels without appreciable loss or interaction. Accommodates 3 low band channels and 4 hi band channels. Also serves to equalize the 7 antenna inputs by the use of plug-in attenuators. Factory aligned to Channels 2, 4, 6, 7, 9, 11, 13. Alignment may be changed in the field to handle any VHF channel. (Channel 6 may be deleted and FM added—order Unimix-FM which will pass all FM stations) Net: \$60.30.

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. Net: \$262.50.

High-low FM mixer, Model MUP-41. Passive mixing device, flat response. Will mix up to 4 non-adjacent VHF high band channels with up to 5 VHF low band channels plus the entire FM band. High band insertion loss: 2.5 db. Low band insertion loss: 1 db. 75 ohm input and output impedance. Net: \$172.50.

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 inputs 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: +57 dbmy. Net: \$210.00.

+57 dbmv. Net: \$210.00. Electronic all-band mixer, Model MUE-11. Mixes 1 FM, 4 high band and 5 low band channels. Gain, low band and high band: 6db (2 db FM). FSM jack and TV monitor test jack. 10,000 hour tubes. Frequency response: ± 0.5 db. Net: \$405.00.

TV-HM signal separator Model SS-TVFM. Takes a combined TV and FM signal and separates them with minimum loss and independently feeds them to FM tuner and TV set. List: \$5.95.

JERROLD ELECTRONICS CORP.

Mixing networks, Models AMN-Lo and AMN-Hi. Low loss (less than .5 db) 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 (less than 1.0 db) 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 impedances. PNS. 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 Mc. 75 ohm impedance. PNS.

AM inserter, Model ATS-10. Used for insertion of AM into TV distribution systems or to separate or combine AM-TV bands. 75 ohm impedance. Insertion loss: .2 db (TV) and less than .2 db (AM). Bandpass: 20 to 220 Mc, TV; 0 to 2 Mc, AM. Rejection: 20 db of AM at TV output and 30 db of TV at AM output. PNS.

INTERCONTINENTAL ELECTRONICS CORP.

HL-1—High band and low band mixer. Net: \$13.00.

HL-2—Sub-channel and low band mixer. Net: \$20.00.

MN-1—Mixing network for 3 low band VHF channels Net: \$17.00.

MN-2—Mixing network for 4 high band VHF channels. Net: \$17.00.

AGC Units blonder tongue - benco



Automatic gain control for use with CATV broadband amplifiers, Model MAC. For use with any broadband VHF 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 can deliver up to 10 db additional gain. Net, \$121.50.

JERROLD ELECTRONICS CORP.

Automatic overload control, Model OC-238. For use with Model 2880 or Model 2300 amplifiers. Sets amplifier output signal at optimum operational level. Maximum output: 60 dbj. Gain requirement of associated amplifier: 35 to 50 db. Controlled frequencies: 54 to 98 Mc and 174 to 216 Mc. 75 ohm input and output. Separate high and low band gain controls. Self-contained power supply. Relay rack mounting. PNS.

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 signal 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. PNS.

Automatic sound control, Model ASC. Singlechannel unit designed to insure a constant relationship between sound and video carrier levels being fed to a TV distribution system. Used with single-channel video amplifiers which have AGC. Gain: 54 db. Bandwidth: 200 kc minimum, 400 kc maximum at 3 db down. Output: 1.0 volt (maximum). Insertion loss: 1 db maximum outside 1.5 Mc bandwidth of trap.

75 ohm impedance. PNS. SPENCER-KENNEDY LABORATORIES



Automatic Level Control unit, Model 273. Companion unit to SKL 272. Develops DC control voltage to maintain 272 output within 2 db. Rack or wall mounting. Powered by 282 power supply. PNS

Automatic Level Control unit, Model 451A. Develops control voltage for Model 450 Å amplifier. Used to provide stable system input levels, can be used alone as an ALC pre-amp. Low band gain: 35 db. High band gain: 25 db. Noise figure: 6 db, low band; 9 db, high band. Rack, bench or cabinet mounting. 115 vac powered. Net: \$379.00.

Carrier Generators 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 + or -1 db for line variations between 90 and 135 volts. Designed for shelf or rack mounting. Plugin attenuation. Manual gain control. Bridging output. Operating frequency: 73.5 Mc. Output: 45 dbj (65 dbj on special order). PNS.

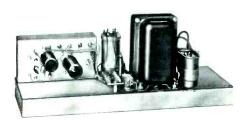
Carrier generator stand-by unit, Model CGS. Designed to provide artificial video and sound carriers for a TV distribution system. Crystalcontrolled carriers. Video carrier modulation control. Accessory function switches. Triggered on and off by horizontal sync pulses only. 30 second, built-in, time delay.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

SPENCER-KENNEDY LABORATORIES

Pilot carrier generator, Model 277. Provides constant level RF signal for system ALC action. Frequency stability: .005% for -20 degrees to +120 degrees F. Amplitude stability: within 1% Output: 35 dbmv. Rack mounting or wall mounting. Powered by 282 power supply. Net \$545.00. 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: \$145.00 (Add \$200.00 for voltage stabilized power supply).



ADLER ELECTRONICS, INC.



tow band single channel VHF amplifier, Model VCA-1. Gain: 40 db. Noise figure: 3 db at Channel 6. Bandwidth: \pm .5 db 6 Mc. 75 ohm input and output impedance. Weatherproof housing with pole or messenger cable mounting for out door use. Specify channel. PNS.

AMECO

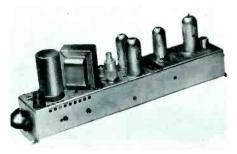
Single channel preamplifier, Model AP-4. Weatherproof head end amplifier with 30 db minimum gain. Noise figure: 5 db (low band); 8 db (high band). Flat frequency response. Self-contained power supply (line powered). Net: \$65.00.

CAS MFG. CO.

Single channel FM amplifier, Model FMS-1. Designed for high selectivity with less than 1 Mc bandwidth. Gain of 60 db and limiting stages provide good output with relatively low signal inputs. Any number can be paralleled when adding FM signals, on-frequency, to distribution systems. Standard 19" rack mounting and selfcontained power supply. Net: \$120.00.

Broadband FM amplifier, Model FMA-10. Covers 88 to 108 Mc. Has traps and tuned stages to vary output level for FM signals which have different input levels. Gain: 40 db. Net: \$140.00.

BLONDER TONGUE - BENCO



AGC controlled amplifier, Model MCSc. For single channel useage except for MCSc-FM which covers the entire FM band. Gain at least 46 db (low band); 38 db (ch. 7-10); 35 db (ch. 11-13). Maximum output; 1.0 volts for less than 1% cross-modulation; 2.0 volts for less than 3%

Self-contained AGC with separate adjustment control. Built-in power supply. Built-in mixing networks so that the output of each MCSc may be plugged into the next MCSc; at the final output all of the channels are fed into one coaxial cable. Net: MCSc--\$89.00 MCSc-FM-\$180.00.

Mast-mounted preamplifier, Model CB. Completely weatherproof, single channel amplifier. Low noise with a 21 db (minimum) gain on low band and 18 db gain (minimum) on high band (when one output is used). Maximum output is 0.5 volts for less than 1% cross-modulation. 300 ohm input; two 75 ohm mixing outputs. Net: \$39.00.

High gain, fast AGC preamplifier, Model PA. Low noise cascode input, together with a high gain AGC circuit. Can be used with inputs as low as 50 microvolts. Provides an output of 50,000 microvolts for input signals of 50 microvolts and over. When the PA amplifier is used alone to feed an apartment system, the output may be turned up to give as high as 1.0 volt output. PNS.

PA-LN—Very low noise PA with 7077 ceramic triodes. PNS.

VHF single channel line amplifier, Model CA. Designed for re-amplification and distribution of VHF and FM signals in community and large apartment systems. Has 60 db gain. Incorporates full AGC circuit for minimum cable losses and steady signal at all times. Minimum input for cascading is 1,000 microvolts; maximum input 30,000 microvolts. With full 6Mc bandwidth, up to 20 units can be cascaded without picture deterioration. Input and output impedances are 75 ohms. PNS.

Unistrip TV/FM amplifier, Model UA-1. Effici-

ent 2 tube amplifier for specified channel. Has 35 db gain, 75 ohm single input, dual 75 ohm output. Built-in level control, full 6 Mc bandwidth, maximum 1 volt output. Requires use with single unit Minipak or triple-unit Unipak power supply. Net: \$42.90.

High output amplifiers, Model CAP-2. Used in high level distribution systems. 3 volts maximum output, mixing outputs, 65 db gain, builtin RF filter and AGC control. PNS.

Model HTA-2. Used in high level distribution systems. 10 volts output maximum, mixing outputs and built-in RF filter. Net: \$470.00.

COMMUNITY ENGINEERING CORP.

Single-channel, VHF preamplifier, Model PRV-A. Cable powered from 24 vac source. Ultra-low noise amplifier with 40 db gain on low band channels and 37 db gain on high band channels. Weatherproof enclosure. Flat response. 3 db noise figure on channels 2-6 and 4.5 db noise figure on channels 7-13. 75 ohm input and output impedance. UHF connectors. A 117 vac version, Model PRV-B, is available. Same specifications as the PRV-A. A rack and panel mounted version, Model PRV-C, is available for indoor applications. This unit is 117 vac powered and occupies only 3½" of rack space. Price: PRV-A-\$295.00, PRV-B-\$295.00, PRV-C-\$295.00. (FM model also available).

ENTRON

Single channel amplifier, Model SB. Minimum input level: + 10 dbmv. Output level: (maximum) TV channels + 60 dbmv. All TV channel models incorporate ALC. FM model input level (minimum): + 5 dbmv. Output level: (maximum) + 45 dbmv. Gain: (all models) 40 db. 1.35 db average output variation with 15 db input variation on all TV channel models. Net: \$127.50.

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: + 54 dbmv. Will operate from 115 vac or can be remote powered by using RPS-B power supply. Net: \$112.50.

Single channel headend 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: \pm 54 dbmv. Output level range: \pm 40 to \pm 54 dbmv (picture carrier). Sound carrier adjustable 0 to 25 db below picture carrier. Net: \$240.00.

HOLT ELECTRONIC RESEARCH

VHF preamplifier, Model VHF-Cl. Designed to amplify weak signals at low noise and high gain. Incorporates B+ standby switch. Gain: 18 db (2-6) and 15 db (7-13). Input and output impedance 75 ohms. Noise figure: 3.5 db. Net: \$42.00.

VHF preamplifier, Model VHF-C2. Same characteristics as VHF-C1 except gain is 40 db (2-6) and 30 db (7-13). Noise figure: 4 db. Net \$58.00.

Single channel VHF amplifier, Model HES-AGC. Designed for head end service. Has mixer output, AGC and power supply built in. Also includes sound traps and is more than adequate for color. Bandwidth: flat from picture to color. Gain: 60 db (15 db down on sound). Input and output impedance 75 ohms. Output level: 60 db. Available for any of the 12 VHF channels. Net: \$206.50.

Single channel VHF amplifier, Model HES-AGC-Super Deluxe. Designed for head end service. Has standby oscillator, mixer output and power supply built in. It also has sound traps and is designed for color. Excellent for continuous commercial service. Bandwidth flat from picture to color. Gain: 60 db. Sound 15 db down. Input and output impedance 75 ohms. Maximum output level: 60 db. Net: \$306.50.

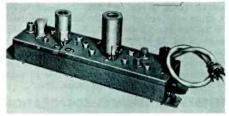
INTERCONTINENTAL ELECTRONICS CORP.

Single-channel preamplifier, Model AP-1. Designed for antenna or mast mounting. Gain: 40 db (Channels 2-6), 37 db (Channels 7-13). Noise figure: 4.8 db at Channel 6, 7.5 db at Channel 13. 75 ohm input and output. Nonremote powered. Net: \$60.00. (Order AP-1A for high band model.)

Single-channel preamplifier, Model AP-2 Extremely low-noise pre-amp utilizing co-planar triode. Weatherproof enclosure for mounting on antenna or pole. Has remote power supply. Tube is forced-air cooled. Gain: 20 db at Channel 13. Noise figure: 5 db at 500 Mc. Available for all VHF TV channels and UHF channels up to Channel 40. Net: \$350.00.

JERROLD ELECTRONICS CORP.

Single-channel amplifier, Model DPM. Designed for head end or trunk line service. Gain: 60 db minimum. Bandwidth: 6 Mc. AGC equipped to hold output within \pm 1 db variation for a 10 db input variation. Regulated supply voltages. Non-critical mixing, Manual gain control has 30 db minimum control. Output: 1.5 v rms (63.5 dbj) maximum. Uses either RPS-150N or RPS-300N power supply. Rack mounting. PNS.



Single-channel amplifier, PMA series. Consists of single-channel strips, Models PMA-2 through PMA-13 inclusive and an FM strip Model PMA-FM. Utilizes "StabiLife" circuit to maintain the gain of the amplifier independent of tube variations. Designed for larger hotel, motel and apartment distribution systems also CATV systems. Gain: 35 db, low band; 30 db, high band; 20 db, FM band. Flat response. 75 ohm input and output impedance. Output: 1 v (60 dbj). Dual outputs. Plug-in pads for gain control. Pads available in 3 db steps from 0 to 21 db of attenuation, Uses RPS-150B or RPS-300B power supplies. PNS.

Single-channel amplifier, Model HPM. Designed for head-end use in all types of TV-FM distribution systems. Self-contained power supply plus convenience Outlet. Relay rack or surface mounting. Gain: 46 db, low band; 46 db, high band; 42 db, FM models. Two 75 ohm outputs and one 75 ohm input. Output: 4.0 v at .5 db sync compression. AGC range of 20 db. FM model has delayed AOC with 10 db gain range. PNS.

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 guage, perforated steel housing and is designed for continuous indoor service. 406A also contains its own internal power supply for use at 117 vac. Model 501 A.P. is a package 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).PNS (See Power Supplies).

SPENCER-KENNEDY LABORATORIES

Single-channel preamplifier, Model 450A. Operates from 105 vac to 125 vac. Frequency range: any standard 6 Mc 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 451A control amplifier. Net: \$348.00

Single-channel amplifier, Model 901. High level amplifier with 35 db minimum gain, low band. Bench or cabinet mounting. 115 vac powered. Has 6360 output stage. Net: \$195.00

UHF

ADLER ELECTRONICS, INC.

UHF single channel RF amplifier. Write for specifications. PNS.

COMMUNITY ENGINEERING CORP.

UHF preamplifier, Model PRU-H. Weatherproof enclosure. Uses single stage 6299 tube. 10 db minimum gain. Low noise figure. 300 ohm input and output. 75 ohm impedances available on special order. Connectors and pilot lights are mounted on the bottom, protected by a drip shield. Recommended for any of the UHF channels from 14 to 83. (Specify channel). Price: \$345.00.

UHF preamplifier, Model PRU-J. Same features as PRU-H except has two-stage amplifier with 20 do minimum gain using 7077 tubes. Low noise figure. Recommended for any channel from 14 to 40. (Specify channel). Price \$395.00.

UHF preamplifier, Model PRU-K. Weatherproof enclosure. Two-stage 6299 amplifier. 20 db minimum gain. Recommended for any channel from 14 to 83. Low noise figure. 300 ohm input and output impedance. 75 ohm impedances available on special order. Connectors and pilot lights are mounted on the bottom and protected by a drip shield. Price: \$495.00. (Specify channel).

UHF preamplifier, Model PRU-L. Rack and panel version of the PRU-J. Uses two 7077 tubes. Has 75 ohm input and output impedances. Takes only $31/2^{\prime\prime}$ of rack space with a depth of 4^{''}. Recommended for channel 14 to 40. (Specify channel). Price: \$395.00.

UHF preamplifier, Model PRU-M. Rack and panel version of the PRU-K. Uses two 6299 tubes. Has 75 ohm input and output impedances. Takes only $3V_2^{\prime\prime}$ of rack space. (Specify channel). Price: \$495.00.

HOLT ELECTRONIC RESEARCH

UHF preamplifier, Model UHF-D2. Designed to amplify weak signals at low noise and high gain. Incorporates B+ switch. Gain: 20 db. Input and output impedance 75 ohms. Noise figure: 7 db. Net: \$225.00.

UHF preamplifier, Model UHF-D1. Designed to amplify weak signals at low noise and high gain. Incorporates B+ switch. Gain: 12 db. Input and output impedance 75 ohms. Noise figure: 5.5 db. Net: \$135.00.

UHF preamplifier, Model UHF-SD1. Same characteristics as UHF-D1 except gain of 14 db and 4.5 db noise figure. Net: \$175.00.



UHF preamplifier, Model UHF-SD2. Same characteristics as UHF-D1 except gain of 24 db and 6 db noise figure. Net: \$295.00.

Converters-VHF FM

AMECO

VHF to VHF converter, crystal controlled. Most conversions available including FM. Net: \$125.00.

BLONDER TONGUE - BENCO VHF to VHF converter, crystal-controlled, Model **CO-2.** Handles most conversions with few exceptions. Conversion chart available. Provides off-channel conversions such as: lowering Channel 2 by 1 Mc to provide extra guard between Channels 2 and 3. Net: \$263.80.

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) .01%, 0 to 110 degrees F. 75 ohm input, two mixing 75 ohm outputs. Net: \$246.00.

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 .01%, 0 to 110 degrees F. 75 ohm input and two 75 ohm mixing outputs. Net: \$246.00.

FM converter, crystal controlled, Model CO-2-FM. PNS.

Sub-channel converter, crystal-controlled, Model CO-2-SUB. PNS.

CAS MFG. CO.

Stereo FM and Tape/CATV head end system converter. Consists of two basic units, the FM-107 and 107FMC. Will handle up to 4 channels. Rack mounted with self-contained power supply. Net: \$280.00 (one channel). Additional channels, Net: \$140.00 each channel.

ENTRON

High VHF to low VHF converter, Model CHL-D. Converts any high band channel to any low band channel (specify). Utilizes ALC system referenced to video carrier and a sound carrier level control. ALC will maintain output within ± 0.5 db for input variations of 10 db. Crystal controlled oscillator. 10,000 hour tubes. Gain: 6 db. Stability: \pm .005%. Net: \$450.00.

INTERCONTINENTAL ELECTRONICS CORP.



VHF to VHF converter, Model CV-1. Available for most all conversions. Has output buffer stage. Gain: 6 to 9 db depending upon conversion. 75 ohm input and output. Input: 600 to 10,000 uv. Net: \$130.00.

JERROLD ELECTRONICS CORP.

VHF to VHF converter, crystal-controlled, Model WCON. Conversion gain from unity to \pm 3 db. Stability: .005%. Input and output 75 ohms. Self-contained, regulated power supply. Most conversions available. Write for additional details on the WCON series and the KCON, TKON versions. PNS.

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. PNS.

CONVERTERS- UHF BLONDER TONGUE - BENCO

Tuneable UHF to VHF converter, Model BTU-2T. Tunes channels 70 to 83. For fringe and primary areas. Gain 5 to 8 db. Output on Channel 5 or 6. Stripless 300 ohm terminals, speed and fine tuning. Net: \$28.65. Tuneable UHF to VHF converter, Model 995. Tunes 470 to 890 Mc. For primary areas. Converts to VHF Channel 5 or 6. 300 ohm stripless terminals and drift-compensated circuitry. Net: \$19.35.

BLONDER TONGUE - BENCO

UHF to VHF converter, crystal-controlled, Model MUC. Converts specified UHF channel to speci fied VHF channel. Gain: 15 to 30 db depending upon conversion. Stability .01% over temperature range of 0 to 110 degrees F. 300 ohm input and two 75 ohm mixing outputs. Net: \$235.00.

UHF to VHF converter, crystal-controlled, Model CO-3. Converts specified UHF to VHF. Built-in UHF pre-amp, power supply (regulated), stability 0 to 100 degrees F., .0025%. Frequency accuracy .006%. Net: \$424.60.

UHF to VHF converter, non-crystal-controlled, Model UC-2. Built-in power supply. Two 75 ohm mixing outputs. When one output is used, gain is 6 to 10 db depending on conversion. Output level is 3 db lower when both outputs are used. 300 ohm input. Net: \$102,00.

CAS MFG. CO.

UHF to VHF converter, Model UHF-1. Single channel converter, battery powered. Low noise figure with unity gain. (New Product.) PNS.

ENTRON



UHF to VHF converter, Model CUL. Converts any specified UHF channel to any specified channel from 2 thru 6 depending upon conversion needs. Input RF amplifier is ceramic, coaxial type UHF triode. Incorporates 5 amplifiers in cascade and an ALC stage. ± 1 db output variation for 40 db input change. Gain: 94 db. Operates with PSR-2 or PSR-3 power supplies. Net: \$487.50. UHF to VHF converter, Model SC-U. Converts any specified UHF channel to any specifier channel from 2 thru 6 depending upon conversion needs. Gain: 20 db. 300 ohm input, 75 ohm output. Self-contained power supply. Net: \$179.50.

HOLT ELECTRONIC RESEARCH



UHF to VHF converter, Model UHF-2. Converts UHF channel to either a high or a low VHF channel. Crystal controlled. Unity gain. 75 or 300 ohm input and 75 ohm output impedance. Self-contained power supply. Net: \$159.95.

UHF to VHF converter, Model UHF-3. Converts UHF channel to either a high or a low VHF channel. Crystal controlled. Gain: 12 db. 75 ohm input and output. Low noise. Self-contained power supply. Has built-in UHF pre-amp stage. Net: \$275.00.

UHF to VHF converter, Model UHF-4. Converts UHF channel to either a high or a low VHF channel. Crystal controlled. Gain: 24 db. 75 ohm input and output. Low noise. Self-contained power supply. Has built-in 2 tube UHF preamp. Net: \$375.00.

JERROLD ELECTRONICS CORP.

UHF to VHF crystal-controlled converter, Mode! 503-HX. Designed especially for the MPATI program. Converts Channels 72-76 to any VHF channel (specify). Weatherproof UHF head and remote oscillator-power supply unit. Power supply can be used to energize a Jerrold Mast-mounted preamp. Noise figure: 10 db maximum (2-6) and 14 db maximum (7-13). 75 ohm input and output. PNS.

UHF to VHF crystal-controlled converter, Model 503-HU. Same characteristics as 503-HX except for channels 14-83, PNS.

UHF to VHF converter, Model UVC-7083. Consumer type for MPATI areas. Has RF pre-amp. Diode mixer. Nuvistor oscillator. Complete bandspread tuning. Housed in low-silhouetted, highimpact plastic case. PNS.

RF Tuners

JERROLD ELECTRONICS CORP.

AM/FM tuner, Model AFT-300. 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 limiter. AM section has 10 kc bandwidth. Self-contained power supply. Several cabinets available for housing one or more AFT-300 tuners and AT modulators. PNS

TELESYSTEM SERVICES CORPORATION FM tuner converter. For use in CATV head end

applications. Receives FM signals and converts to 21.0 Mc. IF then finally back to an output frequency in the 89-95 Mc. range. Incorporates AGC, AFC and voltage regulated power supply. RF tuner and oscillator adjust separately. Crystalcontrolled output. Plug-in crystal control for

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receiver optional. RF output level: 1.5 v rms/75 ohms, adjustable 40 db down. RF output impedance: 75 ohms bridging, back matched. Net: \$299.50.

Modulators

ADLER ELECTRONICS, INC.

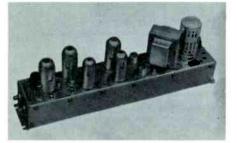
Modulator, audio and video, Model AVD-1. Produces modulated audio and video carriers on any one of 12 channels from audio and video sources. Crystal controlled. Switch for insertion of 400 cps tone or external audio. Audio carrier level adjustment provided so that the audio carrier may be adjusted for 10 to 90% of the visual carrier. Output level: 1 rms across 75 ohm load. Video input impedance: 75 ohms. Input level: 1.0 v p-p (video), + 10 dbm (audio). 75 usec. pre-emphasis. PNS.

AMECO

Modulator unit (audio), Model FMAT-1. Mounts on Ameco-Tran single channel transmitter chassis. Maintains 4.5 Mc audio-carrier separation. Provides local or remote control for selection of audio. Response within FCC requirements. Operates from transmitter power supply. 75 usec. pre-emphasis. RF output: 0.5v. Input impedance: 600 ohms unbalanced or Hi Z. Net: \$141.10.

Modulator unit, Ameco-Tran. Companion to Ameco modified Conrac Demodulator. Video response: 4.2 Mc. Output level: 1 volt (maximum) RF. Picture-sound ratio adjustable over 30 db range. Input impedance 75 ohms. Input level 1 volt video (p-p). Self-contained power supply. Net: \$565.20 (low band) \$762.60 (high band)

BLONDER TONGUE - BENCO



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). Output impedance is 75 ohms. Net: \$175.00.

CAS MFG. CO.

Video modulator, Model TVM. Input: video and 4.5 Mc audio. Output: Composite TV channel with sound channel (maximum video-55 dbm) (maximum audio-40 dbm). Output impedance: 75 ohms. 4 tubes and self-contained power supply. Vestigal sideband filter and RF amplifiers. Low band RF output. Net: \$160.00.

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. Net: \$140.00.

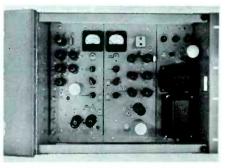


FM modulator, Model M-107. Supplies AFC controlled 10.7 Mc FM carrier. Audio input: mike, tape, etc. M-107 produces FM sound in conjunction with FMC-107. Rack mounting, with selfcontained power supply. Net: \$140.00.

ENTRON

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 the 26 FM channels. Maximum output level: 0.2 volts. Level control range: 25 db. Stereo channel separation: 35 db. Hum and noise: down 55 db at 75 kc deviation. 10,000 hour tubes. Net: \$405.00.



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. Net: \$1492.50.

FIRST ELECTRONICS CORPORATION



Audio/video modulator, Micro/Mitter. Converts any AM or FM signal to any TV channel from 2 to 13. Provides complete TV channel when fed from any audio and video source such as tape, record, etc. CCTV or off-air demodulated video. Input: 50 mv (audio), 1.4 v p-p (video) Video impedance: 75 ohms. Audio impedance: high. Video modulation: picture carrier, double sideband, 80% amplitude modulated. Internal sync pulse available when external video input signal is not provided. Sound carrier: FM \pm 25 kc deviation, 4.5 Mc above picture carrier. Output RF: 0-1 v composite. PNS.

JERROLD ELECTRONICS CORP.

FM stereo adapter, Model AFM-ST, For use with Model AFM audio-modulator. Adapts existing FM unit (AFM) into stereo receiver. All necessary hardware and template are supplied. PNS.



FM audio modulator, Model AFM. Provides an FM signal in either the 72-76 or 88-108 Mc range. Operates from any suitable audio source. Incorporates AFC system. Crystal-controlled carrier. Output level control. Provisions for mounting VU meter. Dual 75 ohm outputs. Regulated power supply. Output: 1 v (60 dbj) into 75 ohms from dual outputs. High Z input. Rack mounting. PNS. **Modulator, Model AT.** Designed for hotels, motor courts, hospitals, apartments, schools, etc. Provides an 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-300 tuner, etc. RF output: up to 55 dbj, each carrier, separately controlled, at 75 ohms, at each of two terminals. Spurious signals: down 50 db. Builtin power supply. Standard pre-emphasis. PNS.

JERROLD ELECTRONICS CORP.

Industrial television modulator, Model TM. Provides standard vestigal sideband transmission of any low band VHF channel, 2 through 6, 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 + or - 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). PNS.

FM modulator, Model TAM. Auxiliary unit for the TM unit. Converts any audio source into 4.5 Mc FM signal. Output level: $3 \vee p \cdot p$ across 75 ohms. High input. 75 usec. pre-emphasis. Deviation: + or -25 kc. PNS.

Video-audio separator, Model TVA. Auxiliary unit for the TM unit. Permits sound diplexing 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. PNS.



AMECO

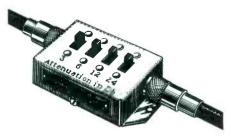
Fixed attenuator. For 75 ohm operation. Models available for 3, 6, 10, 13, 16 and 20 db. Other levels available on special order. SO-239 connector "in" and PL-259 "out." Low VSWR. Standard color code. Net: \$3.97.

BLONDER TONGUE - BENCO

Fixed attenuator, Model LAT. Specify 3 db 6 db, 10 db, 14 db or 20 db. 75 ohm input and output. Benconnectors. Net: \$4.90.

Fixed attenuator, Model FA. Specify 3 db, 6db, 10 db or 20 db. "QD" connectors. Net: \$2.70.

Variable attenuator, Model SA-3. 0 to 38 db. Laboratory accuracy. Steps of 6 db, 12 db, and 20 db. 75 ohm input and output. QD connectors. Net: \$9.25.



COMMUNITY TV CABLE



	ТУРЕ	O. D. INNER CONDUCTOR	O. D. DIELECTRIC	O, D. INNER SHIELD	O. D. INNER JACKET	O. D, OUTER SHIELD	O. D, OUTER JACKET	CHANNEL 6	UATION CHANNEL 13 00 FT.)	SHIPPING WEIGHT LBS./M FT.
PP	15076	.114	.525	.565	.615	.655	.775	0.81	1.49	300
PP	15077	.064	.285	.320	.365	.395	.460	1.36	2.30	120
PP	15079	.032	.146	.171	.221	.250	.325	1.92	3.64	60



ТУРЕ	O. D. INNER CONDUCTOR	O. D. DIELECTRIC	O. D. SHIELD	O. D. JACKET	ATTENUATION CHANNEL 6 CHANNEL 13 (DB/100 FT.)		SHIPPING WEIGHT LBS./M FT.
PP 15075	.114	.525	.575	.675	0.81	1.49	185
PP 14145	. 06 4	.285	.335	-405	1.36	2.30	90
PP 15080	.032	.146	.171	.242	1.92	3.64	31
PP 15259	.025	.146	.171	.242	2.50	4.50	35
PP 16387*	.032	.146	.171	.242	1.92	3.64	56

* BUILT-IN MESSENGER, FIGURE 8 TYPE

	O. D. TYPE INNER CONDUCTOR		YPE INNER DIELECTRIC SHIELD		O. D. JACKET	ATTENU CHANNEL 6 (DB/10	CHANNEL 13	SHIPPING WEIGHT LBS./M FT.
PP	423	.025	.146	.171	.242	3.22	5,58	40
PP	15091	.025	.146	.171	.242	3.22	5.58	35
PP	16334*	.025	.146	.171	.242	3.22	5.58	80

* BUILT-IN MESSENGER, FIGURE 8 TYPE

PLASTOID CORPORATION COMMUNITY TV CABLE

TYPE	O. D. INNER CONDUCTOR	O. D. DIELECTRIC	O. D. Shield	O. D. 2nd SHIELD	O. D. JACKET	CHANNEL 6	UATION CHANNEL 13 00 FT.)	SHIPPING WEIGHT LBS./M FT.
PP 20421	.114	.525	.536	.547	.632	0.77	1.30	167
PP 20395	.081	.373	.389	.400	.480*	1.01	1.60	101
PP 20422	.064	.285	.296	.307	.407	1.31	2.20	73

*FITS STANDARD FITTINGS AND CONNECTORS



TYF	PE	O. D. INNER CONDUCTOR	O. D. DIELECTRIC	O. D. SHIELD	O. D. JACKET	ATTENUATION CHANNEL 6 CHANNEL 13 (DB/100 FT.)		SHIPPING WEIGHT LBS. /M FT.
PP 2	0420	.114	.525	.536	.632	0.77	1.30	147
PP 2	20423	.081	.373	.389	.460	1.01	1.60	89
PP 2	20351	. 06 4	.285	.296	.407	1.31	2.20	64



42-61 24TH STREET / LONG ISLAND CITY 1, N. Y. / ST 6-6200 CABLE ADDRESS "PLASKOTE"



NEW LOW PRICE ON THE BEST UHF PREAMPLIFIERS IN THE BUSINESS ... SAVE ^{\$}100 ON ANY MODEL!



- Resonant cavity
 Gain: 10 db minimum-single cavity; 20 db minimum-double cavity
 Single channel-specify channel
 Ultra low noise:
 6.0±1 db. ch. 14-40 tube type 7077;
 5.0±1 db. ch. 14-40 tube type 6299;
 5.5±1 db. ch. 41-60 tube type 6299;
 6.0±1 db. ch. 61-83 tube type 6299;
 6.0±1 db. ch. 61-83 tube type 6299;
 6.0±1 db. ch. 61-83 tube type 6299;
- Specify impedance desired, in and out -300 ohms or 75 ohms 117 v-50-60 cps Weatherproof enclosure integral to unit



- MODEL PRU-G Reg. \$295
 Single stage 7077 tube, recommended for Ch. 14 to 40.
- MODEL PRU-J.... Reg. \$395
 Seg. 7077 tube, recommended for Ch. 14 to 40.
- MODEL PRU-H Reg. \$345
 Single stage 6299 tube, for any UHF Channel.
- MODEL PRU-K Reg. \$495 \$395 Double stage 6299 tube, for any UHF Channel.

COMMUNITY ENGINEERING CORPORATION

234 E. College Ave. State College, Pennsylvania Phone 814 - 238 - 2461

CECO manufactures and installs complete systems for the distribution of TV signals at both RF and Video frequencies. in 3 db steps. 75 ohm input and output. UHF type connectors. Net: \$14.60.

Variable attenuator, Model VAT. Steps of 3, 6, 9, 14, 20 and 23 db. 75 ohm input and output. Benconnectors. Net: \$15.85.

INTERCONTINENTAL ELECTRONICS CORP.

PD—Fixed attenuator, 75 ohm, supplied with A-102 connectors Specify 3, 6, 10 or 20 db. Net: \$2.70.

1220A—Variable attenuator, 75 ohm. Up to 82 db attenuation in one db steps. Net: \$50.00.

JERROLD ELECTRONICS CORP.

FA—Fixed attenuator series. Frequency: DC to 1200 Mc. Accuracy: within .3 db on each model. 50 ohm impedance. Available with attenuation values of 1,2,3,6,10 and 20 db. BNC fittings. PNS

PDL—Fixed attenuator series. 75 ohm impedance. Available in 3,6,10,20 db values. 0 to 220 Mc. F-61 fittings. PNS

AV-50 — Variable attenuator for lab use. Has 0 to 62.5 db attenuation in 0.5 db steps. Low insertion loss (.25 db at 250 Mc, .5 db at 500 Mc). Uses shielded, rotary coaxial switches. 50 ohm impedance. 0.5 watts average dissipation. Cast aluminum case for bench use. PNS **AV-50R**—Same as AV-50 except designed for re-

lay rack mounting. PNS AV-50-2—Same as AV-50 except designed to provide attenuation values from 0 to 82 db in 1 db steps. PNS

AV-50-2R—Same as AV-50-2 except designed for relay rack mounting. PNS

AV-75—Same as AV-50 series except 75 ohm impedance. Models available are AV-75, AV-75R, AV-75-2, or V-752R PNS

A-500-Variable attenuator with a range of 0 to 82 db in 1 db steps. Uses 8 slide switches for selection of attenuation values. Housed in slanted front cabinet. Available with "BNC" connectors, "N" connectors (Models A-50B and A-500N respectively). 50 ohms impedance. Freguency: 0 to 250 Mc. PNS

A-750—Same as A-500 except 75 ohm impedance. Connector types: "BNC" (order A-750B), "F" (order A-750F), "N" (order A-750N), and Swiss type (order A-750S). PNS

A-21—Variable attenuator. 75 ohm impedance. 0 to 21 db in 3 db steps. 0 to 250 Mc. Surface mounting. "F" series connectors. PNS

A-72–Variable attenuator. 75 ohm impedance. 0 to 82 db in 1 db steps. 0 to 250 Mc. "F" series connectors. PNS

JFD ELECTRONICS CORPORATION

AS-5—Three way adjustable O-15-30 db attenuator. For 300 ohm lines. List: \$4.95.

SPENCER-KENNEDY LABORATORIES 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. Net: \$52.50

Equalizers

BLONDER TONGUE - BENCO

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. Net: \$9.90.

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. Net: \$9.90.

BLONDER TONGUE - BENCO

FM Equalizer--Equalizes all FM stations. 6 traps cover entire FM band. Net: \$106.50.

COMMUNITY ENGINEERING CORP.

100-LC—Variable line compensator. Price: \$36.50. **100-LCF**—Adjustable tilt, line compensator. Price: \$22.50.

JERROLD ELECTRONICS CORP.

Automatic temperature compensator, Model TOM-2. Equalizes for 21 db of cable at Channel 13. Compensates for temperature tilt variations thru 64 db of cable. Messenger mounting. Compensates for solid or foam dielectric cable. Uses two thermistors, Weatherproof. PNS.

Plug-in variable equalizer, Model PVE-24. Provides cable equalization between two Model SCA-213 amplifier locations. Two controls permit a + or $-1\frac{1}{2}$ db adjustment from its given attenuation value to compensate for variations in distances between amplifier locations. PVE-24 average attenuation is 24 db. Three other models provide other attenuation values. Attenuators plug into SCA-213. PNS.

Filters

AMECO

High pass filter, Model HP-1. Insertion loss: 1 db. Specify characteristics. Net: \$53.90. Low pass filter, Model LP-1. Insertion loss: 1 db.

Specify characteristics. Net: \$53.90. Band pass filter, Model BP-1. Insertion loss: 1 db. Specify characteristics. Net: \$53.90.

Band pass filter, FM band, Model BP-FM. Insertion loss: 1 db. Specify characteristics. Net: \$53.90.

Custom filters. Write for details. Specify requirements. RF power line filters also available.

BLONDER TONGUE - BENCO

BPF—75 ohm band-pass filter. Includes 2 traps. Traps attenuate undesired frequencies by 80 db. For low VHF channels only. PNS.

ENTRON

Tuneable 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. Net: \$277.50. Tuneable filter, Model HQ. Provides a means of improving edge-of-band response of broadband 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. Net: \$75.00.

JERROLD ELECTRONICS CORP.

High "Q," six stage band pass filter, Model BPF. Uses bridged-T trap networks. Wide TV channel pass band. High adjacent channel rejection. Insertion loss: 7 db maximum (built-in 3 db pad). Brackets for wall or panel mounting. Adjacent channel rejection: 22 db, sound; 24 db, pix. 75 ohm impedance. Specify channel when ordering. PNS.

JFD ELECTRONICS CORPORATION

Interference filter, Model HP50. Low frequency filter to 50 Mc. List: \$4.50.

Interference filter, HP88. Mid-frequency and FM, 88 to 160 Mc. List. \$5.95.

Low band filter, Model WT26. Covers channels 2 to 6. Capacitive tuned wavetrap for narrowest rejection characteristics. For elimination of spurious TV signals caused by diathermy, ham, local TV sets. List: \$4.50.

High band filter, Model WT713. Covers channels 7 to 13. Same characteristics as WT-26. List: \$4.50. Single-channel trap for use with Transis-tennas, Model TR2-6. (Specify channel). Designed for areas where a strong local channel saturates the Transis-tenna amplifier. May be used singly or in series. List: \$6.95.

Single-channel trap for use with Transis-tennas, Model TR7-13. (Specify channel). Same characteristics as TR2-6. List: \$7.95.

FM trap, Model TR-FM. Same use as TR-2-6 except for FM frequencies. List: \$6.95.

SPENCER-KENNEDY LABORATORIES

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. Net: **\$49**.50.

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. Net: \$85.00

Traps

BLONDER TONGUE - BENCO

HI-Q-75-75 ohm trap, 60 db attenuation of undesired frequency. Available for each sound and picture carrier. Net: \$28.75.

MWT-1—FM trap. Can be tuned to trap out any FM frequency. Net: \$6.00.

MWT-2—Low band FM trap. Can be tuned to attenuate any frequency from 54 thru 108 Mc. Less than 0.25 db loss. Net: \$34.40

MWT-3—Hi band trap. Can be tuned to attenuate any frequency from 134 thru 216 Mc. Less than 0.25 db loss. Net: \$34.40.

JERROLD ELECTRONICS CORP.

High "Q" bridged "T" traps, Models TLLB-05, TLLB-03, TLB-1, TFM-1 and THB-1. Minimum attenuations: 60 db to undesired CW carriers. Insertion loss: 1 db to desired signals. Tuning range: TLLB-05, 24 to 35 Mc; TLLB-03, 35 to 55 Mc; 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. PNS.

INTERCONTINENTAL ELECTRONICS CORP.

HQ-1—Low band trap (53-100 Mc) tunable. Attenuation to 40 db. Net: \$26.00.

HQ-2—FM trap (80-125 Mc) tunable. Attenuation to 40 db. Net: \$26.00.

HQ-3—High band trap (170-220 Mc) tunable. Attenuation to 40 db. Net: \$26.00.

Duplexers

AMECO

Power duplexer, Model PD-1. All weather housing. Thru loss less than $\frac{1}{2}$ db. 75 ohm impedance. Power capacity 1000 watts. Net: \$7.72.

BLONDER TONGUE - BENCO

MDX-75—Duplexer for carrying AC 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. Net: \$8,60.

MDX-300—Same as MDX-75 except for 300 ohm line. Net: \$8.60.

AC Line Filters

AMECO

Power line filter, Model PLF-1. Suppresses unwanted interference originating from power lines and prevents RF feedback from amplifier to power line. Ruggedized housing and chassis with anodized finish. Prewired. 40 db attenuation. Net: \$11.30.

INTERCONTINENTAL ELECTRONICS CORP.

PF-2—Power line filter with four heavy-duty polarized outlets and one lightning arrestor. Net: \$27.00.

JERROLD ELECTRONICS CORP.

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. PNS

Housings

AMECO

AWH-1—Weatherproof housing. Heavy gage galvanized metal. Pre-punched holes for mounting and accepting components and cables. Cover hinged for easy opening. Air chamber in top cover for insulation and air ventilation. Vents use fine wire screens to keep dirt and insects out. Tamperproof, $18'' \times 20'' \times 12''$. Net: \$30.00 (With 100 cfm fan kit) Net: \$45.00.

AWH-3—Same as AWH-2 except size is $18'' \times 12'' \times 61/2''$. Net: \$24.00.

AWH-T - Weatherproof housing. Messenger mounted, amplifier housing for transistorized amplifiers. Net: \$30.00.

BLONDER TONGUE - BENCO

BH-1—Indoor. Fully ventilated. Perforated mounting surface. Keyed slots for vertical and horizontal mounting. Provision for locking. $20'' \times 27'' \times 101/2''$. Net: \$31.50.

MWH-2—Outdoor housing. Weatherproof. 181/4" x 14" x 6". Net: \$32.95.

MRH-A—Outdoor, radiation proof housing. Provision for locking. Perforated mounting surface. $181/4'' \times 14'' \times 6''$. Heavy duty cadmium plated steel. Net: \$43.50.

H-2—Outdoor housing wired for 2 channel system. Adjustable mounting. $29'' \times 14'' \times 111/2''$. 6 parallel outlets. Conduit elbow and reducer supplied. Net: \$52.40.

H4-Outdoor housing wired for 2 channel system. Adjustable mounting. $29'' \times 22'' \times 101/2''$. 6 parallel outlets. Conduit elbow and reducer supplied. Net: \$96.80.

H-6—Outdoor housing wired for six channel system. Adjustable mounting. $35\frac{1}{2}$ " x 29" x $10\frac{1}{2}$ ". 6 parallel outlets. Conduit elbow and reducer supplied. Net: \$121.75.

UNICASE—Outdoor housing for one UPK-1 (Power supply) and associated equipment. Net: \$24.65.

JERROLD ELECTRONICS CORP.

MR-5—Rail assembly kit that offers sliding chassis facilities to the Tele-Trol units (Models TD and TM) or other relay rack mounted equipment. Finish is cadmium plate. PNS

MP-1—Mounting plates, pre-drilled, for mounting in EH-40 equipment housings, on the MR-4 mounting rails, or on any relay rack. 14" x 19". PNS

MP-2—Same as MP-1 except measures 3%" x 19". PNS

VF-1—Ventilating fan kit. Handles up to 200 cfm. Designed for quick mounting on existing equipment racks. PNS

EH-40—Deluxe equipment housing EH-40 is a deluxe 19" relay rack with standard E.I.A. drilling of its mounting centers. Made of heavy-guage steel and has matching perforated cover. Knock-out holes are included for standard BX fittings. Cabinet can be locked with standard padlock. 291/4" x 203/4" x 121/4". Wall or bench mounting.

WC-400-Weatherproof utility cabinet. Heavy guage steel. Heavy galvanized finish. Hardware and cable connector holes are pre-punched. Cabinet can be locked with standard padlock. 10" x 18%" x 241/4". Crossarm or bench mounting. PNS

1683—Weather resistant housing for Model 406A pre-amp. Iridite finish. Supplied with all necessary hardware. PNS

HB-1—Weather protective, umbrella housing for outdoor mounting of 1500 series splitters. Housing can be mounted on messenger, or on antenna masts. PNS

MR-3—Mounting rail set designed to adapt relay rack mounted equipment to bench or cabinet mounting. $5^{\prime\prime}$ x $1^{\prime\prime}$ x $10^{\prime\prime}$. PNS

MR-4—Mounting rail set for wall mounted installations of relay rack mounted equipment. Supplied with lag screws and expansion bolts. $241/2'' \times 3'' \times 6''$. PNS

Power Supplies

AMECO

Power supply. 110 vac input, -15 vdc output. For powering 5-ATM-20's. Net: \$61.75.

CAS MFG. CO.

Power supply, Model PW-300. Produces 24 vdc. Maximum load: 300 ma. Net: \$27.50.

Power supply, Model PW-400. Produces 24 vdc regulated. Maximum load: 400 ma. Net: \$47.50. Power supply, Model PW-50. Supplies 24 vac. Maximum load: 50 ma. Net: \$18.50. Power supply, Model PW-600ac. Produces 24 vac.

Maximum load: 600 ma. Net: \$24.95.

ENTRON

Regulated power supply, Model PSR-2. Output 160 vdc at 400 ma. maximum regulated. 6.3 vac at 8.5 A. maximum unregulated. Minimum load 100 ma., regulation \pm 1%. Takes 6" of rack space in 19" standard rack. Tubes: (1) OA3, (2) 6AS7GA, (1) 6CB6, (1) 5AU4. Net: \$300.00.



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 $\pm 0.3\%$. Takes 8.3/4" of rack space in 19" standard rack. Tubes: (1) 5651, (4) 6080, (1) 5654. Net: \$300.00.

HOLT ELECTRONIC RESEARCH

Power supply. Handles all models of transistorized equipment. For remote powering of amplifiers. Net: \$35.00.

INTERCONTINENTAL ELECTRONICS CORP.

Power supply, Model PS-7. For AP-3 preamplifier. Net: \$36.00.

Power supply, Model PS-8. Battery supply box for use with AP-3 Net: \$7.00.

Power supply, Model PS-9. Power supply for cable powering transistor amplifiers ABB-9, ABB-10, ABB-11 and ABB-12. Net: \$80,00.

Power supply, Model PS-10. Power supply for location at AC source to drive cable powered system.

JERROLD ELECTRONICS CORP.

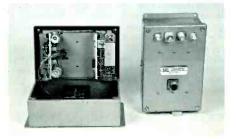
Power supply, Model CPS-4. Designed for powering a single HDX-713 unit in each of up to four feeder lines. 24 vac output. PNS.

Power supply, Model 405P. Remote 24 vac unit for the Model 401-A preamplifier. Tapped, variable output supplies 24 to 32 vac for compensation of voltage drops in line. Unit has "setcontrolled" — "Continuous" switch making it possible to operate the power supply and preamp from the TV set. PNS.

JFD ELECTRONICS CORPORATION

Battery powered supply, Model TNT75. Designed for TNT25 amplifier. Includes connectors, outlets and hardware. Net: \$7.37.

AC line powered supply, Model TNT85. Designed for TNT25 amplifier. Includes connectors, outlets and hardware. Net: \$8.71.



SPENCER-KENNEDY LABORATORIES

Master power supply, Model 282. Powers entire head end station. Has -25 to -30 vdc output at a maximum load current of 400 ma. Regulation within .05 volts for any line variation from 100 to 135 vac. Short-circuit proof. Net: \$500.00

Test Equipment

BLONDER TONGUE - BENCO

Field strength meter, Model FSP-3. Portable, transistorized battery powered for field or lab use. Frequency range: 52-220 Mc in one range. Sensitivity: 5 uv. minimum readable signal and 60 uv. full scale. Percentage Modulation Ranges: 0 to 5% and 0 to 50%. Measurement Range: 0 microvolts to 3 volts in 18 ranges also micromicrowatts to 10 watts in 10 ranges. Input impedance 75 ohm unbalanced and 300 ohm balanced. PNS

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 900 Mc. Isolation: 0 to 216 Mc - 40 db min; 216 to 900 Mc - 27 db minimum. Net \$215.00.

HOLT ELECTRONIC RESEARCH

Transistorized field strength meter. Write for details and specifications. Net: \$250.00.

JERROLD ELECTRONICS CORP.



Field strength meter, Model 704B. Portable unit covering the 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 accurate RF attenuators, built into the circuit. Accuracy: + or - 3 db. Phone and video jacks are provided on the front panel. Sensitivity: 5 uv. 75 ohm input impedance (300/75 ohm matching transformer provided. Adjacent channel rejection: 45 db down from received signal. Aluminum cabinet with carrying handle and shoulder strap. PNS



Sweep generator, Models 601 and 602. Designed for test and alignment of RF circuits. Each generator has 11 overlapping ranges. Sweepwidth in any range is continuously variable from a minimum of + or $-\frac{1}{2}$ % of center frequency, to a maximum of approximately + or $-\frac{60\%}{2}$ of center 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 covers 12 to 225 Mc and Model 602

JERROLD VIDEO MICROWAVE 6 TO 13 KMC

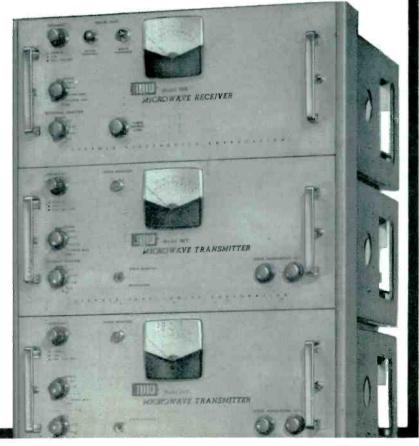
... <u>Best</u> for catv, cctv, etv, and stl use

It may cost a little more at first, but Jerrold video microwave gear really pays for itself in no time. Here's why you can't afford to be without it: Front-panel metering of all tubes and circuits . . . Time-delay circuit protects klystron in event of power failure . . . Extended filament life with built-in regulating transformer . . . Only simple test equipment needed for set-up, troubleshooting, maintenance . . . Video monitor output at transmitter eliminates referring to receiver location . . . Compact modular construction saves space, reduces need for spares.

Take advantage of Jerrold's wide experience not only in supplying equipment but in helping you plan any hop from 20 to hundreds of miles. For complete information, write or call Jerrold Electronics, Philadelphia 32, Pa.



- Simplest to set up
- Most dependable in performance
- Easiest and most economical to operate and maintain
- Widest baseband—IF bandwidth 30 mc, video bandwidth 8 mc
- Greatest stability—±0.005%
- Individual power supplies—can't lose all channels at once



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covers 4 to 112 Mc. RF output response (601) is 1.0 volts rms, within .5 db and 2.5 volts rms (602), within .5 db. Portable, rugged case, PNS

SADELCO

Field strength meter, Model FS-1. Portable, transistorized, battery operated unit. Covers VHF spectrum in two expanding ranges. Utilizes 8 transistors. Separate picture and sound. Peak carrier reading. 20 uv to 1 volt range. Temperature compensated for continued accuracy and AGC system for long term stability. Jacks on front panel allow the use of phones, oscilloscope or connection to recording devices. UHF coverage possible with the addition of the Sadelco UA-1, UHF adaptor. Cast aluminum housing. Accuracy: ± 1.5 db. Net: \$295.00 (Complete with carrying case less batteries).

SIMPSON ELECTRIC COMPANY

AC/DC Volt-Ohm-Milliammeter, Model 260. Has polarity reversing switch; 50 microampere-250 Millivolt range; easy to read black and red scales; 5,000 ohms-per-volt AC sensitivity; frequency response is 5, to 500,000 cycles per second.

Second. Voltage Ranges: DC: 0-2.5, 10, 50, 250, 1000 5000v AF: 0-2.5, 10, 50, 250, 1000, 5000v AC: 0-2.5, 10, 50, 250, 1000, 5000v DB: (Imw-600 ohm) minus 20 to plus 10. minus 8 to plus 22. plus 6 to plus 36. plus 20 to plus 50. Current Ranges: DD: 0-2.10 pmps DB: (Imw-600 ohm) minus 20 to plus 10, to plus 22, plus 6 to plus 36, plus 20 to Current Ranges: DC: 0-50 ua; 0-1, 100, 500ma; 0-10 amps. Resistance Ranges: 0-2000 (12 ohm ctr.); 200K (1200 chm ctr.); 0-20 meg. (120K ohm ctr.). Frequency Response: Essentially flat through 50,000 cps.

Accuracies: DC Volts: plus or minus 3% of full scale DC Current: plus or minus 3% of full scale. AC Volts: plus or minus 3% of full scale. DC Resistance: plus or minus 3% or arc length.

Size: 51/4" x 7" x 31/8" . Net Weight: 31/2 lbs. Complete with test leads No. 7500 and operator's manual. Net: \$48.95.

AC VTVM, Model 715. High input impedance, multi-voltage ranges and wide frequency response for general purpose applications. Ranges:

Kanges: Volts: 0..01, .03, .1, .3, 1, 3, 10, 30, 100 300 rms Decibles: Total Range minus 52 to plus 52 DBM Zero DBM: 1 millivolt in 600 ohms Scale Markings: minus 12 to plus 2 db Accuracy: plus or minus 5% of full scale Input impedance: Minimum 1 meg at 1kc shunted by 26 midt

25 uufd. Internal Multipliers plus or minus 1% precision

resistors. Frequency Response: 10 cps to 400kc plus or minus

db put Power Requirements: 110 to 125 VRMS, 50/60 cps at 10 watts Input

Size: $71/2'' \ge 51/2'' \ge 3''$. Net weight 3 lbs. 10 oz. Complete with operator's manual and shielded input cable. Net: \$69.95.

AC/DC Volt-Ohm-Milliammeter, Model 270. Includes all of the excellent features of the Model 260. plus a mirror scale and knife-edge pointer. The instrument offers repeatability, dependability, ruggedness, and the higher accuracy necessary for many productions and laboratory applications. Voltage, current, and resistance ranges are identical to the Model 260. Frequency response is flat from 20 cycles to 30 kc and within 1/2 db on 2.5, 10, and 50 VAC ranges at 200 kcps. High voltage stability is excellent due to incorporation of a newly developed feature that permanently eliminates the possibility of erratic readings due to electrostatic fields. Size: 51/4" x 7" x 31/8" Net Weight: 31/2 lbs. Complete with leads No. 7500 and operator's manual. Net: \$59.95.

Adapter plug-in units for Model 260 or 270. The "Add-A-Tester" series of adapters allows expansion of the 260 or 270 instruments by simply plugging in the necessary unit. As each new test arises, you buy only an adapter and save the cost of duplicate meters and circuitry necessary for single-purpose testers.

Transistor Tester, Model 650-Net: \$26.95.

Checks low and medium power transistors of the junction type. Checks Beta and Ico. Beta Ranges: 0-10, 0-50, 0-250. (F.S.). Beta Accuracy: plus or minus 3%, with 260 plus or minus 5% nominal; with 270 plus or minus 4% nominal.

Ico Range: 0-100ua

Ico Accuracy: plus or minus 1%, with 260 plus or minus 3% (F.S.); with 270 plus or minus 2% DC VTVM, Model 651-Net: \$32.95.

High Sensitivity with laboratory type DC coverage (10 ranges) offers higher accuracy of reading. Ideal for general VTVM applications, transistorized circuitry (design and servicing).

Voltage Ranges: 0-.5, 1.0, 2.5, 5, 10, 25, 50, 100, 250, 500. Accuracy: plus or minus 1%, with 260 plus or minus 3% (F.S.); with 270 plus or minus 2% (E.S.)

Input Impedance: Greater than 10 megs all ranges. Other adapters are available for numerous uses

Calibrated field strength meter, Model 498A. Power line or battery operated ... self-charging. Internal storage battery can be recharged by self-contained charger or from automobile battery while traveling between jobs. Covers all channels, UHF and VHF. Measures field strength from approximately 20 microvolts to .05 volts with an accuracy of plus or minus 6 db on VHF signals and plus or minus 8 db on UHF signals. Continuously variable sensitivity. Size: 93%" x 113%" x 91/2". Weight: 141/2 lbs.

less battery; Shpg. Wt. 18 lbs. Complete with operator's manual (less battery). Net: \$199.95. Storage battery, 12 ampere hour capacity . Net: \$16.95.

Model 458, 7' colorscope. Features wide band operation with a frequency response that is flat within plus or minus 1.0 db to 4.5 Mc. Displays color burst frequency with a sensitivity greater than 40 Mv rms per inch of vertical deflection. In narrow band operation, the frequency response is flat within plus or minus 2 do from 10 cycles to 300 kc with a sensitivity greater than 15 Mv rms per inch. Square wave response is excellent for accurate representation of sync pulses and composite wave-form patterns. Horizontal sweep, to 250 kc for expansion of high frequency wave-form detail and color burst. Vernier and compensated decimal step attenuator for better signal control. Provision for intensity modulation of CRT. 1 volt peak to peak calibrating voltage. 7" cathode ray tube. Size: 11" x 161/2" x 141/2" ... Weight 29 lbs., Shpg. Wt. 38 lbs. Complete with operator's manual Net: \$249.95.

Model 2610, wide band oscilloscope. High gain scope for the 1001 jobs where an expensive spec ialized scope is not needed. Vertical sensitivity. 6 mv rms. Vertical calibration accuracy, plus or minus 3%. Response (linear position): DC to 5.0 Mc/sec, plus or minus 0.5 db; DC to. 8.0 Mc/sec, plus or minus 1.5 db. Response (transient position): DC to 3.5 Mc/sec, minus 3 db, and minus 6 db at 5.0 Mc/sec. Triggered and recurrent sweeps. Precalibrated sweep positions of 5/50/500/5000 microseconds.

Accessories: A 10:1 probe, green filter, graticle, detachable line cord, and instruction manual are provided as standard accessories and shipped with each unit.

Size: 15" x 111/2" x 201/2" Net Weight: 53 lbs. Net Price \$575.00.

Many other instruments are available from Simpson Electric Company for industrial, radio and television applications.

Multi-range standards, Models 1700, 1701, 1702, 1703, and 1704. A new line of laboratory standards for general industrial laboratory testing, plant incoming inspection, production line applications and for high school and college laboratories.

These standards feature Simpson's self-shielding deep core construction with spring mounted sapphire jewels and hardened steel pivots. This ensures the high degree of accuracy built into each standard. The combination of the selfshielded core magnet meter movement and the steel case make these instruments impervious to the effects of external fields.

The meter is temperature compensated from 15 de-grees C. Hand stepped, hand drawn, white enameled dial with mirror segment assures greater accuracy over the entire scale arc. Tubular aluminum knife-edge pointer (painted black on top side only) im-proves readability, eleminates parallax. Ranges—DC Voltmeter Model 1700 0-1.5, 3, 7.5, 15, 30, 75, 150, 300, 750, 1500 Ranges—DC Ammeter Model 1701 0-0.75, 1.5, 3.7, 7.5, 15, 30, 75 Ranges—DC Milliammeter Model 1702 0-1.5, 3, 7.5, 15, 30, 75, 150, 300, 750, 1500 Ranges—DC Millivoltmeter Model 1703 0-7, 150, 750, 1500 Ranges—DC Millivoltmeter Model 1704 0-30, 75, 150, 750, 1500 The meter is temperature compensated from 15 de-

Net Price: Model 1700-\$160.00; Model 1701-\$155.00; Model 1702-\$135.00; Model 1703-\$140.00; Model 1704-\$150.00.

TRIPLETT ELECTRICAL INSTRUMENT CO.

Tube analyzer, Model 3444. Dynamic mutual conductance analyzer. Plots tube characteristic curves, measures grid current at known potentials, compares cut-off characteristics of dual tubes, and reads directly in micromhos with a self-checking Gm circuit. Checks plate current cutoff, gas under actual operating conditions, checks rectifiers under load, checks thyratron firing voltage and grid current. CG adapter for Model 3444 enables the testing of low power transmitting, industrial, and special purpose tubes, including subminiature. Has sockets for septar, lighthouse, acorn, and pencil triode tubes. Also available is the Model 3490 Transistor Analyzer for complete transistor checking. Net: \$349.50.

Vacuum tube volt meter, Model 850. High impedance (11 megs.), wide frequency range tester. High stability meter readily usable on most circuits including transistor uses. The 850 has superior voltage measuring capabilities, plus resistance ranges to 1000 megohms. Accurate within plus or minus 3% on AC, DC and Ohms. Operational at frequencies up to 250 Mc with auxiliary probe. Uses unlimited for all types of TV and microwave applications. Also included is a long line of Triplett V-O-M's covering almost every electronic need including a portable selfcontained VTVM. Write for complete catalog of details. Net: \$79.50.

Ranges

 Ranges

 DC: 0.5, 1.5, 5, 15, 50, 150, 500, 1500

 AC: 0.1.5, 5, 15, 50, 150, 500, 1500

 P-P: 0.4, 14, 40, 140, 400, 1400, 4000

 OHMS: 0.1000, 10,000, 100,000, 1 Meg., 10 Meg., 100 Meg., 1000 Meg.

 Frequency Range: 15 cps to 3 Mc. (Up to 250 Mc with accessory diode probe available extra.)

TRANSISTORIZED EQUIPMENT Broadband

AMECO

All-band line extender amplifier, Model ATM-20-C. Provides 20 db usable gain for feeder line extension; apartment, motel, hotel installations; long cable runs thru areas without power. Maximum output: 45 db (single amplifier). Noise figure: 6 db. Contained in weatherproof pole or messenger mount housing. Power requirements: minus 15 vdc. Net: \$69.50.

All-band line extender amplifier, Model ATM-20. Same characteristics as ATM-20-C except selfcontained power supply. Net: \$99.50.

Low band line extender amplifier, Model ATL-30. Same characteristics as the ATM-20 except low band only. Self-contained power supply. Net: \$65.50

band line extender amplifier, Model Low ATL-30-C. Same characteristics as the ATM-20-C except designed for remote cable powering. PNS.

All-band trunkline amplifier, Model ATA-60. Cable powered, cascadable amplifier. Gain: 30 db maximum (Channel 13). Gain control range: 10 db. Variable tilt. AGC circuit. Noise figure: 10 db. Maximum output level: +50 db (single amplifier). Plug-in pads on input provide 20 db maximum attenuation in 3 db steps. Power requirements: 29 vac. Net: \$395.00.



All-band trunkline amplifier, Model ATM-60. Same characteristics as ATA-60 except no AGC. Net: \$295.00.

CAS MFG. CO.

High band-low band line amplifier, Model TRA-220. Covers 40 to 110 Mc and 170 to 220 Mc. Gain: 25 db, low band; 36 db, high band. ALC, gain controls and tilt adjustment for low and high bands on same chassis. Remote powered by 20 to 30 vac or + DC source. Weatherproof aluminum housing. Single input and output. Zener regulated circuits provide constant output Zener regulated circuits provide constant output with varying temperature and line voltages. Net: \$180.00.



Low band bridging amplifier, Model TR-4W. Covers 30 to 110 Mc. Gain: 14 db across bandwidth on 4 outputs. Remote powered from 20 to 30 vac or + DC source. 20 db variable pad on input for gain control. Maximum of 1 db thru loss. Weatherproof aluminum housing. Net: \$58.00.

All-band bridging amplifier, Model TRA-4W. Covers 50 to 220 Mc. Gain: 10 db minimum at Channel 13 across 4 outputs. Remote powered from 20 to 30 vac or + DC source. 20 db variable pad on input for gain control. Weatherproof aluminum housing. Net: \$69.50.

Low band bridging amplifier, Model TR-95B. Covers 54 to 95 Mc. Gain: 30 db at Channel 6. Gain and tilt is temperature compensated thus reducing the need for AGC. Remote powered from 20 to 30 vac or + DC source. Weatherproof aluminum housing. Two inputs and two outputs for line bridging or cascaded runs. Net: \$95.00.



Low band distribution amplifier, Model TR-100ex. Covers 40 to 110 Mc. Gain: 12 db minimum across bandwidth. Single input and output. Remote powered from 20 to 30 vac \pm DC source. Size: 1" x 3". Net: \$29.50.

Line extender amplifier, Model TRA-200ex. Gain: 10 db minimum at Channel 13. Single input and output. Remote powered from 20 to 30 vac or + DC source. Size 1" x 3". Net: \$38.00. High band-low band distribution amplifier, Model TRA-215. Covers 50 to 110 Mc and 170 to 220 Mc. Gain: 28 db, high band; 18 db, low band. Separate amplifiers. Gain control, tilt adjustment for high and low bands on same chassis. Remote powered from 20 to 30 vac or + DC source. Single input and output. Weatherproof aluminum housing. Net: \$112.00.

CHANNEL MASTER

Antenna-mounted amplifier, Model 0023. High gain, low noise amplifier that mounts directly on the antenna. Can feed up to 4 sets. Lightning protection circuit. List \$39.95.

Pre-amplifier, Model 0021. Can be mounted directly on the back of TV set. Will feed up to 4 sets. Utilizes high gain, low noise transistor circuit. AC powered. List: \$33.95.

THE FINNEY COMPANY

Antenna-mounted amplifier. Transistorized. Covers all VHF TV channels plus FM. Can drive up to four sets. Gain: (feeding one set) 19 db, low band; 10.5 db high band. Remote power supply has built-in four set coupler. Stripless 300 ohm terminals. List: \$34.95.

HOLT ELECTRONIC RESEARCH

Low band bridging amplifier, Model 2-4. Gain: 25 db. Output: 36 db. Tilt control, 4 outputs, 75 ohm input and output. Net: \$89.00.

All-band bridging amplifier, Model 4-4. Gain: 20 db. Output: 36 db. Low and high band tilts, 4 outputs, 75 ohm input and output. Net: \$130.00.

All-band line extender, remote. Gain: 20 db. Output: 33 db. 75 ohm and input and output. Net: \$65.00.

All-band line amplifier, AGC equipped. Gain: 40 db. Output: 33 db. Separate low and high band till controls and gain controls. Low and high band switches, 75 ohm input and output. Net: \$400.00.

All-band chain amplifier. Manual gain control. Delay line adjustment, 75 ohm input and output. Net: \$250.00.

All-band remote line amplifier. Gain 38 db. Output 33 db. Manual. Low and high band tilt and gain controls, 75 ohm input and output. Net: \$150.00.

Low band remote line extender. Gain: 38 db. Output: 33 db. Tilt and gain controls, 75 ohm input and output. Net: \$60.00.

Low band manual remote line amplifier. Gain: 38 db. Output: 33 db. Tilt and gain controls, 75 ohm input and output. Net: \$75.00.

INTERCONTINENTAL ELECTRONICS CORP.

Low band amplifier, Model ABB-9. Manual gain control variable over a 4 db range. Covers channels 2-6 plus FM. Noise figure: 5 db. 75 ohm input and output impedance. Can be used for either trunk or feeder line service. Adjustable tilt permits easy equalization. Builtin standby power source automatically supplies emergency battery power up to 25 hours when commercial power fails. Restores to primary power automatically. Weather-proof enclosure. May be cable powered. Gain: 35 db at 88 Mc. Output: +46 db (five channel operation) (for one amplifier). Net: \$200.00.

Low band amplifier, Model ABB-10. Same characteristics as ABB-9 except has AGC system to hold output within 2 db for input increase of 10 db. Net: \$235.00.

Low band amplifier, Model ABB-11. Manual gain control variable over 4 db range. Covers channels 2-6 plus FM. Input and output impedance 75 ohms. Gain: 35 db at 88 Mc. Output level: +46 db for one amplifier, (5 channel operation). Can be used as trunk or feeder amplifier.

Low bard amplifier, Model ABB-12. Same characteristics as ABB-11 except has AGC system to hold output constant within 2 db for an input variation of 10 db. Net: \$170.00. Low band bridging amplifier, Model AB-3. Provides four high level outputs from a main trunk cable. Gain: 25 db minimum. Gain control range: 20 db. Slope adjustment: flat to 3 db. Output: 0.25 v per carrier for 5 channels. 120 vac or cable powered. Net: \$180.00.

JFD ELECTRONICS CORPORATION

Antenna - mounted amplifier, Model TNT25. Mounts directly on the antenna dipole terminals. "Add-on" type. Can be used for TV or FM. Net: \$16.05 (See Power Supplies).

Antenna - mounted amplifier, Model TNT100. Complete assembly including TNT75 batterypowered supply, 300 ohm connectors, outlets, and hardware. (Complete distribution system). Amplifier is TNT25. Net: \$23.42.



Antenna-mounted amplifier, Model TNT103. Complete assembly including TNT85 AC line powered supply, 300 ohm connectors, outlets and hardware. (Complete distribution system). Amplifier is TNT25. Net: \$24.76.

Pre-amplifier, Model TNT105. New Nu-Vista AC powered amplifier with outputs for 4 sets. Can be used for TV or FM. 300 ohm or 75 ohm input and 300 ohm output. Has demonstrator switch, gain control and courtesy AC outlet. Complete with connectors, outlets and hardware. Net: \$20.07.

SPENCER-KENNEDY LABORATORIES



Low band amplifier, Model 251. Covers 20 to 100 Mc. Operates from 28 vdc. Noise figure: 8 db at 100 Mc. Cable powered with ALC unit to compensate for temperature changes. Gain: 17-25 db. All transistorized, cascadable. Net: \$310.00

Single-Channel

CAS MFG. CO.

Single channel preamplifier, VHF, Model TRP-1-13. Gain: 15 db minimum on Channel 13. Bandwidth: 8 Mc with low noise figure. Weatherproof aluminum housing. Remote powered from 20 to 30 vac or + DC source. Specify TV channel. Net: \$75.00.

HOLT ELECTRONIC RESEARCH

VHF preamplifier. Gain: 20 db. 75 ohm input and output. Includes power supply. Net: \$50.00.

INTERCONTINENTAL ELECTRONICS CORP.



Single-channel preamplifier, Model AP-3. Designed for cable powering or can be battery powered. Power supply can be located up to 600 feet from pre-amp. Low noise figure on both high and low band. Gain: 40 db (low band) and 35 db (high band). 75 ohm input and output impedance. For storage battery operation, unit requires 9 vdc at 18 ma. Net: \$70.00.

SPENCER-KENNEDY LABORATORIES



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. Noise figure: 8 db, high band; 6 db low band. Net: \$165.00

Single-channel amplifier, Model 272. Gain control range: from -10 db to + or -30 db. Response: + or -2 db. Output: 36 dbmv for 1% intermodulation distortion. Noise figure: 11 db for 6 Mc bandwidth. Rack or wall mounting. DC powered (See power supplies) by 282 power unit. Net: \$270.00



Crystal-controlled VHF to VHF converter, Model 276. Operates from 28 vdc. Matched input and output. Converts any VHF channel to any other VHF channel with single or double conversion. Gain: unity to + or -3 db. Rack or wall mounting. Completely transistorized unit. Net: \$280.00

DISTRIBUTION EQUIPMENT Couplers

BLONDER TONGUE - BENCO

4 set coupler, Model A-104. Directional coupler with flat response from 50 to 220 Mc. Feeds 4 receivers from one antenna, or mixes 4 antennas into one line. Isolation: 12 to 20 db. Net: \$2.75. 4 set coupler, Color-4. Deluxe 4 set coupler. Low loss, excellent isolation. No deterioration of color signals. PNS.

BLONDER TONGUE - BENCO

2 set coupler, Model A-102. Isolation: 10 to 20 db. Net: \$1.95.

CHANNEL MASTER

0036 — 2-set coupler. Insertion loss 3 db. coupler utilizes 1/4 wavelength transformer in each leg of circuit to maintain a constant 300 ohm impedance match. List: \$4.86. **0038** — 2-set coupler. Covers TV-FM-UHF. List: \$3.95.

HOLT ELECTRONIC RESEARCH

TSC-1—Two set coupler. 25 db isolation between outlets. Minimum of 3.5 db loss per output. Push-on fittings. Capacitive isolation. 75 ohm input and output. Bandpass: 2 thru 13. Net: \$3.25.

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JFD ELECTRONICS CORPORATION

AC60-3-set outdoor coupler. Same characteristics as AC40 (2-set). List: \$4.50.

BC3—3-set coupler. Same characteristics as BC2 (2-set). List: \$3.65.

AC40—2-set outdoor coupler. Permits coupling at point of highest signal strength. (Next to antenna). Ferrite core transformer design achieves minimum insertion loss and maximum isolation between sets. Rugged U-bolt assembly permits secure mounting on any point on mast: List: \$4.00.

BC2—2-set coupler. Low loss ferrite core transformer and bifilar coil design effect better interset isolation (12 db), flat signal response, no increase in normal line SWR, insertion loss of less than 1 db across the band, optimum impedance match. List: \$3.20.

RA2—2-set economy coupler. Ultra-compact, installs in a wink. No stripping necessary, sawtoothed washers make positive contact with any flat, oval or round twin lead. List: \$1.65.

SC-2—2-set bifilar coil coupler. Ultra low loss bifilar core transformers develop maximum signal transfer and set isolation on Channels 2 and 13. List: \$10.95.

TC2—2-set coupler, bifilar coil, with built-in lightning arrester. Same characteristics as SC-2. List: \$11.95.

TT2-2-set economy bifilar coil coupler. List; \$3.95.

AC70-4-set outdoor coupler. Same characteristics as AC 40 (2 set). List: \$5.25.

BC4—4-set coupler. Same characteristics as BC2 (2-set). List: \$4.05.

SC4—4-set bifilar coil coupler. Same characteristics as SC2 (2-set). List: \$11.95.

TC4—4-set bifilar coil coupler with built-in lightning arrester. Same characteristics as TC2 (2 set). List: \$12.95.

VIKING CABLE COMPANY

TC1-2-set coupler. Die cast zinc case which prevents radiation and acts as a regular shield to outside interference. Maximum signal transfer and minimum loss. Price: \$1.00.

2CP-2-set coupler. Enclosed in high impact plastic case. Price: \$.60.

TC4-4-set coupler. Die cast zinc case which prevents radiation and acts as a regular shield to outside interference. Maximum signal transfer and minimum loss. Price: \$1.85.

Matching Transformers-Flush

MX-3—Matching transformer. Mounts in flush electrical outlet box with ivory cover plate. 75 ohms to 300 ohms. Bandwidth: 5 to 300 Mc. HHS-1652 connector. Connectors and screws included. Net: \$3.75.

MXT—Identical to the MX-3 except designed for multiple unit series connections in motels and hotels. MXT is padded in steps of 3 db to the 300 ohm output. Range: 9 to 40 db. Low insertion loss. PNS.

JERROLD ELECTRONIC CORP.



T-373—Matching transformer. 75 to 300 ohms. Ivory finish. B-59 connector for cable. 2 screw terminal strip for 300 ohm line. AC isolation. Mounts in standard 2" x 2" outlet box or 4" 4" x 4" box with single gang plaster cover. PNS.

VIKING CABLE COMPANY



913—Matching transformer. 6 db voltage stepup. 75 ohm to 300 ohm. Flush mount, wall type. Bandpass: 2 to 13. Standard RG59 coax connector supplied with unit. Price: \$1.75.

Matching Transformers-Surface

AMECO

MX-2—Matching transformer. 75 ohms to 300 ohms. Surface mounting. Cadmium finish. HHS-1652 connector. Connectors and wood screws included. Leads not furnished but may be ordered extra in 6, 12, and 20' lengths. Bandwidth: 5 to 300 Mc. Net. \$2.50.

MX-5—Matching transformer. For use where strong signal is present and can be picked up by the twin lead. Cast in epoxy resin. 75 ohm to 300 ohms. Bandwidth: 5 to 300 Mc. HHS-1652 connector. Net: \$1.50.

CAS MFG. CO.

CT-8—Matching transformer. 75 to 300 ohm. + 6 db voltage transfer ratio. Complete AC isolation (2000 volts). Response flat from 20 to 250 Mc. Transformer is formed on end of 8' coaxial cable and enclosed in shrink tubing. Other end of cable fitted with phone jack. Mates with WP-75, WB-75 and WBT-4 wall jacks. Net: \$1.75.

HK-15—Same characteristics and specifications as CT-8 except has 15' cable. Net: \$1.75.

ENTRON

WBF-Matching transformer. Surface mounting. Ivory finish. 75 ohm input, 300 ohm output. TV signal transfer +6 db. FM signal attenuated 20 db. Complete AC isolation. Net: \$5.25.

WBC—Matching transformer. Surface mounting. Push-on fitting input and terminal strip on output. Useful for apartment use or other situation wherein different TV receivers might be connected to a permanent installation at different times. Net: \$3.75.

WBL—Matching transformer. Mounts on rear of TV receiver. Equipped with push-on connector with pin vise and twin lead with spade lugs. Net: \$3.53.

WBM—Matching transformer. Mounts on rear of TV receiver. Equipped with push-on connector with screw terminal and twin lead with spade lugs. Net: \$2.70.

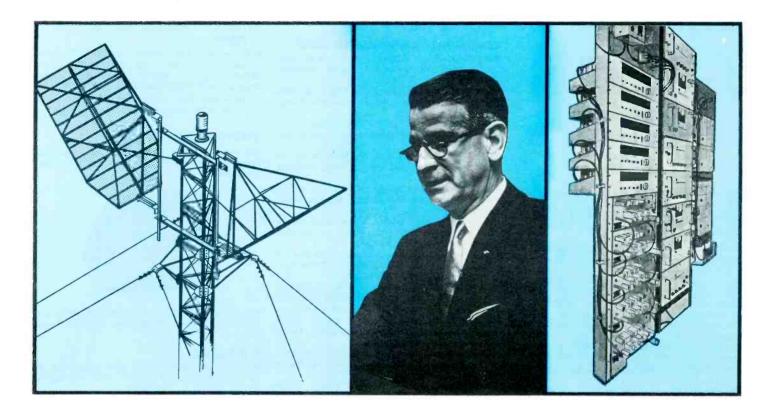
OF-320—FM subscriber connection device. Surface mounting. Ivory finish. FM tapoff attenuated 20 db. Push-on thru line fittings. 75 ohm input (thru line) and 300 ohm output (FM). Net: \$5.18.

HOLT ELECTRONIC RESEARCH

 SM-2-Jr.-Matching transformer. 75 ohm input and 300 ohm output. 2 times voltage increase. Transformer type for full isolation. Net: \$1.00.
 SM-2-Matching transformer. 75 ohm input and 300 ohm output. 2 times voltage increase. Capacitor isolation for protection. Net: \$1.75.

All-band bridging amplifier, Model LH-BA7-4. Covers channels 2 to 13. Has variable tilts, low and high band. Designed to drive four feeder lines. Gain: 21 db, Channel 6; 25 db, Channel 13. Output: 40 db at Channel 6 and 46 db at Channel 13. Self-contained power supply. 75 ohm input and output impedance. Net: \$175.00.

YOUR DYNAMIC INDUSTRY DEMANDS...



An Authoritative Business Publication

"Give us more sophisticated engineering material . . . I'd like to see more information on financing and systems management . . . greater emphasis on microwave . . . Your coverage of FCC actions is vital . . . We need more articles on closed circuit . . . I hope you'll publish more new product data"

These are just a sampling of the requests and suggestions received from readers of TV Horizons magazine. With thousands of subscribers, representing dozens of phases of our expanding industry, we have experienced difficulty in trying to satisfy everyone. There exists, however, a single solution. More pages.

In the months ahead you will see this magazine expanded to more than twice its present size. In addition to the established "TVH" editorial content, the new, larger format will enable us to bring you increased coverage of microwave topics, closed circuit and video tape uses, industrial two-way radio and television, in-depth management reports, and more detailed reporting of regulation and legislation affecting the video-communication industries.

Additional top-notch technical talents on the Television Horizons staff will assure you of a quality magazine comprising the full scope of articles and features which you have asked for. Since this book is published for **your** benefit and satisfaction we will welcome your comments on our efforts to produce an expanded, more valuable publication for **you**.

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CITIZENS BAND CALLBOOK

CB MOBILE HANDBOOK

(S. A. F.) COMMUNAL AERIALS AND COAXIAL RELAY PRACTICE

INTERCONTINENTAL ELECTRONICS CORP.

WB-1-Indoor, surface mounted 75 ohm to 300 ohm matching transformer. Supplied with A102 connectors. Net: \$3.25.

WB-3-Indoor, surface mounted 75 ohm to 300 ohm matching transformer. Crimp type connector. Net: \$2.60.

JERROLD ELECTRONIC CORP.



MTU-372-Matching transformer for indoor service. Surface mounting. Flat response over the entire UHF band. Insertion loss: .6 db at 470 Mc and 1.2 db or less at 890 Mc. F-61 connectors. PNS.

MTUO-374-Matching transformer for outdoor applications. Flat response over the entire UHF band. Insertion loss: .6 db at 470 Mc and 1.2 db or less at 890 Mc. Unit passes ac at 1.0 amp. maximum. F-61 connectors. PNS.

T-375-Matching transformer. 75 to 300 ohms. 5 to 6 db voltage gain. AC isolation. Surface mounting. 6" length of 300 ohm line with lug tips is provided. Ivory finish. PNS.

T-372-Same characteristics as T-375 except has terminal strip for connection of 300 ohm line. Uses C-52 solderless connector for cable connection. PNS.

Mounted in TO-374—Matching transformer. weather resistant, iridite finished case designed for mast or other outdoor mounting. Same features as T-375 except designed to pass ac voltages with minimum loss so unit may be used with Jerrold "DeSnower" pre-amps and their remote power supplies. PNS.

TELESYSTEM SERVICES CORPORATION

MTC-Matching transformer. 75 ohms to 300 ohms. Surface mounting. Enclosed in metal can. Quick mount "L" bracket and screw. 6" leads with spade lugs. Voltage gain 2:1. Has DC blocking capacitors on input side Net: \$1.45 (In lots of 500-\$1.10) (In lots of 1000-\$1.05).

MT-Matching transformer. Same characteristics as MTC except does not have blocking capacitors on input but has isolation type transformer for set protection and safety. Net \$1.25 (In lots of 500-\$1.00) (In lots of 1000-\$0.95).

VIKING CABLE COMPANY

910-Matching transformer. 6 db voltage stepup. 75 ohm to 300 ohm. Surface mount. High impact case with internal aluminum shielding. Bandpass: Channels 2-13. Standard RG59 coax connector supplied with unit. Can be mounted on back of set. Price: \$1.00.

911-Same as 910 except for baseboard mounting. Price: \$1.00.

Splitters-Indoor

BLONDER TONGUE - BENCO

4-way splitter, Model TS-774. Indoor, surface mounted. Can split four 75 ohm cables. 61/2 db loss. Net: \$5.10.

2-way hybrid splitter, Model TS-772. Indoor, surface mounted. Can be used to split or combine two 75 ohm cables. 31/2 db loss. Net: \$3.45.

CAS MEG. CO.

MS-2—Two-way splitter, "Midget" line. 3.2 db loss (10-220 Mc). Good isolation. 59/U solderless connections. Fits electrical outlet box. (New Product). Net: \$1.75.

MS-3-3-way splitter, "Midget" line. 4.5 db loss to three legs (10 to 220 Mc). Good isolation. 59/U solderless connections. Fits electrical outlet box. (New Product.) Net: \$1.85.

MS-4-4-way splitter, "Midget" line. 6.2 db loss (10 to 220 Mc). Good isolation. 59 /U solderless connections. Fits electrical outlet box. (New Product). Net: \$1.95.

COMMUNITY ENGINEERING CORP.

200-S-33-UC-2-way splitter. 2 outlets, 3 db each. 55-216 Mc. UHF connectors. Flange mounted. Price: \$5.75.

200-S-33-SL-2-way splitter. 2 outlets, 3 db each. 55-216 Mc. 59/U solderless connections. Flange mounted. Price: \$4.95.

200-S-014-UC-2-way splitter. 2 outlets, 3 db each. 54-216 Mc. UHF connectors. Flange mounted. Price: \$5.75.

200-S-014-SL-2-way splitter. 2 outlets, 0 db, 14 db. 59/U solderless connectors. Flange mounted. Price: \$4.95.

200-S-024-UC-2-way splitter. 2 outlets, 0 db, 24 db. 54-216 Mc. UHF connectors. Flange mounted. Price: \$5.75.

200-5-024-SL-2-way splitter. 2 outlets, 0 db, 24 db. 54-216 Mc. 59/U solderless connections. Flange mounted. Price: \$4.95.

DC-8-UC-2-way splitter. Directional coupler, 2 outlets, 8 db, 1 db. 54-216 Mc. UHF connectors. Flange mounted. Price \$5.75.

DC-8-SL-2-way splitter. Directional coupler, outlets, 8 db, 1 db. 54-216 Mc. 59/U solderless connections. Flange mounted. Price: \$4.95.

200-5-555-UC—3-way splitter. 3 outlets, 5 db each. 54-216 Mc. UHF connectors. Flange each. 54-216 Mc. mounted. Price: \$6.75.

200-5-555-SL-3-way splitter. 3 outlets, 5 db each. 54-216 Mc. 59/U solderless connections. Flange mounted. Price: \$5.95.

200-5-6666-UC-4-way splitter. 4 outlets, 6 db each. 54-216 Mc. UHF connectors. Flange mounted. Price: \$7.75.

200-5-6666-51—4-way splitter. 4 outlets, 6 db each. 54-216 Mc. 59/U solderless connections. Flange mounted. Price: \$6.95.

JERROLD ELECTRONIC CORP.

1592-2-way splitter. Response flat from 4 to 220 Mc. Surface mounting. Isolation: 20 db, low band; 15 db, high band. 75 ohm impedances. F-61 fittings. 3.5 db maximum insertion loss. PNS.

DC-8—Back-matched, 2-way splitter. Insertion loss: 1.5 db. Tap loss: 9 db. Isolation: 30 db at Channel 6 between line output and tap output: Bandwidth: 7 to 216 Mc. F-59 fittings. PNS. DC-9-Same as DC-8 except has test point. Test point loss: 40 db. PNS.

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. E-61 fittings. Bandwith: 0 to 216 Mc. PNS.

1502-2-way resistive splitter. Bandwidth: 0 to 220 Mc. 75 ohm impedance. 6 db isolation between outputs. 6 db splitting loss, F-61 fittings. PNS.

1522-2-way transformer type splitter. 18 db isolation, 8 to 88 Mc and 26 d's, 14 to 46 Mc. 75 ohm impedance, F-61 fittings. PNS.

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. PNS.

1582—2-way transformer type splitter. Same characteristics as 1562 except uses F-61 fittings and fittings are mounted on face of "blister-can." PNS.

G-1518-8-way splitter. Has push-on "Gamma" chassis fittings. 75 ohm impedance. Isolation: 17 db minimum between outputs of opposite end groups; 14 db minimum between outputs of same end group in the low band; 7 do minimum between outputs of same end group in the high band. Splitting loss: 9 d's nominal, Covers 54 to 216 Mc. PNS

1514-4-way transformer type splitter. 12 db isolation. 6-7 db splitting loss. F-61 fittings. Covers 24 to 216 Mc. PNS.

1503—3-way resistive splitter 10 db isolation, F-61 fittings. 10 db splitting loss. 75 ohm impedance. PNS.

INTERCONTINENTAL ELECTRONICS CORP.

LS-21A-2-way line splitter for RG-59/U cable. Crimp type. For indoor use. Net: \$5.30. LS-1A-2-way line splitter for RG-59/U cable. Supplied with A102 connectors. Net: \$5.60. LS-2A-4-way line splitter for RG-59/U cable. Supplied with A102 connectors. Net: \$8.60.

VIKING CABLE COMPANY

931—4-way splitter. All band design. Radiation proof. Low VSWR. Fittings: 59U and 11U types. Price: \$5.00.



930-2-way splitter. All band design. Radiation proof. Low VSWR. Fittings: 59U and 11U type. Price: \$2.50.

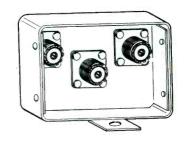
WINEGARD

LS-752—2-way splitter. 75 ohm impedance. 6 db attenuation at all outputs. C-59 connectors. Surface mounting. List: \$8.45

LS-275-2-way line splitter, 3 db attenuation per output. C-59 connectors. Surface mounting, 75 ohm. List: \$9.00

Splitters-Outdoor

AMECO



Two-way line splitter, Model LS-2. 75 ohm impedance. Cadimum plated, iridite finish. Specify bandwidth and connectors. Bracket mounting. Net: \$8.00

Four-way line splitter, Model LS-4. 75 ohm impedance. Cadmium plated, iridite finish. Specify bandwidth and connectors. Bracket mounting. Net: \$11.25.

BLONDER TONGUE - BENCO

2-way, hybrid splitter, Model MDC-2b. Can be used to split or combine two 75 ohm cables. 31/2 db loss. Net: \$8.60.

2-way, hybrid splitter, Model 2SP-75. Can be used to split or combine two 75 ohm cables. Net: \$8.50.

2-way, splitter, Deluxe Cable Master. 10 to 216 Mc, VSWR less than 1.2. PNS.

2-way asymetrical splitter, Model 2ASP-75-MP. Back matched. Available in 8, 10, and 12 db attenuation. PNS.

2-way splitter, back matched, Model 2SP-75-MP. PNS.

3-way, hybrid splitter, Model 3SP-75. Can be used to split or combine three 75 ohm cables. Net: \$10.45.

3-way, back matched splitter, Model 3SP-75-MP. PNS.

4-way hybrid splitter, Model MDC-4. Can be used to split or combine four 75 ohm cables. 61/2 db loss. Net: \$17.50.

4-way transformer type splitter, Model 4SP-75. Used to split four 75 ohm cables. Net: \$10.35. 4-way back matched splitter, Model 4SP-75-MP. PNS

CAS MFG. CO.

CAS-2W-2-way splitter. UHF fitting. Maximum 3.2 db loss with 14 db isolation. Switch controls line powered voltage to both outputs. Strand mounting. Net: \$7.50.

CAS-3-6-3-way splitter. UHF fittings. Line powered voltage passes to 3.2 db leg and switch controls voltage to 6.2 db leg. Strand mounting. Net: \$8.50.

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. Net: \$9.00.

COMMUNITY ENGINEERING CORP.

200-S-33-U-2-way splitter. 2 outlets, 3 db each. 54-216 Mc. UHF connectors. Weatherproof mounting. Price. \$9.50.

200-S-014-U-2-way splitter. 2 outlets, 0 db, 14 db. 54-216 Mc. UHF connectors. Weatherproof mounting. Price. \$9.50.

200-5-024-U-2-way splitter. 2 outlets, 0 db, 24 db. 54-216 Mc. UHF connectors. Weatherproof mounting. Price. \$9.50.

DC-8-U-2-way splitter. 2 outlets, 8 db, 1 db. 54-216 Mc. UHF connectors. Weatherproof mounting. Price: \$9.50,

JERROLD ELECTRONIC CORP.

1593-2-way splitter. Splits one 75 ohm line into two 75 ohm lines with only 3 db loss in each leg. Passes 24 vac for line extenders. Mounts on messenger cable. 26 db minimum isolation. F-61 fittings. PNS.

INTERCONTINENTAL ELECTRONICS CORP.

LS-3A-Weatherproofed 2-way line splitter. For RG-11/U cable. Less cable connectors. Net: \$10.80.

LS-4A—Weatherproofed 4-way line splitter. For RG-11/U cable. Less cable connectors. Net: \$12.80.

Tapoffs-Indoor (Flush) **BLONDER TONGUE - BENCO**



TF-771B-Flush mounted plate. Single 75 ohm output from 75 ohm thru line. 17 db isolation. 0.7 db thru loss. Net: \$2.55.

TF-771BS—Same as TF-771B except with stainless steel plate. Net: \$2.80.

TF-771BL-Same as TF-771B except only 0.4 db thru loss. Net: \$3.45.

TF-771BLM-Same as TF-771BL except with autotype plug. Net: \$3.25.

output from 75 ohm thru line. 12 db isolation. 0.7 db thru loss. Net: \$3,40,

TF-771AS—Same as TF-771A except with stainless steel plate. Net: \$3.75.

TF-731B-Flush mounted plate. Single 300 ohm output from 75 ohm thru line. 17 db isolation. 0.7 db thru loss. Net: \$2.15.

TO1-75-Flush mounted plate. Single 75 ohm output from 75 ohm thru line. Jack for auto-type plug. 17 db isolation. 0.7 db thru loss. Net: \$2.75.

ISO-1S—Same as TO1-75 except with stainless steel plate. Net: \$2.85.

TF-772B-Flush mounted plate. Two 75 ohm outputs from 75 ohm thru line. 17 db isolation. 0.35 db thru line loss per output used. Net: \$3.75.

TF-772A-Same as TF-772B except 12 db isolation and 0.7 db thru loss per output used. Net: \$3.75. TFP-731A-Flush mounted plate. Single 300 ohm stripless plug output from 75 ohm thru line. 12 db isolation. 0.6 db thru loss. Net: \$3.30.

TFP-731BL-Flush mounted plate. Single 300 ohm stripless plug output from 75 ohm thru line. 17 db isolation. 0.4 db thru loss. Net: \$3.90.

LJ-1-Tumbler lock cover that fits over any Lock-Jax unit or standard single wall plate. Net: \$5.85. LJ-2-Blank wall plate with direct connection for thru line. Net: \$4.00.

LJ-6-Video thru unit for video camera, amplifier or monitor, with shorting switch. Net: \$9.10.

LJ-11-Single 17 db tapoff with torroidal ferrite transformer. Net: \$7.30.

LJ-12-Double 17 db tapoff similar to LJ-11. Net: \$10.15.

TF-771-Flush mounted wallplate. 75 ohm input. One 75 ohm output. No isolation. PNS.

TF-331-Flush mounted wall plate. 300 ohm input. One 300 ohm output. No isolation. PNS.

CAS MFG. CO.

WP-75-Flush mounted. Plastic telephone cover with phone jack, mates CAS-CT-8 transformer cable. 75 ohm resistor terminates line when phone plug on CT-8 is disconnected. Net: \$0.95.



WBT-4-Choice of 4 taps (10, 15, 20 and 25 db) by removing parallel capacitors. Mounted on telephone wall plate. 59/U solderless feed-thrus. $11/2'' \times 11/2''$ metal box with phone jack outlet which mates CAS CT-8 transformer cable. (New Product) Net: \$1.45.

COMMUNITY ENGINEERING CORP.

TWP-P*-AMP-LOK receptacle with plug for 300 ohm twin lead, Price: \$3.75.

TWP-S*-Screw terminals for 300 ohm twin lead. Price: \$3.50. * Specify finish: CH, BW, IW also specify attenua-

tion (0, 15, 20, 25 or 30 db) WP-SL*-Solderless connector receptacle for RG-

59/U coax. Flush mounting. Price: \$1.10.

WP-UHF*-UHF SO-239 receptacle, Flush mounting. Price. \$1.50.

WP-BNC*—BNC UG-220/U receptacle. Flush mounting. Price: \$2.25.

Specify finish: CH, BW, or IW.

INTERCONTINENTAL ELECTRONICS CORP

OP-75-Flush mounting 75 ohm to 75 ohm. Specify 0, 15, 25 or 30 db isolation. Net: \$2.35.

TF-771A-Flush mounted plate. Single 75 ohm OP-75T-Flush mounting 75 ohm to 75 ohm, 15 db isolation. Includes termination. Net: \$2.50.



OP-300-Flush mounting 75 ohm to 300 ohm. Specify 0, 15, 25 or 30 db isolation. Net: \$2.85. OP-300T-Flush mounting 75 ohm to 300 ohm. Includes termination. Specify 0 or 15 db isolation. Net: \$3.00.

JERROLD ELECTRONICS CORP.

1477-Flush mounting. 75 ohm output from 75 ohm line. Choice of isolation. PNS.

1478-Flush mounting, 75 ohm output from 75 ohm line also output for AM radio. Choice of isolation. PNS.

1431-Flush mounting. 300 ohm output from 75 ohm line. Choice of isolation. PNS.

VIKING CABLE COMPANY



914—Flush-mounted wall plate. 75 ohm, 17 db isolated outlet from 75 ohm cable. "C" type connections. Price: \$1.80.

WINEGARD

LTF-33—Flush mounting 300 ohm tap for 300 ohm feeder line. Available in 6 db line-to-set isolation and in 300 ohm terminated units. Ivory enamel finish. Mounts in standard 2" x 4" outlet box. Complete with 300 ohm twin-lead disconnect plug. List: \$3.50 (6 db or terminatedspecify)

LTF-73*-Flush mounting 300 ohm output from 75 ohm line. Available in 10, 15, and 20 db isolation values and in 75 ohm terminated units. Ivory enamel finish. Mounts in standard 2" x 4" outlet box. Complete with 300 ohm aisconnect plug and dual RG-59/U cable clamp for feeder line input and output. List: \$3.50 (standard or terminated) Specify isolation.

Tapoffs-Indoor (Surface)

BLONDER TONGUE - BENCO

TSP-331-Surface mounted box. 300 ohm input. One 300 ohm stripless plug output. No isolation. Net: \$2.35.



TO2-75-Surface mounted box. Two 75 ohm outputs from 75 ohm thru line. Jacks for auto-type plugs. 17 db isolation. 0.35 db thru loss per output. Net: \$4.80.

TO-774A—Surface mounted box. Four 75 ohm outputs from 75 ohm thru line. 12 db isolation. 0.6 db thru loss per output used. Net: \$8.50.

TSP-731A—Surface mounted box. Single 300 ohm stripless plug output from 75 ohm thru line. 12 db isolation. 0.7 db thru loss. Net: \$3.85.

TO-2-300—Surface mounted box. Two 300 ohm outputs from 75 ohm thru line. Stripless terminals. 17 db isolation. 0.35 db thru loss per output used. Net: \$4.80.

TS-731B—Surface mounted box. Single 300 ohm output from 75 ohm thru line. 17 db isolation. 0.7 db thru loss. Net: \$2.95.

TSP-731BL—Surface mounted box. Single 300 ohm stripless plug output from 75 ohm thru line. 17 db isolation. 0.4 db thru loss. Net: \$4.10.

TS-771B—Surface mounted box. Single 75 ohm output from 75 ohm thru line. 17 db isolation. 0.7 db thru loss. Net: \$2.95.

TS-771BL—Same as TS-771B except only 0.4 db thru loss. Net: \$3.60.

TS-771A—Surface mounted box. Single 75 ohm output from 75 ohm thru line. 12 db isolation. 0.7 db thru loss. Net: \$3.60.

CAS MFG. CO.

WB-75—Surface mounted. $1\frac{1}{2}$ " x $1\frac{1}{2}$ " metal box for wall mounting with phone jack. Mates with CAS-CT-8 transformer cable. 75 ohm resistor terminates line when plug on CT-8 is disconnected. Net: \$1.25.

INTERCONTINENTAL ELECTRONICS CORP.



OS-75—Surface mounting 75 ohm to 75 ohm. Specify 0, 15, or 30 db isolation. Net: \$2.55. **OS-75T**—Surface mounting 75 ohm to 75 ohm. Includes termination. 15 db isolation. Net: \$2.75. **OS-300**—Surface mounting 75 ohm to 300 ohm. Specify 0, 15, 25 or 30 db isolation. Net: \$2.95. **OS-300T**—Surface mounting 75 ohm to 300 ohm. Includes termination. 15 db isolation. Net: \$3.25.

JERROLD ELECTRONICS CORP.

J-501-6—''J'' Jack basic receptacle for RG-6/U type cables. Passes frequencies from 0 to 220 Mc. PNS.

J-501-11—Similar to J-501-6 but for RG-11/U cables. PNS.

J-503—Plug-in feed-thru unit for use with any J-501-6 or J-501-11 receptacle. PNS.

J-505-U—Similar to J-504-U but provides connections for 1 TV receiver and 1 RF control function. PNS.

J-506-U—Similar to J-504-U but provides connections for equipment (amplifiers, traps, filters, etc.). PNS,

J-507-U—Combination video-RF plug-in unit for use with either J-501-6 or J-501-11. Provides connections for 2 video and 1 RF to the receptacle. PNS.

JP-520—Standard 2-gang stainless cover plate for use with either J-501-6 or J-501-11 receptacle. PNS. JP-530—Standard 3-gang stainless cover plate for use with either J-501-6 or J-501-11 receptacle and a separate audio outlet. Complete with 3-pin audio connector, cap and chain. PNS.

JP-550—5-gang stainless cover plate for use with either 2 J-501-6 or 2 J-501-11 receptacles and separate dual audio outlet. Complete with 4-pin audio connector, cap and chain. PNS.

FMT-2—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 impedances. PNS.

UT-22—Tap-off unit, Ultra-Tap series. Choice of three isolation and feed-thru values. For TV or FM. Can be flush mounted by using $2'' \times 4''$ wall box. Accepts 75 or 300 ohm push-on plugs (G-59 or G-300). PNS.

UT-33—Tap-off unit, Ultra-Tap series. Available in the same isolation and feed-thru values as Model UT-22. Additional isolation to separate TV and FM signals for simultaneous connection of a TV receiver and FM receiver. Flush mounts in same manner as UT-22. Accepts G-59 or K-300 plugs. PNS.

UT-12—Special wall terminal unit. Without isolation or feed-thru. Size and shape is same as UT-22 or UT-33. Accepts G-59 or G-300 plugs. PNS.

UT-SH-Surface housing for UT-22, UT-12. Single outlet, ivory surface mounting box. PNS.

UT-PI-Flush cover plate. Single outlet ivory cover plate. PNS.

UT-PS—Flush cover plate. Single outlet cover plate, brushed stainless steel. Other finishes and double-sized cover plates are available on special order. PNS.

WINEGARD

LTS-33—Surface mounting 300 ohm tap for 300 ohm feeder line. Available in 6 db line-to-set isolation and in 300 ohm terminated units. Ivory enamel finish, Complete with 300 ohm twinlead disconnect plug. List: \$3.50 (6 db or terminated—specify)

LT5-73*—Surface mounting. 300 ohm output from 75 ohm line. Available in 10, 15 and 20 db isolation value and in 75 ohm terminated units. Ivory enamel finish. Complete with 300 ohm disconnect plug and dual RG-59/U cable clamp for feeder line input and output. List: \$3.50 (standard or terminated)

Specify isolation.

Tapoffs-Outdoor (Single)

BLONDER TONGUE - BENCO

MTO-11—Single 75 ohm output from RG-11/U cable. Pressure tap. 17 db isolation.

MT-11—Single 75 ohm output from 75 ohm thru line. Choice of 12 db, 17 db, or 23 db isolation. Net: \$3.95.

ST4—Single 75 ohm output from 75 ohm thru line. Choice of 12 db, 16 db, 20 db or 30 db isolation. Also available with ground provision. PNS.

ST4-75-P—Solderless tap-off with lower feed thru loss and improved frequency range of 4.5 - 220 Mc/s. In 12 db attenuation only. PNS.

ST4-75-MP—Back matched solderless tap-off. A-vailable in 13, 16, 20, 25, 30, 35, 40, 45 and 60 db attenuation. PNS.

AT1-75P—Solderless tap-off for insertion into cable. PNS.

ENTRON

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). Net: \$2.03.

FTB-460—For use with double shield cables. 75 ohm output from 75 ohm thru line. Choice of attenuators (capacitive FTC series or resistive FTR series). Net: \$2.03.

HOLT ELECTRONIC RESEARCH

SC-2-Junior tap-off tee. Brass center insertion

pin, all-aluminum block hook and nut. Low insertion loss. Push-on fittings. Choice of resistive or capacitive inserts. Net: \$2.50.

VIKING CABLE COMPANY

900—Pressure tap for .410 cable (11U, VK11, & VKD11). Hook type. 75 ohm output from 75 ohm thru line. Choice of capacitive taps. Add 25c per unit for resistive taps. Price: \$2.25.

901-Same as 900 except for .465 cable (strip braid single-double VK108-VKD108, and double shielded and double jacketed 11U types.) Price \$2.25.

902—Pressure tap for .410 cable (11U, VK11, & VKD11). Button-hook type. 75 ohm output from 75 ohm thru line. Choice of capacitive taps. Add 25c per unit for resistive taps. Price: \$2.25.



903—Same as 902 except for .465 cable (strip braid single-double VK108-VKD108, and double shielded and double jacketed 11U types.) Price: \$2.25.

915—Underground pressure tap for .410 cable (11U, VK11, & VKD11). 75 ohm output from 75 ohm thru line. Choice of capacitive taps. Add 25c per unit for resistive taps. Price: \$2.25. **916**—Same as 915 except for .465 cable (strip braid single-double VK108-VKD108, and double shielded and double jacketed 11U types.) Price: \$2.25.

T12–12 db transformer insert. .25 db insertion loss. Frequency response: 8-220 Mc. PNS.

T16–16 db transformer insert. .1 db insertion loss. Frequency response: 8-220 Mc. PNS. **T20**–20 db transformer insert. .1 db insertion

loss. Frequency response: 8-220 Mc. PNS. T24-24 db transformer insert. .1 db insertion

loss. Frequency response: 8-220 Mc. PNS.

TELESYSTEM SERVICES CORPORATION

TTPR-Outdoor tap-off. Resistive type. Neoprene sleeve available for use on single shield cable. Uses F-59 connector (included). Button type hook for housedrop support. Isolation unit can be installed in inverted position. Choice of attenuators. Net: \$2.50 (in lots of 100-\$2.10) (In lots of 1000-\$2.00)

TTPI—Outdoor tap-off. Same as TTPR except inductive type. Choice of attenuators. Net: \$3.20 (In lots of 100—\$2.68) (In lots of 1000—\$2.55). **TTPC**—Outdoor tap-off. Same as TTPR except ca-

pacitive type. Choice of attenuators. Net: \$2.50 (In lots of 100-\$2.10) (In lots of 1000-\$2.00).

Tapoffs-Outdoor (Multiple)

AMECO

LT Models—Four taps provided with drops ranging from 15 to 40 db depending upon model. 75 ohm impedance. Low insertion loss. Choice of connectors available for customer taps. Net: \$12.40.

IT-4—Four taps provided with drops ranging from 15 to 40 db depending upon model. 75 ohm impedance. Low insertion loss. Choice of connectors available for customer taps. "In-line type. Net: \$12.40.

IT-2—Same specifications as LT models, except only 2 customer drops. PNS.

BLONDER TONGUE - BENCO

MIT-4—Four 75 ohm outputs from 75 ohm thru line. 17 db isolation. 0.35 db thru loss per output used. Net.: \$17.50.



NEXT BEST THING TO A COMPLETE ENTRON SYSTEM ENTRON ENGINEERED IMPROVEMENTS!

ENTRON is the company which created the famed ADABAND system and remarkable FASTEE clamp. Their superiority in engineering and equipment design is both recognized and proven. Whatever your requirements . . . from compatible parts to the solution of special problems . . . you can depend on, *and improve your system with Entron!*

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2141 Industrial Parkway, Silver Spring, Md. Telephone: Area Code 202 622-2000

Northwest: 100 N.E. Holladay Street, Portland 12, Oregon • Telephone: Area Code 503 235-8127 Southwest: 6455 Dannyboyar Avenue, Canoga Park, California • Telephone: Area Code 213 346-1769 Southeast: P.O. Box 594, Dublin, Georgia • Telephone: Area Code 912 272-4152 4T-75-Four 75 ohm outputs from 75 ohm thru line. Choice of 12 db, 20 db or 30 db isolation. Net: \$12.55

4T-75-MP-Back matched four way tap-off. Available in 10, 15, 20, 25, 30, 35 and 40 db attenuation. PNS.

CAS MFG. CO.

CAS-T-Four taps available in 15, 22, 25 and 32 db versions. UHF fittings on feed-thru and F fittings on four taps. Strand mounting, weatherproof aluminum housing. Net: \$8.50.

COMMUNITY ENGINEERING CORP.

TH-2-2-way hybrid tap unit. 54-216 Mc. High isolation. True match on all outputs. Price: \$9.50. TH-4-4-way tap unit. 54-216 Mc. High isolation. True match on all outputs. Price. \$14.50.

INTERCONTINENTAL ELECTRONICS CORP.



Tapoff, outdoor type, Model PT. Will accommodate two tap-offs from single block. Choice of capacitive or resistive inserts. Available for 4 different cable types. 1- for RG-11/U, single shield; 2- for RG-11/U double shield and jacket; 3- for 1/2" Foam or Solid dielectric; 4for 3/8" Foamflex. PNS.

Polethylene plug, type BP. For plugging unused tap connection of PT tapoff.

TRANSMISSION LINES

CAS. MFG. CO.

Coa	xial	cabl	es.

Type	Description	Price			
59/ES	.246 O.DHMW-House	drop\$21.95/m			
59/FSM	*246 O.DHMW-Ho	use			
	drop				
S11/FS—Strip braid-HMW-polyfoam-1.32					
		6\$57.90/m			
40/FS—(408 type) strip braid-HMW-polyfoam					
1.6 db loss at Channel 13\$73.70/m					
40/FD—Same as above except double					
	shield	\$96.80/m			
CAS NFB. CD.					



* (Indicates messenger support extruded into iacket).

INTERNATIONAL WIRE & CABLE CO. Coaxial cable for Community Antenna TV Sys-

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in the VHF frequency range. General purpose cable

901-59/U type cable. Foam dielectric. Noncontaminating poly jacket. .242 O.D. 903-59/U Triax type cable. Foam dielectric.

Non-contaminating poly jacket. .335 O.D.



905—11/U type cable. Foam dielectric. Noncontaminating poly jacket. .405 O. D. 907-11/U Triax type cable. Foam dielectric. Non-contaminating poly jacket. .475 O. D. 928-For trunk line service. Foam dielectric. Non-contaminating poly jacket. .665 O. D. 900-59/U type cable. Poly dielectric. Vinyl jacket. .242 O. D. 902—59/U Triax type cable. Poly dielectric. Vinyl jacket, .315 O. D.

904-11/U Triax type cable. Poly dielectric. Vinyl jacket. 475 O. D.

931-6A/U type cable. Poly dielectric. Vinyl jacket. 332 O. D.

Trunk and feeder line cable.

11005-Foam dielectric. Strip braid shield. Noncontaminating jacket. .630 O.D. Loss: 1.5 db at Channel 13: .79 db at Channel 6.

1102D-Foam dielectric. Double strip braid shield. Non-contaminating jacket. .630 O.D. Loss: .79 db at Channel 6; 1.5 db at Channel 13. 11045-Foam dielectric. Strip braid shield. Noncontaminating jacket. .408 O.D. Loss: 1.29 db at Channel 6; 2.1 db at Channel 13.

1106D-Foam dielectric. .408 O.D. Non-contaminating jacket. Double strip braid shield. Loss: 1.29 db at Channel 6; 2.1 db at Channel 13. 11085-Foam dielectric. Strip braid shield. .460 O.D. Non-contaminating jacket. Loss: 1.02 db at at Channel 6; 2.1 db at Channel 13.

1110D-Foam dielectric. Non-contaminating jacket. Double strip braid shield. Loss: 1.02 db at Channel 6; 1.7 db at Channel 13.

PRODELIN

Low attenuation, Spir-O-Foam coaxial cable. Designed for CATV applications. Spir-O-Foam consists of a high conductivity copper inner conductor encircled by a cellular polyethylene dielectric foam. This core is contained by a commercially pure high strength aluminum sheath. This construction possesses inherent three part strength that is highly crush resistant and ensures accurate centering of the copper inner conductor throughout the cable length. Available in continuous lengths up to 1000'. Optional polyethylene jacket is available for direct burial, operation in corrosive atmospheres, or submarine applications. Lengths of 500' and longer are shipped on non-returnable reels at no extra charge. 75 ohm impedance.



Type	Size	Description	Price
55-375	3/8"	Alum. Sheath	\$210-M
56-375	3/8"	Poly Jacket	\$238-M
55-500	1/2"	Alum. Sheath	\$227-M
56-500	1/2"	Poly Jacket	\$277-M
55- ⁸ 75	7 / 8"	Alum. Sheath	\$648-M
56-875	7 /8"	Poly Jacket	\$774-M

tems. All cable is factory swept at all channels Spir-O-Line coaxial cable. Excellent for feeding 6 kMc antenna systems. Several sizes available with either plain aluminum sheath or polyethylene jacketed. Spir-O-Line was designed and developed to replace sectional air or solid dielectric transmission line. The outer conductor is a commercially pure aluminum sheath. In addition to the natural strength of the sheath, additional crush resistance is obtained through the support of six polyethylene tubes which are in tangenital contact with the high conductivity copper inner conductor. Contact Prodelin for further information.

TIMES WIRE AND CABLE

Standard and special purpose coaxial cable. Complete cable assemblies. Transmission system design and engineering. Times' CATV cables are available for immediate delivery.

Coaxial Cable for Drop Line Service

JT-202-Cable sweeps flat within .5 db in 40 db of cable. Long life Xelon jacket. Foamed poly dielectric. Loss/100', 2.65 db at 100 Mc.*

JEL-105-Solid polyethylene dielectric. Long life Xelon jacket.*

JEL-105-MS-Messengered cable. Solid ethylene dielectric. Long life Xelon jacket.* JT-205-Foamed solved

JT-205-Foamed polyethylene dielectric. Long life Xelon jacket."

JT-205-MS-Messengered cable. Foamed polyethylene dielectric. Long life Xelon jacket.

RG-59/U—Solid polyethylene dielectric. PVC jacket. Color-black.* RG-59/U-MS—Messengered cable. Solid polyethylene dielectric.*

RG-59/U-Solid polyethylene dielectric. PVC jacket. Color-gray.*

Coaxial Cable for Feeder Line Service

JT-200-Cable sweeps flat within .5 db in 40 db of cable. Foam poly dielectric. Long life Xelon jacket. Loss per 100', 1.44 db at Channel 13.* JT-200D-Cable sweeps flat within .5 db in 40 db of cable. Foamed poly dielectric. Long life Xelon jacket. Loss/100', 1.44 db at Channel 13.* JT-201-Cable sweeps flat within .5 db in 40 db of cable. Long life Xelon jacket. Foamed poly dielectric. Loss/100', 1.44 db at 11 Mc. Trunk and feeder line.*

JT-201A—Cable sweeps flat within .5 db in 40 db of cable. Long life Xelon jacket. Foam poly dielectric. Loss/100', 1.44 db at Channel 13.* JT-203-Trunk and feeder line cable. Long life

Xelon jacket. Foamed poly dielectric. Loss/100', 2.2 db at 100 Mc.*

JT-204-Cable sweeps flat within .5 db in 40 db of cable. Long life Xelon jacket. Foamed poly dielectric. Trunk and feeder line. Loss/ 1.44 db at 100 Mc.* 1001

JT-204A-Trunk and feeder line cable. Long life Xelon jacket. Foamed poly dielectric. Loss 100', 1.44 db at 100 Mc.*

JT-211-Cable sweeps flat within .5 db in 40 db of cable. Trunk and feeder line. Long life Xelon jacket. Foam poly dielectric. Loss/100', 2.2 db at 100 Mc.*

JT-304-Long life Xelon jacket. Foamed poly dielectric. Loss/100', 1.44 db at 100 Mc. Trunk and feeder cable.*

JT-400D-Transportation trunk and feeder line. Cable sweeps flat within .5 db in 40 db of cable. Strip copper braid. Long life Xelon jacket. Foamed poly dielectric. Loss/100', .3 db at 100 Mc.*

JT-400S—Transportation trunk and feeder line. Cable sweeps flat within .5 db in 40 db of cable: Loss/100', 1.3 db at Channel 13. Strip copper braid. Long life Xelon jacket. Foamed poly dielectric.*

JT-404D—Trunk and feeder line cable. Cable sweeps flat within .5 db of 40 db of cable. Long life Xelon jacket. Foamed poly dielectric. Strip copper braid. Loss/100', 2.2 db at Channel 13.*

JT-404S-Trunk and feeder line cable. Cable sweeps flat within .5 db in 40 db of cable. Long life Xelon jacket. Strip copper braid. Foamed poly dielectric. Loss/100', 2.2 db at Channel 13.*

JT-408D—Truck and feeder line cable. Cable sweeps flat within .5 db in 40 db of cable. Strip copper braid. Long life Xelon jacket. Foamed poly dielectric. Loss/100', 1.6 db at Channel 13.*

JT-4085—Trunk and feeder line cable. Cable sweeps flat within .5 db in 40 db of cable. Long life Xelon jacket. Strip copper braid. Foamed poly dielectric. Loss/100', 1.6 db at Channel 13.*

Coaxial Cable for Trunk Line Service (See Feeder Line cables also)

JT-4085R--Trunk and feeder line cable. Cable sweeps flat within .5 db in 40 db of cable. Long life Xelon jacket. Strip copper braid. Foamed poly dielectric. Ridge extruded into jacket for permanent identification as trunk line. Loss/100', 1.6 db at Channel 13.* JT-408DR--Trunk and feeder line cable. Cable

JT-408DR—Trunk and feeder line cable. Cable sweeps flat within .5 db for 40 db of cable. Long life Xelon jacket. Strip copper braid. Foamed poly dielectric. Ridge extruded into jacket for permanent identification as trunk line. Loss/100', 1.6 db at Channel 13.*

JT-404DR-Specially coded trunkline. Cable sweeps flat within .5 db in 40 db of cable. Cable has ridge extruded into jacket for easy identification of trunk versus feeder. Loss/100', 2.2 db at Channel 13. Long life Xelon jacket. Foamed poly dielectric. Strip copper braid.* (Range of all the listed cables is 20-220 Mc.) * User net price depends on quantity.

VIKING CABLE COMPANY

Swept and thoroughly tested coaxial cables. Available in standard and messenger types and in single and double shields.

59U—Available in Single and double shielded types for house drops.

RG-59U—Single shield. Non-contaminating poly jacket. Loss: 5.6 db at Channel 13. Price: \$24.50/M. **59UDS**—Double shield. Non-contaminating double poly jacket. Loss: 5.6 db at Channel 13. Price: \$50.00/M.

F59—Single shield. Foam dielectric. Low loss. Price: \$24.50/M.

FD-59—Double shield. Foam dielectric. Low loss. Price: \$50.00/M.

11U—Available in single and double shielded types for main line distribution cable, foam and strip braid types.

RG-11U—Single shield. Non-contaminating jacket. Price: \$62.00/M.

RG-11UD – Double shield. Non-contaminating jacket. Price: \$86.00/M.

F11—Single shield. Foam dielectric. Non-contaminating jacket. Loss: 2.35 db at Channel 13. Price: \$63.00/M.

FD11—Double shield. Foam dielectric. Non-contaminating jacket. Loss: 2.35 db at Channel 13. Price: \$86.00/M.

VK11—Single strip braid shield. Foam dielectric. Non-contaminating jacket. Loss: 2.2 db at Channel 13. Price: \$65.00/M.

VKD11—Double strip braid shield. Foam dielectric. Non-contaminating jacket. Loss: 2.2 db at Channel 13. Price: \$85.00/M.

VK100—Single strip braid shield. Low loss foam cable. (Lowest loss of the 11 series) Price: \$175.00/M.

VKD100—Double strip braid shield. Low loss foam cable. (Lowest loss of the 11 series) Price: \$205.00/M.



VK308—Single strip braid shield. Foam dielectric. Non-contaminating jacket. Loss: 1.65 db at Channel 13. Price: \$85.00/M. VKD308—Double strip braid shield. Foam dielectric. Non-contaminating jacket. Loss: 1.65 db at Channel 13. Price: \$105.00/M.

Coaxial cables with built-in messenger cable. 59UM-59U cable with built-in messenger. Price: \$36.00/M.

F59UM—Foam 59U cable with built-in messenger. Price: \$36.00/M.

F11M—Foam 11U with built-in messenger. Single shield. Price: \$83.00/M.

FD11M—Foam 11U with built-in messenger. Double shield. Price: \$103.00/M.

VK308M—Same as VK308 shown above, with built-in messenger. Price: \$105.00/M.

VKD308M—Same as VKD308 shown above, with built-in messenger. Price: \$125.00 / M.

Waveguide

MARK PRODUCTS DIVISION of the DYNASCAN CORPORATION

Dual polarized adapters for 5800 to 7750 Mcs to convert existing single polarized antennas to dual polarization. The adapter allows the simultaneous transmission of two microwave signals polarized at 90 degrees to each other. Minimum isolation is 35.0 db with 0.1 db insertion loss. Four models are available to cover the range specified. List: \$225.00.

MICRO-LÎNK CORPORATION

Rigid waveguide, WR-75.

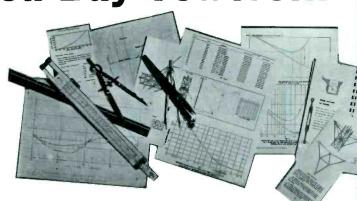
Length	Price	
207	\$80.00	
12'	\$65.00	
10'	\$60.00	
8'	\$55.00	
5'	\$50.00	
Variable	\$38.00 -	+ 2.60 /ft.

Flexible waveguide.

Lengt	h	Price
17	\$	80.00
2'		84.00
3'	\$	88.00

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Every tower manufactured by the Fort Worth Tower Company is designed specifically for the needs of the individual customer. Engineers in our office are thoroughly trained in the scientific study of towers. And they are constantly probing for better, more efficient solutions to the tower problems confronting designers throughout the world. Consequently, you get the many benefits of our engineering design excellence. Excellence that pays off in profit dollars for you, and optimum performance for your customers.

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Waveguide sections.	
90 Degree H-Plane bend	\$ 56.00
	\$ 56.00
	\$ 70.00
Pressure Adapter	\$ 45.00
Pressure window	\$ 60.00
Pressure Guage Assy.	\$ 10.00
Dehydrator	\$125.00
Sliding Hanger	\$ 10.00
Rigid Hanger	\$ 10.00
Spring Hanger	\$ 20.00
Stud Adaptor	\$ 6.00

Fittings

AMECO

Cable connectors for all applications.

Includes weatherproof and feed-thru versions.

- Catalog No. Description AU-408-UHF series cable end for 408 size flat braid. Uses same crimp ring and tool as F series connector. (Mates with SO-239, 8-BA-11/75, AU-11-Same as above except for RG-11/U and 404 size flat braid.

- size flat braid. AU-59-Same as above except for RG-59/U. PL-258-Splice, double female, UHF series. PL-274-Splice, double female, same as above except longer & furnished with lock nuts for bulk-
- longer & furnished with lock nuts for bulkhead mounting.
 PL-259-Male cable end, UHF series, solder type.
 SO-239-Female chassis mount, UHF series, (also available with screw on nut instead of flange).
 F-59-Male cable end, F series, for RG-59 /U.
 F-81-Splice, double female, F series.
 F-61-Female chassis mount fitting, F series, (mates with F-59, AF-408, etc.).
 AF-404 / 201-Male cable end, 11 /U and 404 size cable to F series fittings.
 AF-408-Male cable end, 408 size cable to F series fittings.

- AF-408-Male cable end, 408 size cable to F fittings. F-408-59-Female cable end, 408 size cable to F series fittings. S-408-Splice, direct cable inserting. Fits 408 cable. Complete with crimp rings and heat shrink

- S-408-Splice, direct cable inserting, Fits 408 cable. Complete with crimp rings and heat shrink weather boots.
 1652 (C.52)-Male cable end, C series for RG-59 /U.
 1660 (C-61)-Female chassis mount fitting, C series to solder point .
 SP-400-Splice 400 S&D. Net: \$7.45.
 BA-400 /UHF-Adaptor, 400 to UHF female. Bulkhead mounts. Net. \$6.25.
 A-400 /FF-Adaptor, 400 to F series female, (mates with F-59, AF-408, etc.). Net: \$7.45.
 BA-11 /75-Fits '20" cable.
 6-BA-11 /75-Fits '3 /8" cable. Adaptor aluminum cable to UHF series female. (Mates with AU-408, etc.). Will bulkhead mount. Net: \$3.95 and \$3.75.
 S-F.75-Fits '20" cable.
 & 6-SP-75-Fits '3 /8" cable. Inline splice. Net: \$4.25 and \$4.00.
 S-AUHF /75-Adaptor, '2" aluminum cable and UHF series male (mates with SO-239, PI-258, BA-400 /UHF, etc.). Net: \$3.95.
 S-B.AFF /75 Adaptor, '2" aluminum cable and F series female (mates with F-59, AF-408, etc.). Furnished with lockhut for bulkhead mounting. Net: \$4.25.
 S-AFF /75-Adaptor, '2" aluminum cable and F series male (mates with F-59, AF-408, etc.). Furnished with lockhut for bulkhead mounting. Net: \$4.25.
 S-AFF /75-Adaptor, '2" aluminum cable and F series male (mates with F-59, AF-408, etc.). Furnished with lockhut for bulkhead mounting. Net: \$4.25.
 S-AFF /75-Adaptor, '2" aluminum cable and F series male (mates with F-51, A-400 /FF, etc.). Furnished with lockhut for bulkhead mounting. Net: \$4.25.
 S-AFF /75-Adaptor, '2" aluminum cable and F series male (mates with F-81, F-61, A-400 /FF, etc.). Furnished with lockhut for bulkhead mounting. Net: \$4.25.
 S-CH-75-Chassis mounting connector with solder terminal. Net: \$3.75.

AMECO

Cable connectors for use with Foamflex and Spirofil coaxial cables. Connectors are aluminum with teflon insulation. Designed for use with the above cables, either $\frac{1}{4}$ or $\frac{1}{2}$. Tapering collar gives high strength and allows for strains produced by heat expansion. 75 ohm impedance. PNS.

Terminating resistor, 75 ohm impedance, Color coded. PL-259 and HHS-1652 connectors. Net: \$1.40.

BLONDER TONGUE - BENCO

CL-5959-Couples 2 RG-59/U cables. Net: \$1.85. CL-1111-Couples 2 RG-11/U cables. Net: \$1.85. CL-1159-Couples RG-11/U cable to RG-59/U cable. Net: \$1.85.

MC-Couples 2 UHF type male plugs. Also may be used as a feed thru bushing. Net: \$1.75. P-115-RG-11/U UHF type male plug. Solderless.

Net: \$1.00. P-595-RG-59/U UHF type male plug. Solderless.

Net: \$1.00. M71-Male plug for RG-11/U cable. Mates with

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M64. Net: \$2.30.

M72-Male plug for RG-11/U cable Mates with M64. Net: \$2.30. $\textbf{M73-}\mbox{Male}$ plug for RG-59/U cable. Mates with

M64. Net: \$.45. M-74-Male plug for BAL-11F cable. Mates with

M64. Net: \$3.20.

POU-59-Push-on UHF type male plug. PNS

POB-59-Push-on Benconnector plug. PNS.

MTP-75-For UHF type SO-239 connectors. 75 ohm 1/2 watt. Net: \$1.75.

M-65—Mates with M60 Benconnector. 75 ohm $\frac{1}{2}$

watt. Net: \$1.55. M-66-Mates with M60 Benconnector. 75 ohm 2

watt. Net: \$3.75.

TC-5975-For QD connectors. 75 ohm 1/4 watt. Net: \$.90

M-67—Female terminator. Mates with M63, M71, M73 Benconnectors. 75 ohm 1/2 watt. Net: \$2.95.

INTERCONTINENTAL ELECTRONICS CORP.

Coaxial fittings.

Type Description	Net
A101-RG-6/U cable connector,	
w/ferrule.	\$.45
FE-1-Ferrules for A101 (100)	\$3.00
A102-RG-59/U cable connector,	
w/ferrule.	\$.30
FE-2-Ferrules for A102 (100)	\$2.00
A103-RG-59/U to RG-59/U female	
adapter. (Supplied with	
mounting nut & washer.	\$.65
A106-Chassis connector for use	
w/A101 or A102.	\$.50
A108A—Die cast connector for	
$\frac{1}{2}$ " to $\frac{1}{2}$ " Foamflex.	\$5.00
A108B—Die cast connector for	
3/8" to 3/8" Foamflex.	\$5.00
A108C—Cabinet entrance connector	
for 1/2" Foamflex to double	
shielded RG-59/U.	\$5.00
A108D—Cabinet entrance connector	
for 3/8" Foamflex to double	
shielded RG-59/U.	\$5.00
A107-75 ohm terminating plug for	RG-59/U.
Net: \$1.95.	

A109-RG-11/U crimp type terminating plug.

- Net: \$2.75. A111-RG-11/U feedthru. \$.45 PL-259-RG-11/U cable connector _____\$.70
- UG173/U-Reducing bushing for PL-259 for use with RG59/U. ____\$. 25

JERROLD ELECTRONICS CORP.

C-52—Fits RG-59 type cables. Male plug. Fits C-61, C-62 or C-81 fittings. PNS

C-56-Fits RG-6/U cable. Male plug. Fits C-61, C-62 or C-81 fittings. PNS

F-59-Fits RG-59 type cables. Male plug. Fits F-61 or F-81 fittings. PNS

F-56-Fits RG-6/U cable. Male plug. Fits F-61 or F-81 fittings. PNS

AF-101-Fits RG-11 type cables. Male plug. Fits F-61 or F-81 fittings. PNS.

AF-201-Fits JT-201, 204, 301, 304 cables. Male plug. Fits F-61 or F-81 fittings. PNS

AF-404-Fits JT-201, 204, 301, 304, 404 cables. Male plug. Fits F-61 or F-81 fittings. PNS

AF-408—Fits JT-408 cable. Male plug. Fits F-61 or F-81 fittings. PNS

F-101-59-Fits RG-11 type cables. Female plug. Mates with F-56, F-59 or any AF-series connectors. PNS

F-201-59-Fits JT-201, 204, 301, 304 cables. Female plug. Mates with F-56, F-59 or an AFseries connectors. PNS

F-404-59-Fits JT-201, 204, 301, 304, 404 cables. Female plug. Mates with F-56, F-59 or any AFseries connectors, PNS

F-408-59-Fits JT-408 cable. Female plug. Mates with F-56, F-59 and any AF-series connectors. PNS

F-200-Fits JT-200 cable. Female plug. Mates with F-56, F-59 and any AF-series connectors. PNS

F-400—Fits JT-400 cable. Female plug. Mates with F-56, F-59 and any AF-series connectors. PNS

SC-24-In-line splicer for JT-201, 204, 301, 304, 404 cable. PNS

SC-48-In-line splicer for JT-408 cable. PNS

BRX-1-For solderless grounding of double-shield double-jacket cable to wall of equipment enclosure. Takes JT-201, 301 or JEL-101. PNS

BRX-20-Same as BRX-1 except for JT-200D cable. PNS

BG-40-For grounding the shield connection of an F-400 connector to a weatherproof cabinet. PNS

BG-48-Same as BG-40 except accommodates F-404-59 or F-408-59 connectors. PNS

C-61—Female chassis fitting. 3/8" long threaded stem. PNS

C-62—Female chassis fitting. 1/4" long threaded stem, PNS

F-61-Female chassis fitting. PNS

A-61—Adapter for F-56, F-59 or any AF-series connectors to C-61 or C-62 chassis fittings. PNS

C-81-Feed-thru fitting. Female. Takes C-52 or C-56 male connectors. PNS

F-81—Feed-thru fitting. Female. Takes F-56, F-59 or any AF-series fittings. PNS

F-71—Back-to-back F-59 male coupling. PNS

PF-59-Push-on type fitting. Has F-59 connector (push-on) on one end and F-61 fitting on other end PNS

PRODELIN

Spir-O-Line to waveguide adaptor. Used with RG-106/U waveguide. Adapts 1/2" Spir-O-Line coaxial cable to RG-106/U waveguide (C-band). All aluminum construction. Available in either plain or choke joint flange. Also available with gas barrier when ordering choke joint flange (standard). Several models to cover the fre-quency range of 5925 to 7425 kMc. Price dependent upon model.

Coaxial fittings for Spiro-O-foam series, 1/2" cable. Aluminum irridite finish, easy to assemble, positive mechanical and electrical connection, low cost.

Туре І		Price
76-581-Typ	e N Male	\$4,50
79-581-Spin	r-O-foam coupling	\$5.00
87-581-UH	F male mismatched	\$4.50
	e N female bulkhead	
144-581UHI	F female bulkhead	\$5.00
146-581-F-61	female bulkhead	\$5.00
147-581-F-59	male	\$5.00

VIKING CABLE COMPANY

918—Termination plug for 75 ohm cable and equipment, Type "F". Price: \$1.10.

919—Termination plug for 75 ohm cable and equipment, Type "C". Price: \$1.00.

923-Adapts VK108 single & double to "F" type chassis (female) fitting. Price: \$1.00.

924—Adapts VK108 single and double to an "F" type male fitting. (Viking No. 906) Price: \$1.00.

906—Male cable connector for standard RG59/U type cables "F" type. Price: \$.40.

909—Male cable connector for standard RG59/U type cables "C" type. Price: \$.40.

WINEGARD

CHANNEL MASTER

Coaxial connectors for RG-59/U and RG-11/U. C-59-Male plug for RG-59/U coax. Crimp type ferrule. List: \$.98

C-11-Male plug for RG-11/U coax. Crimp type ferrule. Pin insert. List: \$2.45

ANTENNAS

Broadband

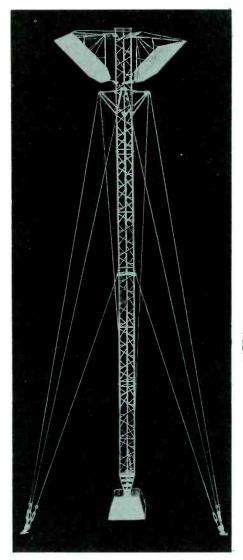
All-band antenna, Traveling Wave series. Para-

sitic and colinear elements. Ruggedized, all

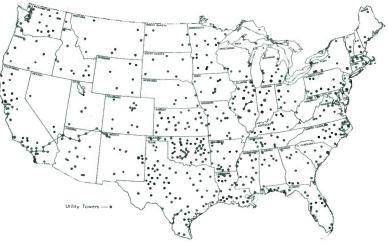
weather construction. Weatherproof harness. 5

different models to cover all needs. High me-

U-til-i-ty $(\dot{u}$ -tĭl'-ĭ-tỹ), n. (pl. -ties (tiz),) (Lat. utilitas, usefulness), 1. the quality or state of being serviceable and useful for some desired end; general usefulness.



"Utility" . . . a fitting name for a company whose many years of experience go into producing the finest, most durable towers available! At Utility Tower Company we take our name seriously. Quality, durability, safety, all around UTILITY . . . are built into every Utility Tower installation. Call Utility for complete tower design, engineering and erection service. At Utility Tower Company service to the customer is a premise—not just a promise!



Across the United States and Canada hundreds of Utility towers withstand the test of time, proving their design excellence and durability.

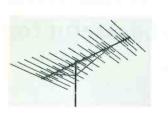
All Utility Towers carry a five year guarantee against faulty workmanship, materials, installation, engineering and design.



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chanical strength. Heavy-duty, twist-proof mast bracket. Seamless reinforcements in all elements. Heavy-duty insulator moldings. Twin boom assembly provides exceptional resistance to high winds and ice loading. List prices \$23.50 to \$59.95 depending upon model.



All-band, proportional energy absorption, Crossfire series. High, uniform gain across the entire VHF TV band. Six separate antenna models provide gain characteristics that will cover a variety of needs. Rugged, air dielectric harness made of corrosion-proof metal rods. Long models are boom-braced. Colinear elements use fiber glass inserts for strength and durability. EPC coating. Heavy-duty mast clamp for quick installation while providing rigidity and strength. List: \$14.95 to \$59.95 depending upon model.

THE FINNEY COMPANY

All-band antenna with transistorized amplifier, Model N-A42GG. Duo-twin-drive. Two half-wave dipoles twin driven on low band. Two 3-element colinear dipoles twin-driven on high band. Equal to six half-wave driven elements. Total of 6 elements working on low band, and 27 elements working on high band. Full 1" square boom, 10' long, and equipped with heavy-duty boom suspension rods. Triple tapered elements having triple wall thickness at bracket end where stress is greatest; double wall thickness at center of element, and single wall thickness at end. Corodized. List: \$97.95.

JFD ELECTRONICS CORPORATION



Log-periodic TV antenna. Especially suited for CATV head and use. High gain and directivity. Flat response across all 12 channels with greater gain on the high band. Rugged construction features aluminum, square boom. Steel reinforced elements. Low wind resistance. Solid harness. Double U-bolt assembly for firm clamping. Weatherprof insulators. Incorporates harmonically resonant, V-elements, operating on the logperiodic cellular principle in the fundamental and third harmonic modes. 6 models available for use in local areas up to super-fringe areas depending upon needs. Prices range from \$8.97 to \$35.97 net.

Transis-tenna series. Several models in the farfringe, near-fringe, suburban, and local category. All models cover the TV/FM range. Smallest antenna utilizes 9 working elements and the largest 31 working elements. All have a transistorized amplifier mounted across the dipole terminals with corresponding power supply. Capable of driving either 2, 3 or 4 television sets. All antennas are gold anodized for protection against corrosion and discoloration. Prices range from \$30.12 to \$51.56 dependent upon model.

Single-Channel

CHANNEL MASTER

Single-channel 10 element, Gold Medal series. Uses super Z-match. High gain, high front to back ratio long-long yagis. Longer boom lengths than previously. Heavy gauge aluminum element brackets. Spun boom ends. Seamless dipole tubing. EPC coating. List: \$20.83 to \$33.33 depending upon channel.

THE FINNEY COMPANY

Single-channel TV antennas, Series H and Y-HD. High band models utilize solid elements and square boom for maximum strength and resistance to high wind and ice. Completely preassembled with box girder, snap-out, self-aligning brackets. Heat treated elements. Exclusive 'Lock-Tite-No-Tilf'' saddle bracket. Low band models feature triple-tapered elements and same rugged construction as the high band models. Write for prices. Stacking kits also available.

JFD ELECTRONICS CORPORATION

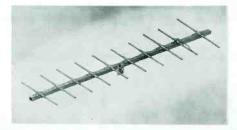
Single-channel, 10 element low band yagi, Models 10Y2-6G. Wide spaced type, anodized. Useful for 100-150 mile distances over uniform terrain or 50-100 miles in rolling or irregular country. Prices range from \$12.93 to \$16.68 depending upon channel.

Single-channel, 10 element high band yagi Models 10Y7-13G. Same characteristics and specifications as low band models. Net: \$6.66. (Specify channel).

TACO



Single-channel yagis, J-series. Heavy-duty, ruggedized yagi. Uses rectangular 11/4" boom of tough aluminum alloy. Elements are seamless chrome-aluminum 1/2" tubing with double wall thickness. Elements are sealed with metal plugs and are reinforced at center with $\frac{5}{6}$ " diameter sleeves. Low channel models are sand-loaded for vibration damping. Double bolted brackets used to hold elements on boom. Driven element uses gamma match with sealed capacitor. Built-on coax fitting. Double U-bolt mounting saddle. Available for any VHF channel. Gain: 10.5 db, high band (min.); 8 db, Iow band (min.). 75 ohm impedance. PNS



Single-channel yagis, Y-100 series. Designed for long lasting trouble-free performance under the most rigid weather conditions. Antennas are twin-driven design. Flat-across-the-channel performance. Extra heavy-duty construction using a 2" square crossarm with 34" elements and 7/8" reinforcing sleeves on Y-104 low band antennas. Nominal gain: 11.2 db low band. High band models (Y-103) utilize 11/4" square boom with $\frac{1}{2}$ " elements with $\frac{5}{8}$ " reinforcing sleeves. Heli-arc welded to the crossarm. Prices vary from \$75.00 to \$215.00 depending upon model. (Regular)

Screen reflector yagis, SY-40 series. For singlechannel, 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. Direct coaxial input. Gas-expanded foam plastic with the antenna feed system prevents the damaging effects of accumulated moisture. SY-41 models consist of a single 4-element yagi on a screen reflector. Yagi elements are V_2 " aluminum alloy with 5/8" reinforcing sleeves. Reflector is made with 11/4" 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. Material sizes are the same as used in the SY-41 models. SY-41 (Specify high band channel) \$115.00. SY-42 (Specify high band channel) \$210.00.

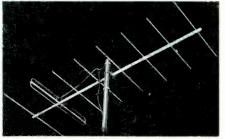
SIMPLICITY TOOL COMPANY



Low band, quad yagi array, Model 94. 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. Net: Varies from \$408.00 each at Channel 2 to \$282.00 each at Channel 6.

High band, quad yagi array, Model 102. 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: Varies from \$141.20 each for Channel 7 to \$124.80 each at Channel 13.

Single-channel, high band yagi, Model 9312-HD. 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 feed impedance. Net: Varies from \$23.80 each for Channel 7 to \$20.85 each for Channel 13.



Single-channel, high band yagi, Model 718-HD. High band, cut-to-channel yagi designed for offthe-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: \$18.95 for all models. Low band, single-channel yagi, Model 848-HD. 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: varies from \$54.75 (Channel 2) to \$35.80 (Channel 6).

\mathbf{FM}

B & K MANUFACTURING CO., Division of Dynascan Corporation

MARK Stereo 7 FM Antenna. Horizontally polarized, omnidirectional 7 element array for FM service. Physical size is 30" wide, 22" high, 51/2" deep. Antenna comes complete with all hardware for easy mast mounting. PNS.

CHANNEL MASTER

Futuramic, 10 element FM antenna, Model 4402G. Z-matched antenna for far-fringe reception. Cross-arms are spun sealed at both ends to keep out rain, ice, snow. List: \$27.65.

JFD ELECTRONICS CORPORATION

10 element, wide spaced yagi, Model AFM650G. Designed for superior FM reception in deepfringe areas. Heavy-duty construction, Gold anodized. Net: \$21.78.

THE FINNEY COMPANY

Finco gamma match FM antennas for commercial and professional use. Models are available with coax cable connectors or coax pigtail connection for RG-58/U, RG-59/U, RG-8/U, RG-11/U. Model FM-4 features heavy-duty square boom, exclusive "Lock-Tite-No-Tilt" saddle mounting, and box girder snap out self-aligning brackets. Completely pre-assembled with double-wall reinforced all aluminum elements. List: \$24.90 (6 element). Order FM-4G for corrosion proof model. FM-4G List: \$27.75.

10 element FM antenna, Model FM-5. Same features as the FM-4 except gold Corodized. Boom length: 10' 0". List: \$36.35.

Cut to specified frequency FM antenna, Model FM-10. Heavy-duty antenna for rugged applications. 10 elements. Heavy boom-suspension rods. PNS.

TACO

Single-channel FM antenna, Model 683. 5-element, rigid assembly. Utilizes gamma-matched driven element. Built-in coax connector. Extra strong brackets to prevent the loosening of elements. Written one-full-year Warranty. Also, a 10element version is available (Model 686) and a 3-element version (Model 681). Designed for the exacting requirements of multiplex reception. PNS.

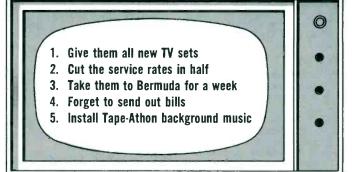
UHF

CHANNEL MASTER



Parabolic UHF antennas, Model 425G. Has EPC "Golden Overcoat" for protection against harmful effects of industrial atmospheres, salt air, rain, ice, snow. Ruggedized, light-weight, Preassembled for lasting performance. Parabolic screen swings open from a packed position.

FIVE (5) WAYS FOR THE CATV OPERATOR TO MAKE HIS SUBSCRIBERS HAPPY!



No matter which one you select you'll make everlasting friends with everyone on your cable. Of course, if you're frugal you can get these same results with a minimum of investment by picking number 5. Tape-Athon's Librarian Tape Player is custom made for CATV systems. It's com-



pletely automatic, professional quality all the way through, and when you match it up with Tape-Athon music you'll have more customers listening than watching. Write — right now — for details on how Tape-Athon can fill an open channel with profits for you.



Gain ranges from 14.5 to 19.1 db over the UHF range. Double bow-tie feed. List: \$37.50.

UHF multi-bow antenna, Model 4220B. Heavyduty insulators. Plug-in mast mounting using preriveted mast adapter for installation without U-bolts. Free space crossover of connecting rods. No shorting in wet weather. List: \$8.19.

UHF corner reflector, Model 4120A. All-aluminum construction. Factory pre-assembled. High frontto-back ratios across the entire band. Designed for UHF fringe area reception. High impact molded plastic insulator. List: \$6.81.

THE FINNEY COMPANY

UHF corner reflector, Model CRB. All-aluminum antenna designed for fringe area reception. High gain, sharp directivity. Mechanically strong. Fold open assembly. Light weight. List: \$7.25. 16-bow phased UHF colinear, Model 4444BT. Simple design, rugged, durable and easily installed. Mounts to any mast. List: \$42.50.

JFD ELECTRONICS CORPORATION

12 bow stack broadside array for far-fringe UHF reception, Model UHF212. Cardoid dipoles, new Implex insulators. Net: \$20.10.

8 bow stack broadside array for fringe area UHF reception, Model UHF208. Cardoid dipoles, new Implex insulators. Net: \$11.97.

Single-channel, 16 element UHF yagi, Model UHF356G. New Ultra-Yagi. Wide-spaced, allaluminum, free stacking transformers. Net: \$4.92. Single-channel 12 element UHF yagi, Model UHF352G. New Ultra-Yagi. Wide-spaced, allaluminum, free stacking transformers. Net: \$3.24. Corrier reflector for semi-fringe UHF reception, Model UHF411G. All-aluminum construction, butt seam elements, Implex "A" insulator. Net. \$4.56.

SIMPLICITY TOOL COMPANY

Single-channel, UHF yagi quad-array, Model 106. Ruggedized array, designed for minimum torque twist and built to withstand heavy icing or winds. Has a forward gain of 20 db and a front-to-back ratio of 14 to 1. Beamwidth at half-power points (horizontal plane) is 18 degrees. Ultimate in extreme fringe area usage. Features a total of 48 elements (12 elements per yagi). PNS.

TACO

UHF screen antennas, SB-series. Designed to withstand the most adverse weather conditions. Used for off-air reception for community or multi-dwelling TV systems. In MATV not incorporating electronic amplification, the very high gain of these antennas makes possible signal distribution through dividing networks with very satisfactory results. Units are ruggedly constructed, factory assembled, ready-to-install units. When 75 ohm coaxial input is desired, order SB-3048 tapered line balun. Model SB-16 consists of 16 bow-tie elements on 39" x 66" screen. SB-32 has 32 bow-tie elements on 78" x 66" screen. SB-64 has 64 bow-tie elements on 78" x 132" screen. Price: SB-16 \$300.00; SB-32 \$375.00; SB-64 \$495.00 (Specify frequency)



UHF parabolic dish antennas, 3065 series. Designed for MPATI areas. Withstands 100 mph winds and heavy icing. Gain: 17 db. 75 and 300 ohm versions. 75 ohm model uses slot-fed dipole. 300 ohm model uses folded dipole with reflector. Dish constructed of 1/8" steel wire, spaced 1" and welded to 1/4" thick crossmembers. Dish is coated with heavy vinyl plastic layer applied over an anti-oxide primer. 20 db or better front-to-back ratio. PNS

Microwave

ADLER ELECTRONICS, INC.

Microwave antenna, Model JF2KM. Light weight corner reflector type for use in the 2000 Mc range. Gain: 9 db over isotropic, 60 degree horizontal angle at half-power point.

MARK PRODUCTS DIVISION of the DYNASCAN CORPORATION

Aluminum parabolas for 1700 to 2200 Mcs; 5800 to 7750 Mcs; 12,200 to 12,700 Mcs. Grid parabolas for 1700 to 2200 Mcs. Parabolas for the 5800 to 7750 Mcs range except for the 2 ft. dish, utilize circular waveguide feed, driven from a transition which converts the rectangular waveguide to circular feed. Specially designed transition section allows fast polarization change. Termination is UG-343A/U broadband choke flange. Aluminum parabola for the 1700 to 2200 Mcs range and grid parabolas for this range utilize a 7/8" E.I.A. swivel flange as the termination. Mounts are available for all antennas except for the 5800 to 7750 Mcs 2' dish which comes complete with a ball and socket swivel mounting.

PARABOLIC ANTENNAS-SPUN

Model Description	List
P-6024—6 Gc. 2' Parabola	\$ 225.00
P-6048T—6 Gc. 4' Parabola	\$ 309.38
P-6072T-6 Gc. 6' Parabola	\$ 421.88
P-6096T-6 Gc. 8' Parabola	\$ 843.76
P-60120T-6 Gc. 10' Parabola	\$1350.00
P-6524-6.5 Gc. 2' Parabola	\$ 225.00
P-6548T—6.5 Gc. 4' Parabola	\$ 309.38
P-6572T-6.5 Gc. 6' Parabola	\$ 421.88
P-6596T—6.5 Gc. 8' Parabola	
P-65120T-6.5 Gc. 10' Parabola	\$1350.00
P-7024—7 Gc. 2' Parabola	\$ 225.00
P-7048T—7 Gc. 4' Parabola	\$ 309.38
P-7072T—7 Gc. 6' Parabola	
R-7096T—7 Gc. 8' Parabola	\$ 843.76
P-70120T-7 Gc. 10' Parabola	\$1350.00
P-10024-12 Gc. 2' Parabola	\$ 225.00
P-10048-12 Gc. 4' Parabola	\$ 309.38
P-10072—12 Gc. 6' Parabola	

PARABOLIC ANTENNAS-GRID

P-2048-2 Gc. 4' Parabola	\$	270.0
P-2072-2 Gc. 6' Parabola	\$	480.0
P-20120-2 Gc. 10' Parabola	\$1	150.0

MICRO-LINK CORPORATION

Passive reflectors.

 Size
 Price

 4' x 6'
 \$ 295.00

 6' x 8'
 \$ 550.00

 8' x 12'
 \$ 710.00

 10' x 15'
 \$ 1250.00



Microwave attennas. Complete parabolic antennas and feed.

Size		Price
2'	Contraction of the second s	\$225.00
4'		\$300.00
6'		\$500.00
8'		\$800.00

PRODELIN

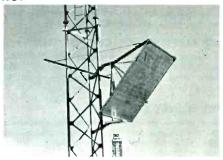
Spun aluminum parabolic antennas for the range range of 400 to 7425 kMc. Antennas are supplied with the hardware for mounting to a Prodelin pipe mount and provide azimuth and elevation adjustment of \pm 7 degrees. Antennas are adapted to four point mounting as indicated in the installation drawings which accompany all antennas. All parts made of steel are hotdipped galvanized after fabrication. All aluminum parts are painted and brass parts are



plated.			
5925 to 6525	kMc	Antennas	
Type Gain			Price
5925-4-35.0	db 4	l' parabola	\$275.00
			\$375.00
5925-8-41.0	db 8	l'parabola	\$750.00
6525 to 7125	kMc	Antennas	
6425-4-35.8	db 4	/ parabola	\$275.00
6425-6-39.3	db 6	parabola	\$375.00
6425-8-420	dh 8	' narabola	\$750.00

All the above antennas are Waveguide Horn fed and terminate in UG-440A/U choke flange.

ROHN



Microwave passive reflectors. Made of Reynolds aluminum interlocking extrusions. Three standard sizes; $6 \times 8'$, $8 \times 12'$ and $10 \times 15'$. Weight of reflectors is 140, 280 and 438 pounds respectively. Easy field asembly.

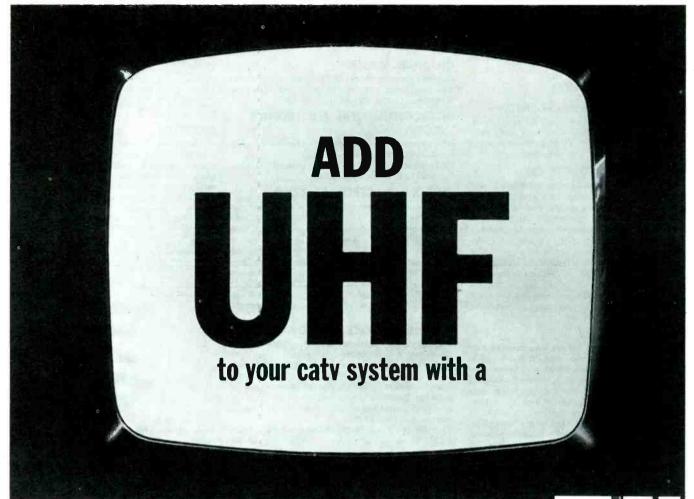
TACO

Parabolic antennas in either spun or mesh versions for the 1700 to 2700 Mc range and spun parabolas for the 5925-8500 Mc, 12.2 to 13.2 kMc range. Feed device employed in the 1700-2700 Mc antennas is of new design and provides a more symmetrical primary illumination, retaining wide impedance bandwidth characteristics. This feed is also completely protected and designed for pressurization. Input is standard 7/8" flange. Also a complete set of dual polarized feeds and associated dishes is available for the 1700-2700 Mc range. Feed assemblies for the 5925-8500 Mc parabolas are precision formed waveguide bends terminating in a close-precision cast sectoral horn. Feed input is a UG-343A/U choke flange. Dual polarized antennas are available for the 5925-7425 Mc range

(5925 to 6525 Mc antennas-plane polarized)

(3723 10 0	525 me amerinas-piane polar	12607
Тіре	Description	Gain
PS-0404 4	1′ parabola	35.4 db
PS-0604 6	5' parabola	38.9 db
PS-0804 8	3' parabola	41.4 db
PS-1004 10)' parabola	43.4 db
(6525 to	7125 Mc antennas—plane	polarized)
PS-0404 4	1′ parabola	36.2 db
PS-0604 6	5' parabola	39.7 db
PS-0804 8	3′ parabola	42.2 db
PS-1004 10)' parabola	44.1 db
(5925 to 6	525 Mc antennas—dual polar	ized)
PS-0405 4	4' parabola	35.0 db
PS-0605 6	5' parabola	38.5 db
PS-0805 8	3′ parabola	41.0 db
PS-1005 10)' parabola	43.0 db
(6525 to 7	'125 Mc antennas—dual polar	ized)
PS-0405 4	4′ parabola	35.7 db
PS-0605 6	5' parabola	39.3 db
PS-0805 8	3' parabola	41.7 db
PS-1005 10)' parabola	43 _. 7 db
(12.2 to 1	2.7 kMc antennas-plane po	larized)

38 THE PROFESSIONAL TELEVISION JOURNAL



BLONDER-TONGUE MODEL UBP UHF PRE-AMPLIFIER

There's nothing like the Blonder-Tongue UBP on the market today. Mast-mounted to take advantage of the maximum signal-to-noise ratio available at the antenna, it increases signal voltage by at least 14db. The UBP uses two lownoise frame grid tubes. The remote power supply sends a 'safe' 24 volts of AC power to the mast-mounted UBP amplifier of the same downlead which carries the signal. The UBP is enclosed in a weatherproof housing with swingdown chassis for easy servicing.

The original Blonder-Tongue Ultra-booster covered only channels 70 to 83. When it was introduced in the MFATI areas, it was so dramatically effective that installers throughout the country demanded units for their particular UHF channels. There are now five standard models, each covering a specific portion of the UHF spectrum: (1) UBP 14 thru 29; (2) UBP 25 thru 40; (3) UBP 41 thru 55; (4) UBP 56 thru 69 and (5) the original UBP for 70 thru 83. In addition, other frequency ranges are available on a custom basis.

The professional UBP, for CATV use, has a 300 ohm input to the amplifier, with 75 ohm Benconectors for amplifier output and remote power supply input and output. Three M-73 male Benconectors (for RG-59/U) are supplied. (Note: Custom UB units (model UBC) are available for any desired frequency spread covering a 5 to 14 channel segment of the UHF band, with your choice of the following connectors:

INPUT OF AMPLIFIER

- 1. 300 ohm stripless screws
- 2. 75 ohm Benconector (with M-73 supplied)
- 3. 50 ohm type N connector
- 4. 75 ohm type N connector

OUTPUT OF AMPLIFIER

- 75 ohm Benconector (with M-73 supplied)
 300 ohm stripless screws
- 3. 75 ohm type N connector
- 5. 15 onin type it connector

Input and output connectors of RPS will be the same as amplifier output connector.

Net Price of the UBC is\$145.00

300 ohm UB units are also available\$ 62.00

BLONDER, TONGUE

Canadian Div.: Benco Television Assoc. Ltd., Toronto, Canada Export: Rocke Int'l., N. Y. 16, N. Y. Cable: ARLAB Home TV Accessories • UHF Converters • Master TV Systems • Closed Circuit TV Systems • CATV Systems



PS-0505	4' parabola
PS-0604	6' parabola
(12.7 to	13.2 kMc antennas—plane polarized)
PS-0505	4' parabola 41.3 db
PS-0604	6' parabola

Towers

FORT WORTH TOWER CO., INC.

Towers, triangular or square, used for microwave, TV, or two-way radio, CATV systems, etc. Used in the fields of MATV, CCTV also. Price dependent upon requirements and specifications.

ENGINEERED PRODUCTS CO.

Towers, free-standing and guyed models for support of antennas, line amplifiers and platforms, including associated hardware and side-mount accessories. All-steel, diagonial bracing, arcwelded and site assembled models, hot-dipgalvanized and special configurations to customer's specifications. For application in CATV installations, including line towers, as well as the general fields of radio, television, microwave, military, commercial, and public safety. Towers engineer-approved for weather and load requirements. Price dependent upon requirements and specifications.

ROHN

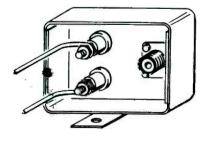
Communications towers for all uses such as supporting passive reflectors, large bays of yagi's, etc. All Rohn towers are hot-dipped galvanized after fabrication—coating all surfaces thoroughly, including the inside of the tubular tower legs with a minimum of 2 ounces of zinc per square foot of surface. Tower models are available in a variety of sizes not only for height variability, but also to fit the antenna and subsequent wind loading requirements. Rohn towers are precision built through mass production machinery that means accuracy, sturdiness and dependability. They are carefully machined, assembled in special jigs and then welded. Write for details and prices.

UTILITY TOWER COMPANY

Manufacturers and installers of microwave, TV, FM and broadcast towers (AM). All towers are designed for 120 mile winds with no ice and 95 mile winds with $\frac{1}{2}$ radial ice load. Welds are all arc-type and consist of 1/4" fillet, continuous, all around each joint by using A.W.S.E-6013 electrodes. All welding is done by registered welders, in strict accordance with the American Welding Society's requirements. Each weld is factory inspected. Towers are available in either galvanized or non-galvanized forms and with or without lighting kits. Microwave towers are designed to support three $8' \times 12'$ reflectors weighing 250 lb. each with a wind pressure of 30 lbs. per square foot. In addition, microwave towers will not twist more than 1 degree (horizontal angular displacement) for the lower edge of any microwave reflector from its unstressed position when all parts of the tower, antenna, reflectors, and accessories are covered with a 1/2'' radial thickness of ice. Utility Towers are backed up by a 5-year written guarantee. Write for further details.

Accessories

AMECO



Balun transformer, Model TB02-A. 75 ohm to 300 ohm. Bandwidth: 2 to 300 Mc. Open wire line to cable. Weatherproof box. SO-239 connectors. Net: \$7.95.

CHANNEL MASTER

Antenna coupler, Model 0033. Couples high band and low band antennas so only one feed line is needed to the TV set. List: \$4.17.

INTERCONTINENTAL ELECTRONICS CORP.

MT-1—Weatherproof balun, 300 ohm to 75 ohm for RG-59/U cable. Net: \$5.75.

MT-2—Weatherproof balun. 300 ohm to 75 ohm for RG-11/U cable. Net: \$6.25.

JERROLD ELECTRONICS CORP.

Antenna mixing networks, Model TX. Designed as channel mixers or splitters with high isolation between channels being mixed or split. Low insertion loss. Connects up to 9 antennas to a single down lead. High "Q" band-pass circuits. Indoor or outdoor mounting. For all channels, VHF, FM and UHF. (Specify unit desired: individual channels 2-13, FM, High-low, and VHF-UHF.) Model GP-4 gang plate available for mounting up to 4 antenna mixing networks. PNS

JFD ELECTRONICS CORPORATION

VHF high-low antenna coupler, Model AC10 Combines any high-low VHF antenna into one integrated antenna system using only one down lead. Combination of high pass and low pass filter networks give 25 db or better isolation between bands, 2 db or less insertion loss, flat passband characteristic, 300 ohm balanced image impedance. List: \$4.00.

VHF-UHF (2-13 and 14-83) antenna coupler, Model AC20. Same characteristics as AC10 except for UHF also. \$4.25.

Matching transformer, antenna mounting, Model AC50. Combination of high pass and low pass filter networks gives 25 db or better isolation between bands, 2 db or less insertion loss, flat pass-band characteristic, 300 ohm balanced image impedance. U-bolt provides fast on-the-mast mounting. List: \$3.95.

MARK PRODUCTS DIVISION of the DYNASCAN CORPORATION

Radomes for spun parabolas available in sizes from 2 ft. to 10 ft. to exactly fit the full line of MARK antennas. Radomes are obtainable in either heated or unheated models. Heated units use a spiral wound heating element molded into the radome and an air sensing thermostat for actuation of the heater.

List
\$ 56.25
\$111.00
\$168.75
\$281.25
\$450.00
\$135.00
\$225.00
\$337.50
\$506.25
\$675.00

Solid parabola mounts for various sizes and configurations are available including special mounts for peculiar installations. Also, two standard kits are available for mounting grid parabolas. All components are fabricated of steel, hot-dipped galvanized, and are shipped with detailed mounting instructions.

SOLID PARABOLA MOUNTS

Model Description	List
HM-4872-4' & 6' Horiz.	\$ 56.25
HM-4872P-4' & 6 Horiz. Pipe	\$ 60.75
HM-96120-8' & 10' Horiz.	\$ 75.00
HM-96120P-8' & 10 Horiz. Pipe	\$ 81.00
VM-4872P-4' & 6' Vert, 4'' Pipe	\$ 84.38
VM-96120P-8' & 10' Vert. 4" Pipe	\$112.50
TE-4872-4' & 6' Angle Extender	\$ 22.50

GRID PARABOLA MOUNTS

K-9629—Mounting	Kit	\$ 30.00
K-9630-Mounting	Kit (less pipe)	\$ 15.00
Pipe for	K-9630 Kit	\$1.80/ft.
K-9628-Mounting	Kit (Non-adjustable)	\$ 22.95

Consult manufacturer for kind and type of kit necessary.

MICRO-LINK CORPORATION

Antenna mounts.

Description	Price
Pipe mount for 2', 4' and 6' antenna	\$ 75.00
Roof mount for 2', 4', and 6' antenna	\$ 50.00
Vertical tilt mount for 2', 4', 6'	\$ 80.00
Horizontal tilt mount for 2', 4', 6'	\$100.00
Pipe mount for 8' antenna	\$150.00
Roof mount for 8' antenna	\$125.00

PRODELIN

Parabolic antenna radomes. Molded fiberglas reinforced resins provide inexpensive protection against adverse climatic conditions, ice and snow accumulation. No signal attenuation through the 10,000 Mc/S signal range. Features simple high strength aluminum clamp assembly.

 Simple inight strength automotion champ assembly.

 Type
 Description
 Price

 4-140-Mounts 4' parabola
 \$100.00

 6-140-Mounts 6' parabola
 \$150.00

 8-140-Mounts 6' parabola
 \$250.00

 10-140-Mounts 10' parabola
 \$400.00

 Also available in heated models. Heated radomes include thermostat, relay and junction box. Write for prices on heated models.



Pipe mounts for 4, 6, 8, and 10' spun antennas. Model 9011-6A. Pipe mounting bracket set includes two pipe brackets and two collars which are permanently fastened to pipe below brackets. Bracket set is used with 4" pipe, (41/2" O.D.). Price: \$80.00.

Roof mount, Model 15-140. Mount consists of four hot galvanized steel brackets which accept the stud mounts on all size antennas. Permits mounting on any flat horizontal surface. Price: \$40,00.

Wall mount, Model 20-140. Mount is made up of angles and Z shapes which permits mounting the 10' antenna on any flat vertical surface. Price: \$60.00.

TACO

Antenna mounts. A series of antenna mounts for all types 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 adjustment of + or -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.

Antenna mounting kit, SY-M1. For installation of one SY-41 or one SY-42 antenna to towers with legs up to $4\frac{1}{2}$ " in diameter. Price: \$18.00

Antenna mounting kit, SY-M2. For installation of one SY-41 or one SY-42 antenna to towers with legs between $4\frac{1}{2}$ " and $7\frac{1}{2}$ " in diameter. Price: \$21.00.

Anti-icing equipment. Radomes for all size dishes. are available for applications where antenna must perform under adverse conditions. Also heater units are available to prevent the accumulation of ice and snow on the radomedish assembly. Individual heaters are available also to heat the dish and feed units where the use of a radome is not desired. PNS

Accessories for ruggedized yagis.

Туре	Description	Price
Y-B-4	Boom-4' long	\$ 6.00
Y-B-8	Boom-8' long	
Y-B-10	Boom-10' long	13.00

"At last . . . a handbook to CATV system design . . ."

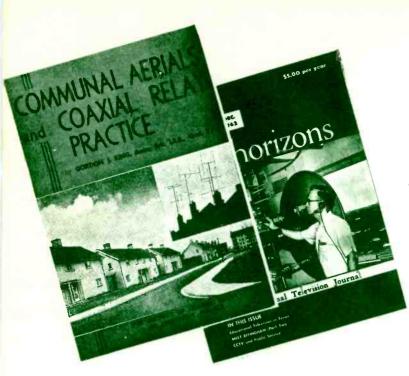
Communal Aerials Design and Practice, the first handbook ever written exclusively for the designer and operator of CATV-MATV systems, is now available from Horizons Publications, Inc. This manual, written and published in Great Britain by Television Horizons 'Man-in-Europe' Gordon J. King is must reading for every CATV buff!

SPECIAL OFFER

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Amplifiers community engineering corporation



Video amplifier, Model 1019EQ. Will drive and equalize up to 11/2 miles of Foam 11 coax or one mile of RG-11/U. Gain: 40 db minimum at 8 Mc. Gain control range: 25 db minimum. Frequency response: 5 cps to 8 Mc – within .5 db for amplifier and cable combination. Output: 8 v p-p into 75 ohm load, positive signal out for positive signal in. Input level: 2.0 v p-p maximum. Price: \$600.00 (Also model 1019F which is flat from 5 cps to 12 Mc – Price: \$550.00).

Video line amplifier, MI-36096-B. Compact, high gain unit designed for use with CCTV equipment to amplify video signals. Besides raising the video level, it also can be adapted to compensate for deficiencies in the frequency response of the distribution system. Frequency response is uniform to 7 Mc with a 30% roll-off between 7 and 8 Mc. Output is 3 v p-p. Input circuit has a noise suppression circuit to balance out extraneous signal currents induced in long runs of cable. PNS.

Video distribution amplifier, M1-36315. Feedback stabilized amplifier with continuously variable gain. Uniform frequency response to 10 Mc. Self-contained, regulated power supply. Gain variable from less than unity to a maximum of 12 db. One high impedance lop-thru input and three terminated outputs. Video output: 1 v p-p (each output). Pulse output: 4.0 v p-p, negative (each output). PNS.

Video equalizing line amplifier, MI-36355. Provides precise video equalization to 8 Mc for balanced and unbalanced lines. 60 db suppression of interference signals. Self-contained, regulated power supply. Accommodates any one of 23 plug-in line equalizer networks. Optional plug-in module for 75 ohm monitoring output. PNS.

Cameras

BLONDER TONGUE - BENCO

Vidicon camers, Model TC-1. Completely selfcontained camera. Camera adjusts automatically to meet changing light conditions. Lens opening and focus are the only controls that the operator normally adjusts. There are two basic versions, the TC-1V which provides a video output, factory set at 1.25 volts peak to peak and the TC-1RF which provides a double sideband RF output of at least 100,000 microvolts across 75 ohms. The TC-1RF can be tuned (by the user) to any TV channel from 2 thru 6. Net: \$850.00.



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 2000 to 1 range. Video output, 1.25 volts. Usable picture may be obtained with as little as 1/2 foot candle of scene illumination with the standard F/1.9 lens supplied. Net: \$1950.00.

Model TTVC-1(2-6). RF version of the TTVC-1-1. Output 50 millivolts, channels 2 thru 6 available. Net: \$1995.00.

Model TTVC-1R. Same as TTVC-1 but equipped for remote control of electrical focus, beam, target, video gain and power. Net: \$2500.00

Model TTVC-15N. Same as TTVC-1 but accepts studio net pulses. Use with WFM-5 waveform monitor. Allows common synchronization for multi-camera operation. Net: \$2100.00.

Model TTVC-ISNR. Same as TTVC-ISN but equipped for remote control. \$2740.00.

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 optional intercom and remote control. Video

"Television Horizons is to be commended for bringing this fine handbook of television system's design to its American readers. . . ." "As a designer of CATV systems in eastern Canada I can assure you that I was pleased to see such a manual become available. . . ." "I have met your Mr. King and I can assure you that he is very much on top of the CATV-MATV world in Europe. . . ." "Very keen indeed. . . ."

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> As different from 1962 as last year's TVH Directory issue. Television Horizons has grown into a vital - non-compromising publication essential to everyone in the television broadcasting and reception industries.

Model EV-1(2-6). Same as EV-1 except has RF output. Channels 2 through 6 available. Net: \$4295.00.

Model EV-1-SNR. Same as EV-1 but accepts studio net pulses and is remote control. Net: \$4995.00.

CONTINENTAL ELECTRONICS PRODUCTS CORP.

Vidicon TV camera, Model V-1051CC. Ideal for use in closed-circuit and CATV systems. Completely self-contained. Crystal controlled horizontal oscillator. Bandwidth: 5 Mc. Resolution: 400 lines. 1 volt composite video output (75 ohm). Can be remote controlled. Net: \$495.00. Vidicon TV camera, Model V-1080RCC. Rugged industrial or closed-circuit camera. Remote power supply. Resolution: in excess of 500 lines. Bandwidth: 7 Mc. Uses any 16 mm "C" mount lenses. Output: 1 volt composite negative video (75 ohms). Crystal controlled horizontal frequency. Net: \$715.00.

Video broadcast camera, Model V-108ORB. Produces full, broadcast quality pictures. Resolution: 600 lines horizontal. Full 2-1 interlace. Available with RTMA sync generator (EIA). Self-contained emergency sync generator. Has 4-lens turret for 16 mm "C" mount lenses. Video output: 1.5 volts negative (75 ohms). Camera control unit has beam, target, pedestal, focus and contrast controls on front panel. Includes camera control and power supply. Net: \$2,950.00.

RADIO CORPORATION OF AMERICA



Vidicon camera, TK-202. Consists of two basic units: a small, portable camera and a control unit. Both units can serve as foundation "building blocks" of a multiple camera chain system which may incorporate other cameras and control units, monitors, sync generators, pulse amplifiers for use with external drive signals and various accessories such as remote or automatic iris control, remote lens turret, pan and tilt mechanism, video line amps, automatic sensitivity control, and automatic light control equipment. Resolution: 550-600 lines. Bandwidth: Uniform to 8 Mc. Choice of 525 line interlaced 2 to 1 or 525 random interlace. Output: 1.0 v p-p across 75 ohms. Negative sync. PNS (Write for additional details)

Vidicon viewfinder camera, TK-205. Has 4 lens, $6 \ 3/8''$ diameter turret. For use in studio-type applications. Operates from an internal or external EIA standards sync generator. Accepts manual control zoom lens. Control unit designed for rack mounting or in appropriate cabi-net. Viewfinder uses 8" tube. 525 line interlaced or random. Two front tally lights, one rear. Will accept four 16mm "C" mount lenses. Output: 1 v p-p across 75 ohms. Negative sync. Horizontal resolution: 600 lines maximum in center of picture. Internal sync will provide scan lock for input frequency of 60 cps, plus or minus 1/4 cps. Lens selection made from rear of camera by means of a full-grip handle. Optical focus control is located on the right rear side of the case. Jacks for single or double headsets are provided on the rear panel. Write for additional details. PNS.

TV eye closed-circuit camera equipment. Video System ES-36298 and RF System ES-36299. Designed as an inexpensive means for the remote viewing of processes, locations and operations, where direct observation is too dangerous, too hot, too cold, too inconvenient, too confining, or too costly. Has single lens although a manual 3 lens turret may be attached. Horizontal resolution: 350 lines maximum. Output: 1 v p-p (composite video). Output impedance is 75 ohms (300 ohms for RF model). Write for additional details. PNS.

SYLVANIA ELECTRIC PRODUCTS, INC.

Direct wire television camera, Model RF 300. Lightweight self-contained vidicon camera. Automatically and continuously compensates for widely varying degrees of ambient illumination. Primary controls: lens, brightness, contrast, focus, channel selector. Secondary controls: vertical centering, horizontal centering, vertical linearity, height, horizontal hold, width, horizontal linearity. Camera has 4 position lens turret which accepts any standard l6mm "C" mount lens. Resolution is 300 lines. RF output: 100 mv minimum into 300 ohms. Channel coverage. Channels 2 thru 6. Net: \$750.00.



Direct wire television camera, Model VRF 400. Transmits 300 line resolution RF signals and finely detailed 400 line video signals. Covers channels 2 thru 6. Equipped with Electronic Self-Adjustment, the VRF400 automatically and continuously compensates for a widely varying degree of ambient illumination. Uses crystalcontrolled horizontal scan to assure constant and stable image reception when multiple cameras are used. Has 4 position lens turret which accepts any standard 16mm "C" mount lens. Video output: 1.4 v p-p composite into 75 ohms. RF output: 100 mv minimum into 300 ohms. Video output signal polarity is black (sync) negative. Net: \$820.00.

Direct wire TV viewfinder camera, Model VRF-400/M. Has self-contained 5" viewfinder to eliminate the need for an auxiliary monitor. Will transmit either 300 line resolution RF or 400 line video. RF output on Channels 2 thru 6. Self-adjusting to any ambient illumination. Crystal-controlled horizontal scan. 4 position lens turret will accept any standard 16mm "C" mount lens. RF output: 100 mv minimum into 300 ohms. Video output: 1.5 v p-p composite into 75 ohms. Net: \$1395.00.

Direct wire television camera, Model 600. High resolution; 300 RF; 600 video. Complete vidicon camera with 4 position turret which accepts any standard 16mm "C" type lens. Electronic Self-Adjustment to compensate for widely varying ambient illumination. Stabilized Electrical Focus to maintain focus with varying line voltage. RF signal output: 100,000 uv minimum into 300 ohms. Video output: .5 v p-p into 75 ohms. Net: \$995.00.

Consoles

BLONDER TONGUE - BENCO

Porta-Studio for origination of both sound and picture. Model ST-1 consists of: 1. Transistor camera equipped with F/1.9 lens and a light bar with two 150 w floodlights, all mounted on a heavy-duty friction head; 2. 17'' video monitor; 3. Amplifier with input for 2 microphones (one microphone supplied), audio monitoring provision including speaker, ear phone jack, VU meter; 4. Audio-video modulator which converts picture and sound into a complete TV channel (2-13); 5.

High gain (35 to 46 db) AGC controlled RF amplifier, output set at 0.5 volts video and 0.2 volts sound by factory; 6. All necessary cables, switches and controls. Net: \$4950.00.

Model ST-2. Similar to the ST-1 but has inputs for two transistor cameras (one camera supplied). To display both cameras, dual 8" monitors are used in place of the single 17" monitor on the ST-1. Operator can switch from camera to camera and "take lights" indicate which one is in use. Net: \$5670.00.

CONTINENTAL ELECTRONICS PRODUCTS CORP.

Television control console. Typical console consists of; electrical camera control units, audio switcher, video switcher, remote control panel for film and slide projectors, network or utility preview monitor, film and slide preview monitor, live preview monitor and a master monitor. Prices quoted on request.

Film Chains

BLONDER TONGUE - BENCO

16mm film chain, Model FC-1. Converts 16mm film into video signals. Includes 16mm projector, TTVC-1 camera and all necessary lenses, mountings, controls, etc. Net: \$5900.00.

Model FC-1R. Same as FC-1 but equipped for remote control (TTVC-1R camera). Net: \$6500.00. Model FC-1SN. Same as FC-1 but accepts studio net pulses (TTVC-1SN camera). Can be used with WFM-5 waveform monitor and video monitor. Net: \$6000.00.

Model FC-15NR2. Same as FC-1SN but equipped for remote control. (TTVC-1SNR camera). Net: \$7550.00.

Model FC-2. 16mm film chain console remote controlled. Complete 16mm film chain for studio net use. Includes FC-1SNR, WFM-5, 17" studio net monitor and all remote control panels in compact console. Video polarity reversal switch for film negatives. Net: \$10,300.

CONTINENTAL ELECTRONICS PRODUCTS CORP.



Film chain, Model FP-87. Includes 16mm Bell & Howell projectors, vidicon camera, slide mechanism and multiplexer. The complete film, slide TV system has been designed to satisfy the requirements of Vidicon Film Chains. Complete assembly is pedestal mounted, ready for installation. Uses easy-to-obtain component parts. Provisions for installation of remote control panel for the film-slide projectors. 35 mm slide projector holds 16 slides. 16 mm projectors hold 2000' of film. Vidicon camera is V-108ORB. Prices quoted on resuest.

Modulators BLONDER TONGUE - BENCO

Audio Adder, Model 2303. For addition of sound to any RF camera. Generates sound carrier located 4.5 Mc above any picture carrier (VHF channels 2-13). Sound carrier may be modulated by microphone, tuner, or other audio source. Output of the Audio Adder is a complete TV channel, sound and picture. Unit incorporates built-in audio pre-amp that may be switched in and out. Net: \$140.00.

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. Net: \$145.00.

SYLVANIA ELECTRIC PRODUCTS, INC. Sound modulator, Model TVCA-122. To transmit sound mixed with video image on DWTV circuit. Net: \$199.50.

Monitors BLONDER TONGUE - BENCO

Projection video monitor, Model PVM. Projects large TV picture. (Unit supplied with optics intended for a $4/2' \times 6'$ picture). Optics for $6' \times 8'$ or $9' \times 12'$ picture are available on special order. Unit shipped ready for operation—no optical alignment necessary. Designed for dolly or ceiling operation, the PVM is equipped for

remote operation. All operating controls are connected through a 15' cable. Projection tube is air-cooled and unit is safety interlocked. Net: \$3250.00.

Waveform Monitor, Model WFM-5. For monitoring video signals. Displays two horizontal lines or two vertical fields. Built-in calibrator and power supply. Requires vertical and horizontal drive pulses. 5" screen. For 19" rack mount. Net: \$1500.00.

CONRAC

Video monitor, 23", Model EMA23/Y. Designed to give optimum pictures in high ambient light areas. Created for instructional television field where broadcast signals are interchanged with locally originated higher resolution signals. Video response to 10 Mc. All operating controls, adjustments and fuses are accessible through a locking trap door. Video signal: 0.25 v p-p. 4.0 maximum. Sync negative at monitor input. Video input impedance: Hi bridging can be terminated by an internal 75 ohm load through a switch located on rear apron. Net: \$375.00 — ES23 Speaker, Net: \$40.00 — Pedestal Mount M8, Net: \$40.00 — M9 Ceiling Mount, Net: \$30.00.

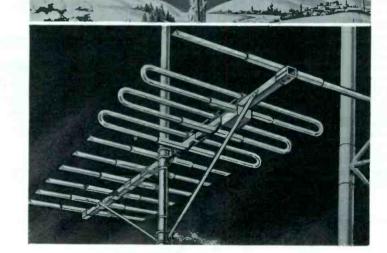


General purpose video monitor, Model CLB. Designed for continuous duty operation. Video response flat to 10 Mc for maximum resolution of 800 lines. Horizontal and vertical linearity within 2% of picture heighth. Taps available on horizontal output transformer so unit can be operated full scan or reduced scan. Built-in switch allows selection of either composite video or separate video and composite sync. Parallel jacks for loop-thru- operation. Net: \$315.00.

Video monitor, Model CNA8/C. Designed for broadcast quality video presentation. Video response flat to 8 Mc for resolution in excess of 600 lines. Taps available on horizontal output transformer so unit can be operated full scan or reduced scan. Horizontal and vertical linearity within 2% of picture heighth. Parallel jacks for loop-thru operation. Mounted in portable case 9¼″ x 111/a″ x 18″. Net: \$325.00.

Video monitor, Model CNA8/2R. Same specifications and characteristics as CNA8/C except dual

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unit requiring only $10^{1}/_{2}$ " of vertical rack space for two independent pictures. Net: \$595.00.

CONTINENTAL ELECTRONICS PRODUCTS CORP.

Video monitors, Models FP-37 and FP-1. Model FP-37 utilizes 8" CRT and Model FP-1 utilizes 17" CRT. Single chassis construction in metal cabinet. Input: from .3 to 1.5 volts p-p with sync negative. Two paralled connectors provide for loop-thru operation, Resolution better than 600 lines. Also 14" and 21" monitors available. Price depends on size and installation.

RADIO CORPORATION OF AMERICA

Video monitors, 24 and 27 inch, MI-36120 series. General purpose picture presentation units for use in broadcast and CCTV applications. Video amplifier has a frequency response flat to 8 Mc, plus or minus 2 db which provides for a horizontal resolution in excess of 600 lines. Video and external sync inputs are of the bridging type so that the signals can be looped past the monitor or terminated in 75 ohms. PNS.

SYLVANIA ELECTRIC PRODUCTS, INC. Monitor receiver, Model 23E01 (VHF) and Model Model 23E01U (UHF). 23" television receiver priarily for educational uses. Has built-in tuner with balun for 75 ohm cable feed. Rear panel of receiver is tamperproof and conceals all additional controls. Built-in 4 watt amplifier. PNS.

Video monitor, Model VMC-8. Portable 8" monitor in heavy guage steel cabinet. Frequency response to 10 Mc. May be operated from composite video and sync signal. Net: \$300.00.

Video monitor, Model VMR-88. Dual 8" monitor occupying 19" rack panel. Same specifications and characteristics as VMC-8. Net: \$595.00.

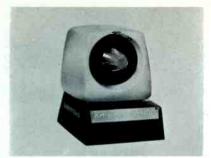
Video monitor, Model VMC-14. 14" portable monitor in metal cabinet. Same specifications and characteristics as VMC-8. Net: \$330.00. Monitor receiver, Model 17M101. Low cost, com-

pact, portable 17" monitor. Glare free contact filter. Net. \$179.95.

Monitor receiver, Model 23M1. Compact 23" monitor. Incorporates built-in tuner. Shatterproof picture tube. Net: \$229.95.

TELEPROMPTER

Projection equipment, Model 190. Portable unit capable of projecting pictures up to 8' wide. Fea-

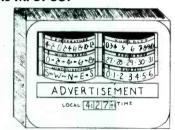


tures remote control as standard equipment. Image meter for instant picture setting. Long tube life. Regulated power supply. Video input: less than 1.0 v p-p negative (75 ohm line). Sync: external/internal. Complete with corrector plate, remote control, AC cable and manual. Net: \$1655.00.

Projection equipment, Model 200. Portable unit capable of projecting pictures up to 18' wide. Available with TV tuner (optional, extra). External video feed requires less than 1.0 v p-pnegative (75 ohm line) Four simple controls; electrical focus, contrast, volume level, on-off switch. Built-in hi-fi audio. Use power pack and head together or remote the head, use two heads with a single power pack front or rear projection, or suspend the projector head from the ceiling, no yoke is needed for permanent installation. Net: \$2850.00 (with choice of corrector plate).

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fall, wind direction, wind speed and time all readable at once in large bold print. Also a revolving band of advertisements will be available to give motion to the screen. The complete system is all electronic with remote readings on Edgewise meters making it possible to get large print in a condensed area. Unit available in February at approximately \$750.00.

CONTINENTAL ELECTRONICS PRODUCTS CORP.

Video switcher, Model V-2012. Features 5 video inputs that may be switched from preview to air. Each channel, numbered consecutively from 1 through 5, contains video gain control. External sync is mixed in the video switcher. Unique features consist of provisions for lap, fade, dissolve and super-imposition of any combination of 5 video channels. Provision is also made for remote controlling projectors by push-button. Input and output impedances: 75 ohms. Net: \$575.00.

SYLVANIA ELECTRIC PRODUCTS, INC.

Four position camers switching box, Model TVCA-107. Switching device for use at monitor to provide selectivity of signal transmitted over coaxial cable from each of two to four cameras into same monitor. Net: \$95.00.

Distribution box, Model TVCA-105. Provides plugin connection for two to four monitors to same camera, with total length of connecting coaxial cables normally not exceeding 1000 feet. Supplied with 10 ft. coaxial lead, connector, and two termination plugs. Net: \$20.00. Termination plug, Model TVCA-106. For insertion

Termination plug, Model TVCA-106. For insertion in unused outlets of distribution box, to close circuits when fewer than 4 monitors are connected to box. Net: \$2.00.

Close-up camera mounting stand and lighting kit, Model TVCA-130. Gear drive permits camera to be cranked vertically for desired field coverage. Holds position without clamping or locking. Includes two light fixtures with bracket for mounting on baseboard of camera bracket. 18" gooseneck arms and swivel mount provide even illumination. Net: \$204.90.

Extension tube kit, Model TVCA-120. For use with close-up stand. Includes 4 tubes of 5, 10, 20 and 40 mm lengths. Can be used individually or in combination of lengths. Standard "C" mount thread. Net: \$16.95.

Camera carrying case, Model TVCA-114. For RF300 or VRF400. Heavy-duty, foam cushioned compartments accommodate camera, four lenses, cables and impedance-matching transformer. Net: \$24.95.

Impedance matching transformer, TVCA-103. To connect monitor to camera or to signal cable extension from camera. Includes 15' coaxial cable (RG-59/U) and connector. Net: \$10.50.

Signal amplifier, Model TVCA-108. Boosts RF signal from camera to monitor in coaxial cable with total length exceeding 1000 ft., or under any conditions causing insufficient line signal strength. Net: \$125.00.

Dolly, Model TVCA-117. Complete with locking wheels and coupling spikes to permit smooth motion of TV camera on tripod. Net: \$38.00.

Tripod, Model TVCA-116. Heavy duty model complete with pan and tilt head. Net: \$110.00.

RADIO CORPORATION OF AMERICA

Automatic light control equipment, MI-36363 and MI-36240. Both units are designed to work in conjunction with the Automatic Sensitivity Control, MI-36362, and may be added to a TK-202 camera chain at any time with no modifications. The ALC equipment functions as an electronically controlled "light valve" to control the maximum light intensity incident on the vidicon faceplate. PNS.

Outdoor remote control pan and tilt, MI-36198. Horizontal panning arc is 355 degrees with a tilt angle of plus or minus 45 degrees from the horizontal plane. Variable speed drive avail-

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able on both pan and tilt. Remotely operated by either a desk or rack mounting control unit. Has non-reversible gear train and dynamic breaking. PNS.

Indoor remote control pan and tilt, MI-36110. Lightweight, maneuverable mount designed for CCTV cameras. Allows horizontal panning through an angle of slightly more than 360 degrees and a tilt angle through 360 degrees. Remote azimuth and elevation control of the pan and tilt mechanism is provided by a separate control unit which may be located near the monitor or in some other convenient control location. Four fingertip push buttons control all movements of the camera. The pan and tilt mechanism is operated by two single phase, dynamic braking, non-synchronous, capacity start motors. Non-reversible gear train and quick braking action assure accurate operation and prevent any overshoot. PNS.

Automatic sensitivity control, MI-36362. Automatically regulates TK-202 camera for maximum picture quality. Smooth, bounce-free operation. Compensates for a 1000:1 variation in light intensity with less than a 50% change in video level. Self-contained voltage regulating transformer. Plugs into TK-202 control unit-no modifications required. Provides plug-in socket for optional Automatic Light Control Module. PNS. Tripod mounts, MI-36225 and MI-36253. MI-36225 is a rugged unit of hard-chrome plated steel and aluminum castings. Has safety lock which is automatic, legs cannot slip, and the automatic leveling action of the safety-lock used on the tie rods provides ultimate simplicity in leveling. The MI-36253 tripod is a lightweight unit of high-strength aluminum alloy construction. PNS.

Video Tape minnesota mining and manufacturing co.

Video tape, 379. Designed to serve commercial telecast video equipment where head travel is nearly perpendicular to tape travel. Oxide coating is transversely orientated to match the recording "path" of the vertically moving heads. Price dependent upon needs.

Video tape, 377. Designed for use on video recorders for closed-circuit, industrial and educa-



tional 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.

RADIO CORPORATION OF AMERICA

Television tape recorder, Type TRT-1B. New transistor signal processor affords finger-tip control of picture quality. Centralized control panel. Built-in picture monitor and oscilloscope with push button selection of signals. Better than 38 db video signal-to-noise ratio. Continuously variable winding speed. Foot release-switch controls reel brakes for ease of tape handling and threading. 4-track range of control track phase adjustment. 55 db limiting in demodulator. Simultaneous playback of program audio and control-track during record. FM carrier and deviation meter. Solid state DC power supplies. Playback tape speed control for sound syncronization of two or more machines. Separate record/playback guide position controls . . . important aid to compatible recording. Tape timer, magnetic tone wheel, master erase head. Variable de-emphasis . . . aids playback of non-standard tapes. Color accessory rack available. Write for further information. PNS.

Lenses

SYLVANIA ELECTRIC PRODUCTS, INC. Standard lens, Model TVCA-100. General purpose 25 mm f 1.9 lens, supplied as standard equipment with television camera. Net: \$59.50. Wide-angle lens, Model TVCA-101. 12.5 mm lens f I.9, nearly doubles angle of coverage of stand-

ard lens. Net: \$69.50.

Telephoto lens, Model TVCA-102. 75 mm f 2.5 lens, acts as telescope, bringing subject three times closer than standard lens. Net: \$69.50. Telephoto lens, Model TVCA-123. 150 mm (6") f 4.5 lens, acts as telescope, bringing subject six times closer than standard lens. Net: \$99.50. Near-focus lens adaptor ring, Model TVCA-104. For use in any of the turret positions to extend the focus range of a lens for close-up pictures. Net: \$2.95.

RADIO CORPORATION OF AMERICA

Direct drive iris mechanism, MI-36111. Functions as a continuously variable "light valve" and serves to maintain an optimum light level on the photosensitive surface of the camera vidicon. This control equipment is useful for both indoor and outdoor applications, and can be employed with many different combinations of cameras, lenses and camera housings. The light control range of the MI-36111-A/B/C series of direct drive iris mechanisms can be as high as 250 to 1, depending upon the number of "f" stops on the camera lens. Units are shipped with either a 12 mm, 25 mm, or 50 mm lens dependent upon which model is specified. PNS.

Remote control lens turrets, MI-36140 and MI-36141. Permits rapid selection of lenses. Accommodates 4 standard "C" mount 16 mm lenses. Control unit provides four buttons for selection of the desired lens. The turret permits remote rapid selection of any combination of lenses ranging from wide angle to telephoto without lens cropping. Change time is less than one second. Model MI-36140 comes complete with remote controlled iris and MI-36141 is less remote iris. PNS.

Vidicon camera lenses. Three series of lenses are available and furnished in focusing 'C" mounts and include an adjustable iris. MI-36316 series includes normal, wide-angle and telephoto lenses for use on any vidicon camera, manual lens turret or the MI-36141 remote 4-lens turret. The MI-36317 series lenses are equipped with an iris gear and are for use with the MI-36111 A/B/C series of direct drive iris mechanisms. The MI-36142 series lenses are equipped with an iris ring, drive pin and torque tube, and are for use with the MI-36142 series lenses are equipped with an iris ring. Write for further information. PNS.

QUALITY BUILDERS OF CATV SYSTEM COMPONENTS



Closed-circuit Zoom lenses. The remote control auto-zoom lens is designed to provide greater flexibility for RCA vidicon cameras by permitting wide angle, regular, and telephoto coverage with a single lens. The focal length, iris setting, and optional focus of the lens may all be controlled remotely by three sub-miniature motors. Limit switches are utilized to brake the motors at each limit of travel and prevent overtravel. The auto-zoom lens provides resolution of better than 600 TV lines and silent operation. Two models are available. Model MI-36189-1 has 30 to 150 mm focal length and Model MI-36189-2 has 60 to 300 mm focal length. PNS.

CCTV Zoom lenses, MI-36359 (Mark IV), MI-36360 (Mark VI). Focal length range of 4 to 1 or 6 to 1. The focal length, iris, and focus

Low Noise VHF Preamplifiers. High-Reliability Power Supplies for Microwave Systems, 300 v. at 300 ma. Special Filters, pass band any VHF channel, minimum 70 db rejection of any two unwanted VHF carriers.

Write Today for Information on the COMPLETE TEPCO LINE

EPCO Corporation

City South Dakota . Phone 343-7200

ONAL TELEVISION JO

can be controlled remotely through the motorized drives from Control Box MI-36361. The Mark IV and the Mark VI zoom lenses utilize a standard 16 mm "C" mount. The focal length is variable from 17 to 70 mm in the Mark IV and 25 to 150 mm in the Mark VI. Either lens may be readily converted for higher focal lengths by means of an accessory Range Extender. PNS.



AMECO

Ameco modified Conrac demodulator. For applications in which both sound and picture are to be transmitted over a single output channel, the unit is furnished with the 4.5 Mc sound subcarrier mixed with the video output. Net: \$280.00 (basic unit) Add \$135.00 for single channel VHF plug-in front end or \$60.00 for 12 channel plug-in tuner.

CAS MFG. CO.

Demodulator, Model 58-FMC. Converts 5.8 Mc signal from microwave equipment to standard FM signal. 19" rack mounting and self-contained power supply. Net: \$160.00.

Demodulator. Modified Conrac AV-12E. Converts complete TV channel to video and 4.5 Mc sound. With all-channel tuner. Net: \$320.00.

CONRAC



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 with-in plus or minus 1 db to 4.1 Mc. Bi-filar T traps are employed to reduce phase distortion. A combination of split-off sound and intercarrier sound is employed. Output capable of over 3.5 volts of video (75 ohm load) with low distortion. Unit can be furnished with provisions for mixing a 4.5 Mc signal (sound sub-carrier) with the video output. This feature available at no extra cost if specified at time of ordering. Net: \$260.00. Add \$135.00 for single channel tuner or \$60.00 for 12 channel tuner.

Representing leading manufacturer's of CATV, Antennas, R. F. Equipment and Systems **A. W. WEART BROTHERS** Communications Manufacturer's Representatives Burney California Covering by aircraft the Western States from 3 offices

JERROLD ELECTRONICS CORP.

Demodulator, Model TD. Designed for CATV head ends; demodulator for TV microwave; offthe-air reception of TV broadcasts. Has allchannel 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. Has station outage squelch circuit. Video output: 1.5 v pp (75 ohm load), negative sync. Frequency response: 30 cps to 4 Mc within 1 db. Audio output: 10 v rms across 600 ohms. 4.5 Mc intercarrier sound output: .5 v rms into 75 ohms. Regulated power supply. Rack mounting. See Model TM, Industrial Television Modulator. PNS.

TELESYSTEM SERVICES CORPORATION TV headend tuner for CATV and microwave applications, Model Tele-Ceiver. Modified Conrac

unit. Has antenna input network adjustable to match any given set of antenna and signal strength conditions. Choice of crystal-controlled single channel unit or all-channel tuner. Optional video or video/4.5 Mc audio. Constant video detector input level. Good phase linearity to insure good color registration. Net: \$260.00 (basic unit) Add \$60.00 for all-channel VHF tuner or \$135.00 for single channel VHF crystal-controlled tuner.

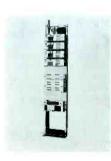
Transmitters-Receivers

ADLER ELECTRONICS, INC.

Microwave system, RT-3A. Operates in the 2 kMc range. Useful for educational television relay or remote pickups. Can receive local station or camera video and audio. 10 watts output. Meets FCC, NTSC and proposed EIA color standards. Vestigal sideband transmission and crystal controlled stability. PNS.

COLLINS RADIO COMPANY

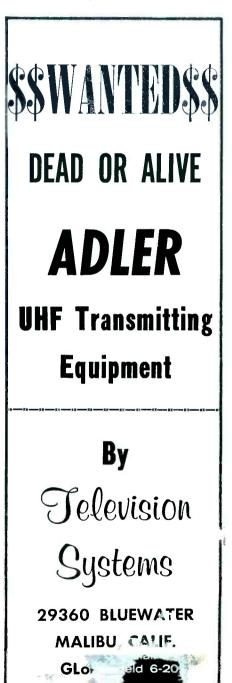
Microwave video relay system, MWV-101. Designed especially for CATV applications. Receivers and transmitters are designed as compact modules. Units are stacked on a common RF waveguide to provide the necessary number of microwave circuits. Racks may be wired for expansion and channels may be added as required. All major circuits may be checked without the use of external test equipment. Sound diplexing equipment is available if requirements call for additional high fidelity audio. Stable, factorytuned IF amplifier provides a 15 Mc bandwidth, and requires no field alignment. Simplified maintenance is possible with the aid of plug-in modules, swing-out panels, complete metering, numerous test points, minimum number of tube types, optional fuse and rack alarm indications, optional switch position indicators, optional remote fault alarm systems. Frequency range: 5925-6425 Mc and 10.7-11.7 kMc. Power output: 100 mw minimum. Frequency response: (video) plus or minus .5 db, 60 cps to 4.2 Mc; plus or minus 2 db, to 6 Mc. Audio response: plus or minus 2 db, 50 cps to 15 kc. Write for additional information.



JERROLD ELECTRONICS CORP



Wide-band microwave equipment for the 5925 to 8100 Mc range and 10,500 to 13,250 Mc range. Equipment is self-diplexing for multichannel operation without additional equipment. System response within 0.25 db from



10 cps to 8.0 Mc and square wave tilt less than 2% for a 30 cps square wave. 5925 to 8100 Mc equipment has 1.0 watt nominal power output. 10,500 to 13,250 Mc equipment has 0.1w nominal power output with optional 0.5w output available on special order. Carrier stability within .005% of assigned frequency through temperatures from -20 degrees C to +55 degrees C and line voltage changes from 105 to 130 volts. Transmitter utilizes special discriminator circuits and quartz crystal reference oscillators to provide the high stability. RF output and frequency deviation is read directly from the front panel meter. Differential gain: + or -.25 db with + or -2.0 Mc deviation. Differential phase: + or - 1.5 degree with + or - 2.0 Mc deviation. All equipment is standard 19" rack mounting. Units can be combined into single antenna. Increased reliability through built-in monitoring circuits with front panel metering without interrupting equipment operation. Write for additional details. PNS.

MICRO-LINK CORPORATION



Fixed Microwave link, Model 600. A complete 0.1 watt system operating between 12.0 to 13.6 kmc for point-to-point FM transmission of sound, data, black-white or color TV signals in the new FCC business operational fixed and STL frequency allocations. Designed for the utmost in reliability and versatility, the 600 series is a two-way communication link but readily converted to one-way or multi-channel operation with frequency diversity or stand-by options. Video bandpass is flat within .5 db to 7 Mc and down 3 db at 8 Mc with excellent phase and gain characteristics for color and high resolution video transmission. Price dependent upon requirements-\$6000 to \$6500.00 range.

Portable microwave link, Model 420A. Designed to operate in the new FCC business microwave and STL bands, the 420A is a 100 mw, 10.5 to 10.7 kmc portable microwave relay link. The transmitter and receiver are each self-contained in their own weatherproof case requiring no additional cumbersome control units. Full 7 Mc video bandwidth for high resolution black-white or color TV transmission. The small size, ease of portability and low cost permits its use to link scattered locations economically, permitting the transmission of data, remote control functions, sound and television picture data between them. Net: \$5000.00.

MICROMEGA CORPORATION

UHF-SHF preamplifiers. Several models covering the range of 500 to 7000 Mc. Preamplifiers are parametric devices utilizing "varactor" diode and klystron pump source. Exceptionally low noise figure is characteristic of units. Permits cost saving by permitting greater spacing of microwave repeater stations without deterioration of signal to noise ratio. PNS.

RADIO CORPORATION OF AMERICA

TV microwave relay system, Type TVM-1B. 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 aging. 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.



CATV Brokerage

DANIELS & ASSOCIATES

Negotiators, consultants and appraisers for the **CATV industry**. Offering a wide range of in-terested 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. Offers a consulting service on any facet of the CATV industry. On sales of property, the firm works on a straight 5% commission, payable by seller. On appraisals, works on a flat fee basis, depending on size of system. Normally, consulting fees are negotiated. Nationwide service, including Canada. 81/2 million dollars in system sales in the last 12 month period. 40 systems appraised and various consulting assignments, Principals include Bill Daniels, Alan Harmon, Carl Williams.

CATV Engineering

BLONDER TONGUE - BENCO Complete engineering service available to handle

any type of installation.

CABLE T-V CONSTRUCTION, INC.

Engineering facilities for system layout planning and maintenance.

CAS MFG. CO.

Complete engineering facilities available to handle all types of jobs. Experienced system planners to aid in layout of large and small installations.

TELESYSTEM SERVICES CORPORATION

Provides a source for technical evaluation of equipment used in CATV systems. Develops specifications for CATV systems construction and inaugurates operation practices and procedures. Makes surveys of communities where CATV service would be desirable. Develops and procures equipment for CATV companies. Provides a national sales organization for cable, electronic equipment, and engineering services for the CATV industry.

DAVCO ELECTRONICS CORPORATION

Specializing in complete system engineering and sales. A full staff is available to aid in planning your needs for either present or future systems.

CATV Management

CABLE T-V CONSTRUCTION, INC.

Currently managing systems in the Midwest for ourselves and other companies at this time Inquiries invited.

TELESYSTEM SERVICES CORPORATION

Provides management for present and future CATV companies. Provides advertising and sales promotion services for CATV companies. Provides technical direction and assistance for CATV companies. Makes a continuing study of CATV plant requirements and provides guidance for electronic equipment development to meet these needs.

CATV Construction

CABLE T-V CONSTRUCTION, INC.

Complete construction division that is engaged entirely in the building of CATV systems, including the tower, headend, etc.

DAVCO ELECTRONICS CORPORATION

Davco has the facilities available for construction of any type of system. Experienced line crews and technicians are ready to aid you in getting a new system underway or to modify an existing one.

MATV Engineering

CAS MFG. CO.

Complete engineering facilities available to handle all types of jobs.

BLONDER TONGUE - BENCO

Complete engineering service available to handle any type of installation.

MATV System Planning

BLONDER TONGUE - BENCO

Complete facilities and staff for all phases of system planning.

CAS MEG. CO.

Experienced system planners to aid in layout of large and small installations.



Heavy-duty guy wire, Model 9082. All weather guy wire designed to last. Ultra-Violet ray proof. Guy wire is galvanized and has a vinyl coating over the galvanized wire. Twenty 50' hanks (interconnected) to the package. PNS

INTERNATIONAL WIRE & CABLE CO.

Plastigard guy wire. Steel stranded plasticoated guy wire. Guards against corrosion, wind, snow, changes in temperature.

Type Description

2510-20-50' connecting coils

2514–500' spool 2515–2-50' connecting coils

JACK PRUZAN COMPANY

Galvanized steel guy strand. Short lengths available in all sizes and grades. All strand in stock on 5000' reels except as noted.

Size Description

- Size Description
 1/16"-Galv. TV guy strand
 4 x 20-1000' spools
 6 x 20-1000' spools
 3 /16"-Galv. common strand; Utilities 2.4M in 5000' reels and 250' coils.
 1/4"-Common strand, 2500' reels; Siemens Martin strand, 2500' reels; High strength 4.7M.
 9/32"-Utilities 4.6M.
 5/16"-Common; Siemens Martin, 1000' reels and 500' coils.
- 9/32"--Utilities 4.6M.
 5/16"-Common; Siemens Martin, 1000' reels and 500' coils; Utilities 6M; High strength.
 3/8"-Common; Siemens Martin, 500' coils; High strength; Utilities 10M.
 7/16"-Common; Siemens Martin; High Strength; Utilities 16M.
 1/2"-Siemens Martin, High strength 25M.
 1/4"-Copperweld 7 strand.

Pole Line Hardware

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. Complete, comprehensive catalog available.



Tools & Safety Equipment

BLONDER TONGUE - BENCO

CR-1-QD crimping tool and cutting pliers. PNS S-1-Rotary cutter and stripper. PNS

INTERCONTINENTAL ELECTRONICS CORP.

CT-1-Coring tool set for PT-1 (RG-11/U single shield) and PT-2 (RG-11/U double shield and jacket). Net: \$5.00.

CT-1 (tip)—Removable tip for CT-1. Net: \$2.25. CT-3-Coring tool set for PT-3 (1/2" aluminum cable with solid or foam dielectric or PT-4 3/8" Foamflex), Net: \$5.00,

CT-4-Crimping tool for PT tapoffs. Net: \$5.00.

JACK PRUZAN COMPANY

All tools available to outfit any lineman from belts to buckets. General tools such as snatch blocks, block and tackle, drawbars, cable grips, and all forms of hand tools. Bashlin line of safety equipment available including climber pads and aluminum adjustable climbers. Complete, comprehensive catolog available.

TACO

PL-601-Ued to crimp C-52 or F-59 ferrules. PNS PL-602-Used to crimp ferrules on C-52, C-56, F-56, F-59, AF-101, AF-201, F-101-59, F-201-59, AF-404 or F-404-59 connectors.

PL-603-Ued to crimp ferrules on AF-408, F-408-59, C-52, F-59, F-408-59 or AF-408 connectors. PNS

Cable Lashing Wire & Accessories

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 Straight hub .045 Cone hub .065 Straight hub .065 Cone hub

- In stock cable lashing wire-galvanized: .061 Cone hub .091 Straight hub

Tapes & Splicing

Materials

JACK PRUZAN COMPANY

All forms of tapes available from bi-seal to electrical filler, electrical vinyl, high voltage, friction, neoprene, splicing, rubber, paper and aluminum. Solders, sleeves and Scotchcast splicing kits plus other splicing accessories to fill all needs and requirements for splicing materials.

Ground Materials & Wires

JACK PRUZAN COMPANY

Complete stock of materials for proper ground-ing of wires, lines, cable, etc.

ing o	i wires, lines, cable, e
Grour	nd Rods.
Size	Description
3∕8″×	4'-Copperclad TV rod
3⁄8'' x	5'-Copperweld-wired
3⁄8" x	5'-Copperweld-unwired
3/8" ×	6'-Copperweld-unwired
1/2" x	6'-Copperweld-unwired
1/2" ×	8'-Copperweld-unwired
1/2" x	10'-Copperweld-unwired
5/8'' x	6'-Copperweld-unwired
5⁄8″ x	8'-Copperweld-unwired
3/4" x	8'-Copperweld-unwired
3⁄4″ x	10'-Copperweld-unwired
1/2" x	5'—Galvanized wired
1/2" x	6'-Galvanized-unwired

1/2" x 5'-Galvanized-unwired 3/4" x 8'-Galvanized-unwired

Ground wire Size Size Description No. 10–Soft-drawn .080–Hard-drawn copper line wire No. 12–Soft-drawn No. 4-ACSR

INTERNATIONAL WIRE & CABLE CO.

Ground rods. Made of heavy gauge steel-copper plated to prevent corrosion. Has permanently attached captive ground clamp. Type Description 2438-4' x 3/8" 2638-6' x 3/8" 2838-8' x 3/8" 2850-8' x 1/2" 2855-Ground rod clamp w/screw

VIKING CABLE COMPANY



920-Grounding block. Stainless steel pins. Simple, protected installation for RG59 co-ax. No coring or splicing required. Price: \$.45.

Splice Boxes

AMECO

Splice box, Model SP-1. Designed for use with RG-11/U and 1/4" aluminum cable. Compensated for a maximum VSWR of 1.2. Cadmium plated steel, iridite finished case. Bracket mounting. Net: \$8.00.

AUDIO EQUIPMENT

Tape Equipment

ALTO-FONIC



Mono-stereo tape transport, series-1100, Model 1102 Clark-Root long-playing transport will handle up to 6 hours of tape at 71/2'' ips using 1 mil tape. Unit is all-transistorized and uses hydraulic tape tensioning system to handle 1 mil tape on 14" reel. Broadcast control system provides plugin front panel jack for monitoring, cueing and test operations without affecting the automatic system. Unit has automatic reversing. Model 1104 is stereo version with same design as 1102. Available in cabinet or 'console mounting versions. Other 1100-series units are available to provide continuous intermixed music by timer control or by completely automated selector system. In addition a complete tape library is available to insure a continuously changing program for music system subscribers. PNS.

TAPE-ATHON



ONLY \$649.50

Complete system with test

vidicon, 1 inch lens and

assembled cables, schema-

ELECTRONICALLY REGU-

LATED POWER SUPPLY

11 Tubes & Transistor-

31.5 Kc. Crystal Controlled

Oscillator 115 v.-A.C. 60

tics, wired and tested.

FANTASTIC VALUE IN CLOSED CIRCUIT TELEVISION

BRAND NEW -- COMPLETE SYSTEM SHOWN

LOW - LOW \$495.00

Complete system with all tubes-wired and tested. Less Vidicon and Lenswith Schematics (connecting cables and plugs only -supplied, but not assembled)

CONTROL MONITOR

12 Tubes & 21DAP4



4 Tubes & Vidicon

EIA Standards of 525 lines, 60 Fields, 30 Frames and 2:1 interlace—Aspect Ratio 7:3-Capable of 700 lines Horizontal resolution and 350 Lines Vertical

Write for Catalog No. 1273TV "HOW TO BUILD LOW COST TV CAMERAS." Industrial and Broadcast Cameras and equipment, Miscellaneous accessories, lenses, tripods, etc. ONLY 50c.



cycles.

minimum maintenance. Utilizes 8 pole drive motor that will not burn out when stalled. Stabilized clutches. permanently oiled. Extremely durable construction for all professional applications. Standard transports are equipped with dual-track heads and an automatic reversing mechanism. Available in 1%'', 2'', 3%'', or 7 1/2'' per second tape speeds. Flat response from 50 to 8000 cps (3 3/4''). Excellent wow and flutter specifications (less than 0.2% at 3 3/4'') Dust-proof relays. Several models are available in a variety of configurations; rack mounting, console and portable, with 7'' or 10 1/2'' reels. All models are also available in 4-track stereo versions. Stereo response: 50 to 12,000 cps.

Type	Description	Net
702-7R-R	Rack Mounting-7" reel	\$384.50
702-10R-	-Rack Mounting—101/2" reel	\$429.50
702-7P-F	Portable, w/pre-amp—7''	\$399.50
702-10P-	-Portable, w/pre-amp— 10½	444.50
(Models 1	702-7P and 702-10P are als	o available
with buil	lt-in amplifiers.)	
702-7CP-	-Console-7", w/pre-amp	PNS
702-10CP	-Console-101/2", w/pre-am	PNS

702-10CP—Console—101/2", w/pre-amp _____PNS 702-7CA—Console—7", w/amplifier _____PNS 702-10CA—Console—101/2", w/amplifier ___PNS

Tape player, console type, Model-Librarian. Has two tape decks with 101/2" reels. Will feed 5 or more phone lines from internal distribution terminals. Self-contained 15 watt amplifier, monitor speaker and 7-day timing clock. Uses exclusive intersperser for complete programming control and avoidance of monotonous sequencing. Once set in operation, the intersperser action and end-of-tape reverse are completely automatic functions. An automatic standby is also incorporated to run one tape continuously when the other deck is not operating. Intersperser unit incorporates 12 easy-to-operate slide switches for quick program selection. To supplement the excellent playing quality of the Librarian and to fulfill its function, a complete library of tapes has been developed to provide the finest taped background music available. This special Tape-Athon feature is available in both lease and outright sale plans. Complete data on both lease or sale libraries is available on request.

DANIELS AND ASSOCIATES MOVES AHEAD

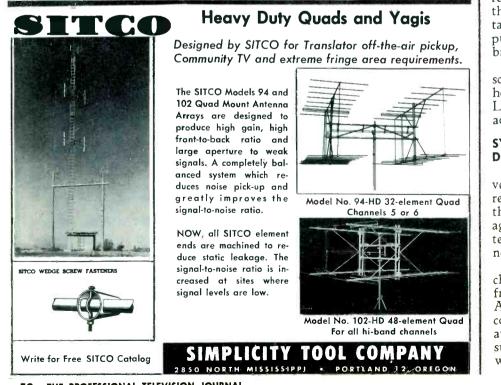
Alan Harmon, former associate of Daniels & Associates, Inc. has been recently made a partner in the firm and elected to Vice President of the Denver based CATV brokerage firm.

Harmon, an energetic 29, gained his early business experience in finance, insurance and sales in Hobbs, New Mexico, one of the centers of CATV in this country.

Since joining the Daniels organization in 1960, he has been involved in all aspects of community antenna television, including brokerage, management, maintenance and construction. He has appraised over sixty systems and has been instrumental in the sale of more than forty systems.

In his new position, Harmon will be responsible for system appraisals, negotiations, financing and consulting for both CATV system owners and prospective investors.

Daniels & Associates also announces the sale of a community antenna television system serving Keene, New Hampshire. The sale was to New England Video Company. The system serves approximately 2,300 subscribers and was formerly owned by Al Ricci, prominent member of the National Community Television Association. Mr. Ricci will remain active in the CATV industry because of his ownership of a CATV system located in Bennington, Vermont.



This was the 64th CATV system sale handled by Daniels & Associates, Inc., making their total transactions consumated in the past four years over 30 million dollars.

Also current is the sale of a CATV system in Penticon and Kelowna, British Columbia. The systems were purchased by Ed Stout of Great Falls, Montana. The purchase price was not disclosed. The combined subscriber total of this sale is 1,700.

EXTENSION OF ALTERNATE TV SERVICES IN CANADA

The Canadian Board of Broadcast Governors has issued a statement concerning the eventual expansion of private non-CBC affiliated second television services in Canada. In general, the BBG feels that the expansion of television service in Canada has proceeded at a good rate. There is some concern however over the fact that where secondary stations have been established by private corporations, the tendency of advertisers buying national advertising is to buy both the CBC and independent outlets in the major markets and completely by-pass the smaller markets where only the CBC outlets are operating. This has resulted in the smaller markets actually losing advertising revenue over a period of one year ago and this is giving the BBG some concern over the future of second network television in Canada. The BBG has therefore deferred any recommendations to allow small market stations to expand their service areas through the use of satellite repeater stations because of the fear that the additional expense of maintaining these repeater stations would push the small secondary market broadcasters further into the red.

At the same time ,the BBG has scheduled a hearing for January to hear a proposal to establish a French Language television network in Canada.

SYSTEM ORIGINATES DEVOTIONALS ON CATV

Dorsey Long, owner of the Laverne, Oklahoma CATV system has reported that his system has begun the production of Devotional Messages over the Laverne CATV system's closed circuit television channel.

The closed circuit channel, on channel 6, will originate only audio from a number of Laverne ministers. A video camera is planned which will complete the transmission of both audio and video Devotionals into the subscriber homes on a five day per week basis.

CATV HELICOPTER **REPAIR CREW DOWNED**

Two CATV system engineers, from the Oneonta Video Company system in upstate New York, found their Helicopter caught in a downdraft Friday, January 4th, and the pair ended up spending the night on top of Graham Mountain, 4,000 feet up and very deep in snow.

The pair were using the Helicopter to service a microwave headend system located on Mt. Graham.

Albert Bagnardi, a Technician for the Oneonta firm and one of the pair stranded, had attempted to reach the microwave head end site on foot some days prior. When he found the passage impossible the Helicopter was brought into play.

A rescue crew started out the next day on Snow cats and the pair was brought back to civilization after an all day trek in drifts four and five feet high.

Owner Bill Calsam, of Oneonta Video, told TV Horizons "We learned a very important lesson here. Always keep an inaccessible mountain top site stocked with sleeping bags and emergency food ration, as well as snow shoes!"

The downed chopper will have to wait until spring and the thaw to be brought down from the mountain peak site.

GEORGIA GROUPS CONTINUES CATV WAR

The Georgia Association of Broadcasters (GAB) in it January 11th news bulletin to the membership reported that a 'new 8 channel CATV system is planned for a southern Georgia city.' The report went on to state "This system would carry eight channels composed of five television channels, a news service channel, a weather service channel and a back-ground music channel." The report concludes with "CATV of this nature is an un-regulated enemy and unfair competition of local AM radio.

This is the first time that a statewide broadcaster's association has drawn AM radio into the contro-versy of whether CATV is or is not competition to broadcasting services.

The Board of GAB met on the matter on January 22.

CHANNEL TWO FOR SANTA FE

FCC Hearing Examiner H. Gifford Irion has issued an Initial Decision looking toward the granting of an application of television station KGGM-13 in Albuquerque to operate the channel 2 allocation in Santa Fe as a subsidiary satelliate of the Albuquerque station.

PROMOTIONS

Blonder Tongue Labs, Inc., Newark, N. J. has announced the appointment of David E. Rubin as Vice President in Charge of Purchasing. Mr. Rubin joined B-T in 1951 as head of the firm's purchasing department. His new position gives him prime responsibility for the negotiation and procurement of all material and services.



David E. Rubin

delphia, Pennsylvania has announced Products Division, and also serves the appointment of Caywood C. as Vice President of the company.



Caywood C. Cooley, Jr.

Cooley, Jr. as Manager of that firm's Community Systems Division.

The Community Systems Divis-ion, the oldest and largest Division of the Jerrold Corporation, is responsible for the design, manufacture and marketing of equipment for the CATV industry as well as installation of completed systems.

Mr. Cooley was formerly man-The Jerrold Corporation, Phila- ager of Jerrold Electronic's Industrial



ALPHABETICAL INDEX TO DIRECTORY

AGC Units Co-lateral	3
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Transports)	
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1 1 1 2	3
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	6
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UHF 1	5
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Equalizing 4	1
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Broadband 34, 3	
	7
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UHF 37, 3	8
Antenna Accessences	0
(See also Baluns, Couplers, Mixers,	
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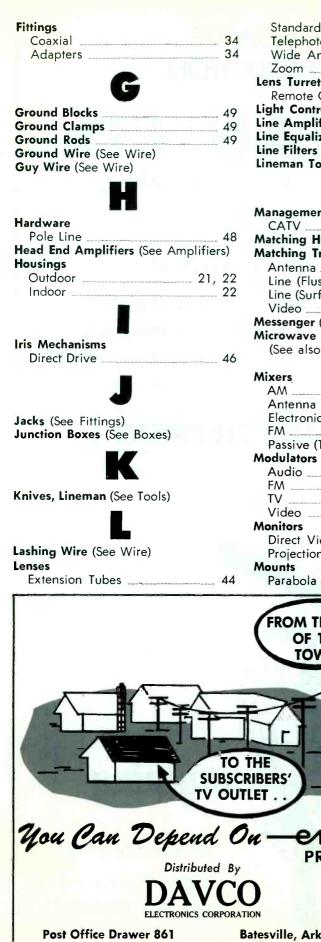
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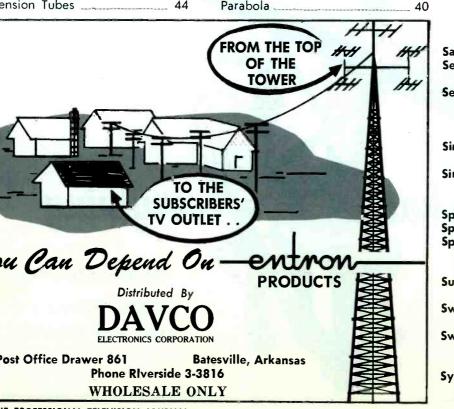
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11045	14C	· 286-F	.297		. 407	NCP	1.31	2.2	65
1106D	14C	.286-F	.297	.308	.407	NCP	1.31	2.2	74
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