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TAPE RECORDER DIRECTORY ISSUE - - - 1956-1957



QUICK FACTS ON MAGNETIC TAPE RECORDERS

(Additional Information can be obtained by writing to the manufacturer)

Manufacturer	Model and Pri	ce	Frequency Response	Data
	A122 Portable	A-SERIES ayer-Recorders STEREOPHONIC 121 Consolette \$495.00 A122 Portable \$449.50 MONAURAL 111 Consolette \$439.50 A112 Portable \$395.00	At $7\frac{1}{2}$ "/sec. 30-15,000 cycles ± 2 db. 50- 10,000 cycles At $3\frac{3}{4}$ "/sec. 30-7,500 cycles ± 2 db 50- 5,000 cycles	Two-speed units with half-track heads for dual-track recording and monaural or stereophonic playback (in-line heads) through separate amplifier-speakers. Half-track erase heads. Signal-to-noise, better than 50 db below peak record level at $71/_2$ "/sec and 40 db at $33/_4$ "/sec. Flutter and wow, under 0.25% at $71/_2$ "/sec, 0.3 at $33/_4$ "/sec. Rewind time, less than 90 sec. for 1200 ft. Inputs: high impedance line 0.75V rms for program level; high impedance microphone. Playback output greater than 0.75 rms into high impedance load. Port- able units weigh 35 lb. Consolettes in blond or mahog- any finish.
	Aó21 Amplifier Spkr. (Con Aó92 Amplifier Spkr. (Por	isole) \$229.50		Ten watts output with noise 70 db below rated output. Response essentially flat from 65 to 10,000 cycles. Con- trols for volume, equalization, selector for tape, TV, tuner or phono.
	CONSOLE MUSIC S A423 \$1470 A	YSTEMS 323 \$1070	(as above)	A423 console includes A121 stereophonic recorder, AM- FM radio, 3-speed record player and two amplifier- speaker systems for stereo tape playback. A323 includes A121 stereophonic recorder and amplifier-speaker systems only.
AMPEX ELECTRIC CORPORATION 934 Charter St.,	0	Model 601 Portable pe Recorder \$545.00	40-15,000 cycles (±4 db) aî 7½″/sec. (±2 db 40 to 10,000 cycles)	Portable, professional-type single-track or dual-track recorder with $71/2''$ tape speed. Takes up to 7'' reels. Signal-to-noise, over 55 db. Flutter and wow, below 0.17%. Starting and stopping time, less than 1/5 second. Fast forward and rewind, 90 seconds for 1200 ft. Timing accuracy \pm 0.2% for 30 minute recording. Separate record and playback amplifiers. Separate erase, record and playback heads. VU meter, independent level con- trols for microphone and line, phone jack for monitor- ing input or tape while recording. Weight, 28 lb.
Redwood City, California	2-Trac	odel \$-5290 ck Stereophonic able \$995.00	(± 2 db 50 to 10,000 cycles)	Model 601 tape transport with two modified 601 elec- tronic chassis. Full-track erase, two-track record and two-track playback. Signal-to-noise, over 50 db either channel. Inter-track crosstalk rejection, over 50 db.
	The later	Model 300-C Console Fape Recorder \$2046.00	30-15,000 cycles (± 2 db) at 15"/sec. 40-15,000 cycles (± 4 db) at 71/2"/sec. (± 2 db 40 to 10,000 cycles)	Professional-type, single-track, dual-speed recorder oper- ating at 15" and $7\frac{1}{2}$ " per sec. Signal-to-noise, over 60 db by NAB standards. Instant start and stop. Flutter and wow, less than 0.1% at 15"/sec. Rewind time, 1 min. for 2400-ft. reel. Timing accuracy, \pm 0.2%. Push button controls for start, stop and record—may be remotely oper- ated. Separate long-life, plug-in heads for erase, record and playback. Other features as on Model 350C below. Also available for portable or rack mounting.
	France .	Nodel 350-C Console pe Recorder \$1315.00	30-15,000 cycles (\pm 2 db) at 15"/sec. 30-15,000 cycles (\pm 4 db) at 7 $\frac{1}{2}$ "/sec. 50-7,500 cycles (\pm 2 db) at 3 $\frac{3}{4}$ "/sec.	Professional-type single or dual-track recorder with tape speeds of $7\frac{1}{2}$ and 15 " or $3\frac{3}{4}$ " and $7\frac{1}{2}$ ". Signal-to- noise, 60 db (single track) or 55 db (dual track). Flutter and wow, less than 0.2% at 15 "/sec. Instantaneous start- ing. Rewind time, 1 min. for 2400 ft. reel. Timing accu- racy, $\pm 0.2\%$. Push-button controls for start, stop, fast forward and rewind. Independent record and playback systems permit monitoring input or tape during recording or playback. Also available for portable or rack mounting.
	Other Equipme	ent:		Two and three channel recorders for stereophonic or binaural sound recording and parallel recording. Portable or rack mounting. Information on request.
AMPLIFIER CORPORATION OF AMERICA 398 Broadway New York 13, N. Y.	VU "Magnemite" Model 610-AV 610-BV 610-CV 610-CV 610-DV 610-DV 610-EV	Speed in/sec. Price 15/16 \$365 17% 315 33/4 345 71/2 365 71/2 385 15 425	300- 2,500 cps 100- 3,000 cps 50- 5,000 cps 50- 7,500 cps 50- 7,500 cps 50-15,000 cps	Completely self-contained battery-operated portables with spring motor drive. 610 -DV and EV are single track — others, dual track. Winding interval 3 to 30 min., de- pending on tape speed. Motor can be rewound while operating. VU meter for measuring record level, output level, "A" battery and "B" battery. Playback through earphones or external amplifier. PM erase optional at extra cost. High and low level inputs. Output imped- ance, 50,000 ohms. Incoming signal can be monitored by VU meter or earphones. Dimensions, $61/2'' \times 91/2''$ x 14". Weight, approx. 19 lb.

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Manufacturer	Model	and Price			Frequency Response	Data
	"Magnemite" Portables	Model 610-A 610-B 610-C 610-TD 610-SD 610-E 610-DM 610-EM	Speed in/sec. 15/16 17/8 3 3/4 7 1/2 7 1/2 15 5/16-7 1/2 17/8-15	Price \$275 225 255 275 295 335 355 395	300- 2,500 cps 100- 3,000 cps 50- 5,000 cps 50- 7,500 cps 50- 7,500 cps 50-15,000 cps as above	Completely self-contained, battery-operated portables with spring motor drive. Models 610-SD and -E, one track. Four speed models 610-DM and -EM, one or two track. All others dual track. Winding interval, 3 to 15 min. Motor can be rewound while operating. Indicator signals 30 sec. before motor rewind. Play- back through headphones or external amplifier. Op- tional erase. Dimensions, 11" x 8" x 5" for 610-A and -B: 11" x 10" x 7" for all others. Weight, 12 to 17 lb.
	Contraction of the second	"Ma (Add	eathertite gnemites \$30 to p td. Units	s'' price	as above	All standard "Magnemites" available in weather-tight sealed aluminum cases with tongue and grooved edges and built-in neoprene gasket seals. Will successfully withstand severe environmental conditions. Satin fin- ished case anodized to resist corrosion.
AMPLIFIER CORPORATION OF AMERICA 398 Broadway New York 13,		'Flyweight lagnemite' 310-A 310-B 310-C 310-C 310-SD 310-E	15/16 17/8 33/4 71/2 71/2 15	340 290 320 340 360 400	300- 2,500 cps 100- 3,000 cps 50- 5,000 cps 50- 7,500 cps 50- 7,500 cps 50- 15,000 cps	Portable, battery-operated electric motor driven re- corders with single tape speed. Models 310-SD and 310E are single track, others dual track. Net weight, only 8 lb. Max. reel size, $5''$. Rewind time, 2 min. Earphone monitor and playback. No erase. PM erase available as optional feature. Powered by 5 replaceable mercury batteries. Dimensions, $51/2'' \ge 9'' \ge 12''$.
N. Y.	00	"Secret Recorder" 210-B	1 7/8	349	100- 3,000 cps	Hidden in zipper compartment of briefcase, operates anywhere on dry cell batteries. Hidden microphone and concealed start-stop clasp switch. Dual track, single or 2-speed recorder operates on replaceable batteries. Maximum reel size 5". Rewind time, 2 min. Earphone
(other models available)		210-BC	1 ⁷ / ₈ 3 ³ / ₄	369	100- 3,000 cps 50- 5,000 cps	playback. No erase. PM erase available as optional feature. Weight complete, including briefcase, 113/4 lb.
	"Magneloop" Continuous Loop Tape Recorder	535-B 535-C 535-D 535-E DUAL 536-B 536-C	LE CHAN 1 1 7/8 3 3/4 7 1/2 1 5 CHANN 1 1 7/8 3 3/4 7 1/2 1 5	345 365 385 405	50- 2,500 cps 50- 7,500 cps 50-10,000 cps 50-15,000 cps 50- 2,500 cps 50- 7,500 cps 50- 7,500 cps 50-10,000 cps 50-15,000 cps	Designed to record and play back any messages, musi- cal programs or sound effects up to 60 min. in length on cartridge-loaded endless loop of std. l_4'' tape. Automatic erase, Push-button start and stop, switch or relay remote control. Electronic-eye recording level indicator. Microphone and bridging inputs. Out- put impedance, 600 ohms. Output level, $\pm 6VU$. Headphone monitoring. Standard rack panel mount- ing or custom rack cabinet. Size, 19" x $83/4''$ x $9l_2''$. Weight, 24 lb.
	"Stereo-Magnemite"	611-C 611-D 611-E	3 ³ / ₄ 7 ¹ / ₂ 15	355 395 435	100- 3,000 cps 50- 7,500 cps 50-15,000 cps	Portable, stereophonic battery-operated spring-motor recorder. Mechanically similar to 610 series. Two separate channels for stereophonic recording. Inde- pendent gain for each channel. Can be monitored with binaural headphones while recording. Optional P.M. erase. Playback through earphones or external amplifiers and speakers. Input impedance, 1 Megohm. Output impedance, 50,000 ohms. Size, 81/2" x 11" x 10". Weight, 17 lb.
AMPRO CORPORATION 2835 North Western Ave. Chicago 18, III. For information write to GRAFLEX, INC. 154 Clarissa St. Rochester 8, N. Y.		Mod	-Fi Two : el 757 el 757T	\$249.95	40-12,500 cycles at 71/2"/sec. 40-6,000 cycles at 33/4"/sec.	Portable, dual-track, dual speed recorder with or with- out built-in radio tuner. Includes "Piano Key" con- trols, electronic eye recording level indicator, automatic selection locator, and provision for mixing and moni- toring live and radio-phono inputs. Flutter and wow, less than 0.5%. Fast forward, 72"/sec. Rewind, 120"/sec. Signal-to-noise, 42 db. Power output, 3.2 watts. Built-in 6" x 9" PM speaker. Input receptacles for microphone, radio-phono, or remote control. Weight, 34 lb.
AUDIOMATION LABORATORIES 7230 Clinton Rd. Upper Darby 23, Pa.		Cont Witho With 1	CERTCAS Finuous T Player out Pwr. \$835.00 OW Pwr. \$905 5W Pwr. \$935	ape Amp. Amp.	40-8,000 Cycles at 3 ¾ ″/sec. 40-15,000 Cycles at 7 ½ ″/sec.	Heavy-duty console type tape phonograph for provid- ing up to 8 hours of unattended, background music without repetition. Two speeds. Automatic reversal and shut-off with unmodified tape. Automatic, con- tinuous re-cycling or shut-off controlled by switch on panel. Simple controls, light tape tension. Easy and precise head alignment. Signal-to-noise, better than 50 db at $7!/2''$ /sec. Hysteresis synchronous capstan motor and two 4-pole torque motors. Max. reel size, 14".

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Manufacturer	Model and Price	Frequency Response	Data
AUDIOMATION LABORATORIES 7230 Clinton Rd. Upper Darby 23, Pa.	FIDELIVOX Continuous Tape Player With single-ended unbalanced Pream \$730.00 With push-pull, balanced Preamp \$755.00		Heavy-duty rack-type tape phonograph for providing up to 8 hours of unattended, background music without repetition. Mounts in $31V_2''$ of space in standard 19" rack. Mechanical and electrical data similar to Concert- caster model, shown on Page 3.
-	VaryTape System With push-pull line Amp. plus 8 VU, balanced \$1,750.00	as above	Consists of two identical Fidelivox automatic 8-hour tape-handling mechanisms arranged for unlimited varia- tion of program continuity by the automatic inter-mixture of the music content of any two reels. Automatically stops one mechanism and starts the other whenever 30 seconds or more of silence occurs on the tape being played. Permits up to 16 hours of music without repeti- tion. Cycling fully automatic and infinitely adjustable.
BELL & HOWELL COMPANY 7100 McCormick Rd. Chicago 45, III.	Bell & Howell Miracle 2000 Model 300-M Mahogany \$299.50 Model 300-BI Blond Oak \$314.50	50-10,000	Manual turnover dual-track recorder with tape speeds of $71/2"$ and $33/4"$ per second. Four speakers: two 8" woolers on opposite sides of case and two electro- static tweeters behind front grill. Three separate motors with electro-magnetic instant braking. Interlocking push- button controls for stop, forward, rewind, play, speaker and record (with safety lock). Automatic tape shut off. Program indicator with manual reset. Fast forward and rewind, 1200 feet in 40 seconds. Wow and flutter below 0.2% at $71/2"$ /sec. Delivers over 8 watts audio. Signal- to-noise, better than 40 db. Distortion less than 3% at 4 watts. Speaker selector switch. Output jacks for ex- ternal amplifier and speaker. Two neon record level lamps. Illuminated volume and tone controls. Prices in- clude controlled reluctance microphone, power cord, radio-phono patch cord and 7" reel.
	TDC "Stereotone Portable \$249.50	50-10,000 cycles (±2 db) at 7½"/sec. 50-8,000 cycles (±3 db) at 3¾"/sec.	Two speed, manual turnover dual-track recorder. Vertica design with 10 inch extended range speaker. Tape speed of $7\frac{1}{2}$ " and $3\frac{3}{4}$ " per second. 7" maximum reel size Three separate motors with electro-magnetic instant brak ing. Interlocking push button controls for stop, forward rewind, play, speaker and record (with safety lock) Automatic tape shut off. Program indicator Fast forwarc and rewind, 1200 feet in 40 seconds. Wow and flutter below 0.2% at $7\frac{1}{2}$ " per second. Delivers over 8 watts audio. Signal-to-noise, better than 36 db. Distortion, less than 3% at 4 watts. Output jacks for external amplifier and extension speaker. Two neon record level lamps Illuminated volume and tone controls. May be used as public address system. Prices include controlled reluct ance microphone, power cord, radio-phono patch cord and 7" recl.
BELL SOUND SYSTEMS, Inc. Columbus 7, Ohio	Model RT-7 Three-Spee Recorder \$164.95	1 12 ,000	Portable dual-track recorder with single-lever speed selec- tor for $71/2''$, $33/4''$ or $17/8''$ per second. Pushbutton record- ing switch with safety interlock. Fast forward and rewind. Neon recording level indicator. $6'' \ge 9''$ oval speaker. Two microphone inputs and one radio-phono input. Out- puts for external speaker and external amplifier. Power output, 3.5 watts. Crystal microphone included. Weight, 35 lb.
	Model RT-8 Two-Speed Recorder \$139.95		Dual-track recorder with tape speeds of 71/2" and 33/4" per second. Pushbutton controls for tape speed, record, play, fast forward, rewind and stop. Separate tone and volume controls. Neon recording level indicator. Three- motor operation. Inputs for microphone and radio-phono. Outputs for external loudspeaker and monitor head- phones. Power output, 3.5 watts. Weight, 27 lb.

Manufacturer	Model and F	Price	Frequency Response	Data
BELL SOUND SYSTEMS, Inc. Columbus 7, Ohio		Cub-Corder Model 2260 7 ½ and 3 ¾ "/sec.) Model 2261 3 ¾ and 1 ‰ "/sec.) \$224.95	200-6,000 cycles at 71/2"/sec.	Dual-track, two-speed battery operated portable. Has microphone with built-in monitor playback level, minia ture transmitter for playback thru radio without connec tions to set, and wet cell batteries that can be recharged from car cigarette lighter outlet. Output for externa amplifier. Fast forward and rewind, 37"/sec. Includes ceramic microphone, shoulder strap, battery charger cable battery syringe, one 600-it. reel of tape and take-up reel Weight, 12% lb.
BERLANT- CONCERTONE Division of American Electronics, Inc. 655 W. Washing- ton Blvd., Los Angeles 15, Cal.	CONCERTONE CUSTOM Models 21, 22, Rack-Mtd. I Models 24, 25, 5-O-5 Recorder Models 26, Full/Half Track R BERLANT DELUXE Models 31, 32, Rack-Mtd. I Models 33, Stereo Recorder Model 33, Stereo Recorder Model 34, 55, Delayed Brow Model 39, Stereo Recorder Models 91, 92, Rack-Mtd. I Models 91, 92, Rack-Mtd. I Model 93, Stereo Recorder Model 94, 95, Delayed Brow Model 94, 95, Delayed Brow	795.00 rder	40-15,000 cycles (±2 db) at 15"/sec. 50-13,000 cycles (±2 db) at 7½"/sec. 50-5,000 cycles (±2 db) at 3¾"/sec.	Complete line of broadcast and home hi-fi recorders for portable, rack or custom mounting. All models have following features: Two-speed direct drive motor and two torque motors; 3 heads with provision for 2 more 41/2" UV meter; 2-channel input mixer; A-B test fadei and cueing/editing switch. Instant speed selection of 15"/sec and $71/2"$ /sec or $33/4"$ /sec and $71/2"$ /sec. Signal to-noise, 55 db by proposed NARTB Standard (ful track). Total harmonic distortion, 2% at zero VU. Tota flutter and wow, less than 0.1% rms at 15"/sec, 0.2% at $71/2"$ /sec. Fast forward and rewind, less than 60 sec for 2500 ft. High impedance microphone input and un- balanced bridging input. Output impedance, cathode fol- lower, 600 ohms with plug-in transformer. Berlant Deluxe Series features hysteresis synchronous direct drive for maximum timing accuracy. Berlant American Series features etched circuit construc- tion of electronic assembly and hysteresis synchronous direct drive. Tape player units also available.
	Tapak (tape-pack)	Duplex Newscaster \$349.50	100-9,000 cycles at 7½″/sec.	The spring-powered equivalent of conventional electric tape recorders. Records, erases, monitors, rewinds at high speed, plays back through built-in 4" x 6" loud speaker for room size audiences, or will feed an external amplifier or public address system. Has new unitized amplifier with transistorized AC bias oscillator for low battery drain and extended frequency range. Speed $71/2"$ per second (33/4" optional). Range: 55-58 db.
BROADCAST EQUIPMENT SPECIALTIES		Triplex Newscaster .\$399.75	100-9,000 cycles at 7 1/2"/sec.	Same as Duplex Newscaster Model with the addition of a miniature VU meter and provision to drive a 500 ohm line. Can thus drive a line while the recorder function stands by ready to record the material in case of line failure. Speed $71/_2$ " per second ($33/_4$ " optional). Range: 55-58 db.
P.O. Box 149 Beacon, N. Y.	Newscast	Simplex Newscaster \$289.50	100-6,000 cycles at 7 1/2″/sec.	The standard attractively priced Tapak for broadcast use. Records, rewinds at high speed, crystal microphone doubles for playback, feeds external amplifier or phono input of radio for loudspeaker reproduction. Recording characteristics for NARTB on studio equipment or home recorders. Speed $71/2^{"}$ per second ($3^{3}4^{"}$ optional). Range: 35-40 db.
		"Pocketape" Battery Operated Pocket Size Unit \$289.50 (Available Nov. 1956)	100-4,000 cycles	Pocket-size, subminiature tape recorder. Records dual track 1 hour total at 3¾" per second or 2 hours at 1½" per second. Records, erases, monitors and plays back through earphone or external amplifier. Interlocks pre- vent accidental erase or "double exposure". Special 4" reels transferable to any recorder. DC motor operated from 15-hour mercury batteries. Dynamic range, 37 db. Wristwatch mike available as optional accessory.
COLUMBIA RECORDS, Inc. 799 Seventh Avenue, New York 19, N. Y.		Columbia Model 560 \$139.95	100-5,500 cycles at 7 ½″/sec.	Portable, two-speed, dual-track recorder with two large PM speakers and single master control for recording or playback. Tape speeds, 71/2" and 33/4"/sec. Can be used as PA system, with or without auxiliary speaker. Auto- matic erase, fast forward and rewind speeds. One Brush recording and playback head. Neon record-level indi- cator. 4-watt amplifier. Includes high-impedance ceramic microphone. Approx. shipping weight, 181/4 lb.
CRESCENT INDUSTRIES, INC.		Model TR 730 "TUTOR" (3¾"/sec.) \$89.95	50-8,500	Portable, dual-track recorder with $3\frac{3}{4}$ " tape speed. Auto- matic 50 kc erase, fast forward and rewind, 3-watt amplifier and neon overload indicator. Signal-to-noise, 43-46 db. Speed control accuracy, $\pm 2\%$. Includes ceramic microphone. Weight, 20 lb.
5900 W. Touhy Ave. Chicago 31, III.		Model TR 772 "CURATOR" (two speed) \$139.95	cycles at 7 ¼ ₂ ″/sec.	Portable, two-speed, dual-track recorder. Same features as above plus two-speaker design, provision for start-stop foot switch and torque braking. Mike and radio-phono input. Output jack for external speaker or amplifier. Wow and flutter less than 0.5%. Weight, 24 lb.

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Manufacturer	Model and P	rice	Frequency Response	Data
CRESCENT INDUSTRIES, INC. 590C W. Touhy Ave. Chicago 31, III.		Model TR 773 "PROFESSIONAL" (2-speaker) \$189.95 Model TR 774 "CHANCELLOR" (3-speaker) \$239.95	70-13,000 cycles at 7 ½ "/sec. 60-5,000 cycles at 3 ¾ "/sec.	Portable, two-speed, dual track recorder with illuminated VU meter recording level indicator. Signal-to-noise, 48- 51 db. Wow and flutter, less than 0.5%. 4-watt amplifier. Kewind time, 80 sec. for 1200 ft. Provision for foot switch control. Simultaneous monitoring and recording, edit control button, ultrasonic erase. Inputs for mike and radio-phono; outputs for external speaker and amplifier. Includes wide-range, controlled refuctance microphone. TR773 has two speakers; TR774, three speakers. Weight, approx. 28 lb.
De JUR AMSCO CORP. 45th & Northern Blvd., Long Island City, N. Y.		De Jur Dual Professional Model TK-820 \$399.50 Model TMB-820 (basic recorder for custom installation) \$329.50	40-16,000 cycles (±2 db) at 7½"/sec. 50-10,000 cycles (±2 db) at 3¾"/sec.	Portable dual-track recorder with hysteresis synchronous, dual speed reversible motor and push-button track re- versal. All functions electronically controlled by piano key switchboard relay operation. Four separate erase and record-playback heads. Illuminated program selector. Electronic eye recording level indicator. Signal-to-noise, 55 db. Flutter and wow, 0.1% at 7½"/sec.; 0.2% at 3¾"/sec. Harmonic distortion, 0.8% at full rated out- put. Power output, 6 watts undistorted. Rewind ratio, 15 to 1. Inputs: 2 high impedance, 1 low impedance. Outputs: 1 high impedance, 1 low impedance. Model TK820 has five speakers: 2 electrostatic "tweeters", 2 P.M. mid-range speakers and 1 P.M. "woofer". Includes wide-range, dynamic cardioid michophone with matching line transformer. Shipping weight, 55 lb.
DuKANE CORPORATION St. Charles, III.		"Tru-Fidelity" Recorder Model 11A200 \$395.00	50-10,000 cycles ($\pm 11/_2$ db) at 71/2"/sec. 50-7,500 cycles ($\pm 11/_2$ db) at 33/4"/sec.	Portable, dual-track, dual-speed recorder with 71/2 watt power output. Signal-to-noise ratio, 50 db on playback, distortion less than 5% at full output. Rewind time, 80 seconds for 7" reel. Fast forward, 100 seconds for 7" reel. Output for auxiliary speaker, monitor headphone and for feeding to input of another recorder for direct tape copying. Inputs for microphone, phonograph, radio. Electronic eye recording level indicator, automatic foot- age counter and exclusive Room Balance Control. Weight, 39 lb.
EDUCATIONAL LABORATORIES INC.		Educorder Dual Model M-6A \$295.00	70-7,500 cycles at 7½″/sec. 70-5,000 cycles at 3¾″/sec.	Portable, two speed, two channel recorder with single- knob-control tape mechanism. Two separate record/re- produce amplifiers and two separate record-play-erase heads. Records or plays back both channels simultane- ously or records on one while playing back the other. Monitoring by headphones while recording. Signal-to- noise, 40 db. Wow and flutter, 0.3% at 71/2"/sec. Fast forward and rewind, 70 sec. for 1200 ft. Nominal .75 watt peak power from each channel. Two input connec- tions for high impedance mikes. Three output connec- tions: Channel 1, Channel 2 and Dual for binaural headphones. Includes headphones and microphone. Weipht, 30 lb.
1823 Jefferson Place, N. W. Washington 6, D. C.	A CONTRACT	Educorder Dual Model M-7A \$320.00	70-8,000 cycles (±3 db) at 7½"/sec. 70-5,000 cycles (±3 db) at 3¾"/sec.	Portable, two speed, two channel recorder, providing same dual functions as Model M-6A above. Recorder unit has push-button control for all functions. Fast for- ward and rewind, 2 min. for 1200 ft. Nominal 4 watt peak power from each channel, sufficient to drive dual speakers or over 100 high impedance headphones from each channel. Neon recording level indicator for each channel. Four input connections, two for each channel: radio-phono and high-impedance mike. Same outputs as above. Includes headphones and microphone. Weight, 30 lb.
ELECTRONIC TEACHING LABORATORIES 1818 M Street Northwest, Washington 6, D. C.	00	Electro-Dual MONITOR Binaural Portable Model E-3 \$297.00	50-9,000 cycles (±3 db) at 3¾"/sec,	Dual parallel track professional language laboratory re- corder. Unique "split" amplifier used to minimize con- trols and simplify operation but preserving the two in- dependent record/play channels. Signal-to-noise, 45 db, separate heads with azimuth adjustment, volume level meter, all components mounted 3/8" aluminum panel. Weight, 15 lb.
ÉMC RECORDINGS CORP. 806 E. 7th St., St. Paul 6, Minn.		EMC "Communicator" Portable Playback Unit \$129.95 (tentative)	60-12,000 cycles at 71/2"/sec. 80-6,000 cycles at 33/4"/sec. (Based on NARTB Curve)	Portable, self-contained playback unit with single-lever tape control. Wow and flutter, 0.25% at $71/2$ "/sec. Signal-to-noise, at least 47 db for $71/2$ "/sec, 42 db for 33/4"/sec. Positive braking minimizes possibility of spill- ing tape. Capstan is ground to \pm .0001" tolerance. Dual track Maico Dynamu 8040 "Ultralinear" head (gap width less than .00015"). Three-stage pre-amplifier plus cathode follower and power output stage. Amplifier out- put: from cathode follower up to 10 volts at 1500 ohms: from enclosed speaker — 3.0 watts at less than 4% harmonic distortion. Amplifier connections: external speaker jack, cathode follower output, power cord re- ceptacle. 5" round Alnico V speaker. Accommodates 7" reel. Weight: 20 pounds.

Manufacturer	Model and Price	Frequency Response	Data
EMC RECORDINGS CORP. 806 E. 7th St., St. Paul 6, Minn.	(Appearance EMC similar to Stereopho ''Communicator'' Portabl on Page 6) Playbac Unit \$199.9 (tentativ	e 40-15,000 k cycles (±3 db) at 7½″/sec. 5	This stereophonic playback unit reproduces half track, full track, stereo colinear (in-line) and stereo staggered tapes. Wow and flutter: less than 0.25%. Signal to noise ratio at least 55 db when measured according to NARTB specs. One Maico Dynamu 8040 "Ultralinear" upper track head. One Maico Dynamu Stereo colinear (in- line) head. (Gaps are less than .00015"). Two three- stage pre-amplifiers plus cathode follower output. One power amplifier. One 5" round 3.05 oz. special low- frequency, low resonance speaker. One 4" round "tweeter" with 1200 cps crossover network. Accom- modates 7" reels.
ERCONA CORP. 551 Fifth Ave.,	Custom Tag Portable Installation Model 3A/N Model 66/N (3 ¾ - 71/2 ips) (3 ¾ - 71/2 ips) \$379.50 \$399.50 Model 3A/NH Model 66/H \$225 (7 1/2 - 15 ips) (7 1/2 - 15 ips) (7 1/2 - 15 ips) (7 1/2 - 15 ips)	er be $\frac{cycles}{dt} = 2 db$ at 71/2''/sec. $\frac{be}{ck}$ $\frac{be}{ck}$ $\frac{be}{ck}$ $\frac{be}{ck}$ $\frac{40-15,000}{cycles} (\pm 2 db)$ at 15''/sec. $\frac{be}{sco}$ $\frac{be}{ck}$ $\frac{be}{c$	Dual-speed, dual-track recorders for portable or custom installation, manufactured by British Ferrograph Re- corder Co., Ltd. of London. Signal to noise ratio, better than 50 db, 200-12,000 cps; 45 db unweighted (includ- ing hum). Wow and flutter, less than 0.2% at $71/2''/sec.$ Longterm speed stability, better than 0.5% . Erase and bias frequency, 53,000 cps. Two inputs, for 1 megohm and 0.1 megohm respectively. Output arrangements: 15 ohm elliptical speaker; jacks for extension speakers — 0.75 volts at 0.1 megohm for external amplifier. Output power. $21/2$ watts into 15 ohms. Weights: Portable, 493/4 lb; Custom, 45 lb; Tape Deck, 18 lb.
New York 17, N. Y.	E.M.I Battery Po \$395.0 Model I (3 ³ / ₄ ip Model I (7 ¹ / ₂ ip Model I (7 ¹ / ₂ ip	rtable cycles (±2 db) 00 at 15"/sec. 2A 50-5,000 os) cycles (±2 db) .2B at 7½"/sec. os) 50-2,500 .2C cycles (±2 db) .2C at 7½"/sec.	Battery-operated recorder manufactured by Electrical & Musical Industries, Ltd., of England. Accommodates 5" reels and requires no external power source. Signal-to- noise, better than 45 db unweighted, when replayed on high quality studio equipment. Wow, less than 0.2% at 15"/sec., 0.25% at $7\frac{1}{2}$ "/sec. and 0.3% at $3\frac{3}{4}$ "/sec. Separate recording and playback heads and amplifiers for monitoring and instantaneous playback. VU meter for recording level. Manually operated geared rewind device to conserve battery life. Operates with cover closed. Weight, $14\frac{1}{2}$ lb. complete.
FAIRCHILD	Consol Mode Unit 12 \$2,750	1 50-15,000 26 cycles (±1 db) at 15"/sec.	Professional type, single-track recorder with $15''$ tape speed $(71/2'')$ and $30''$ models available). Total noise and distortion -64 db (ref. $21/2\%$ dist.). Adjustable bias. Speed tolerance, 0.1%. Built-in VU meter and circuit checking. Unit-type, plug-in chassis. Automatic stop — instant braking and reversal. Full protection against acci- dental erase.
RECORDING EQUIPMENT CORP. 154th St. and 7th Ave. Whitestone 57,	Consol Mode "PIC-SYI \$4,000.	I cycles (±1 db) NC" at 15"/sec.	Same as model 126 with the addition of lip synchronous operation. Used with motion picture camera and film projector, synchronous sound tracks are made and played back on $\frac{1}{4}$ " tape, with no interconnecting equipment. Automatic Framing, which assures correct cueing of tape and film, available at additional cost. Other applications include Facsimile recording, multi-track, and telemetering, with frequency response to 100 KC.
N. Y.	Control Track Generator Model 41 \$125.00		Portable light weight unit for "On Location" picture synchronous sound track recording on $1/4$ " tape. Used with any portable tape recorder with 15"/sec. tape speed and frequency response good to 14 KC, a control track is simultaneously applied which later becomes the tape speed control when played back on Pic-Sync recorder.
FEDERAL MANUFAC- TURING AND ENGINEERING CORP. 199-217 Steuben St. Brooklyn 5, N. Y.	FME Model 4 \$159.5	7 1/2"/sec.	Portable, two-speed, dual track recorder. Signal-to-noise, 43 db. Flutter, less than 0.5%. Fast forward and rewind, 20-to-1 ratio. Safety lock prevents accidental erase. In- stant stop lever for editing. Neon recording level indi- cator. Power output, 3 watts. 5 x 7 elliptical P.M. speaker. Automatic reversible index counter. Input jack for microphone or radio-phono. Output jack for monitor- ing while recording or external hi-fi amplifier. Includes ceramic mike and patch cord with built-in resistance net- work to match recorder. Weight, 27 lb.
FENTON CO. 15 Moore St., New York 4, N. Y.	Fen-Ton Motek Tape De Mcdel M \$79.50	cycles af 7 1/2"/sec. (7 50-7,000	Three-motor-drive dual-track tape transport mechanism for custom installation. Speed change by conversion pulley. Wow and flutter, less than 0.25%. Adjustment for head azimuth. Positive interlock of all switching and braking mechanisms. Simple push-button control for record, playback, fast forward, rewind and stop. Matched preamplifiers also available. PRO-2, \$89.50. TPR-1 \$39.90.

Manufacturer	Model and Price	Frequency Response	Data
FENTON CO. 15 Moore St., New York 4, N. Y.	Fen-Tone Brenell Mark IV Tape Deck Mark IV (monaural) \$96.50 Mark IV/B (stereo) \$114.50	30-15,000 cycles (±3 db) at 15"/sec. 50-12,000 cycles (±3 db) at 7½"/sec. 50-6,500 cycles (±3 db) at 3¾"/sec.	Three-speed tape decks for monaural and stereophonic record/playback, with three-motor drive. All mount up to four heads with individual azimuth adjustment. Cap stan-sleeve speed change. Dual $\frac{1}{2}$ track operation for up to 7" reels. Two-knob control, fully interlocked. Wow and flutter, less than 0.2%. Fast forward and rewind 45 sec. for 1200 ft. Monaural deck can be converted to stereo or sound-on-sound recording by installing addi- tional heads. Can be used with PRO-2 amplifier.
INTERNA- TIONAL RADIO AND ELECTRONICS CORPORATION	"CROWN" Professional SeriesBROADCASTERIMPERIAL Reel Sizes to 7"IMPERIAL Reel Sizes to 10½"IMPERIAL LP Reel Sizes to 14" \$435.00	20-20,000 cycles (±2 db) at 15"/sec. 20-15,000 cycles (±2 db) at 71/2"/sec. 40-8,000 cycles (±3 db) at 33/4"/sec. (above data for dual-track operation)	Portable, 3-motor, 3-speed record/playback units avail able with choice of full or half-track heads (interchange able, plug-in type). Signal-to-noise; 55 db, 52 db and 44 db at 15", $7!/2$ " and $3\frac{3}{4}$ " tape speeds respectively Flutter and wow; 0.10% , 0.15% and 0.25% respective ly. Fast forward and rewind, less than 35 sec. for 1200 ft. Dual-light VU meter for recording level — white light for illumination, red light indicates record and erase. Micro-Sync-Timing, 99.5% playing measured tape Inputs: two mikes plus radio-phono; two high-level mix both high impedance. Built-in amplifier with 30-wat peak output, 15 watt peak at less than 1% distortion Speed reducer (available for all Crown models) give an additional tape speed of $1\frac{7}{8}$ "/sec.
South 17th St. & Mishawaka Rd. Elkhart, Ind.	Dual Track (10½" reels) \$349.50 Full Track (10½" reels) \$399.50 Dual Track LP (14" reels) \$375.00 "CROWN PRINCE" Professional Series (Rack mounting) S425.00	20-18,000 cycles (\pm 2 db) at 15"/sec. 20-15,000 cycles (\pm 2 db) at 71/2"/sec. 40-8,000 cycles (\pm 3 db) at 3 $\frac{3}{4}$ "/sec. (dual-track)	Rack-panel mtd. 3-speed record/playback unit with 3- motor drive. Includes mike and phono preamplifiers Cathode follower output for playback through separat amplifier systems. Flutter and wow; 0.12% , 0.18% and 0.25% at $15''$, $7!/2''$ and $334''$ speeds respectively. Fea- tures otherwise same as "Crown" series. Panel size; 19 by 14'' for $101/2''$ reel models, 19'' by 21'' for 14'' ree- models.
INTERNA- TIONAL SCIENTIFIC INDUSTRIES CORP. 2374 E. Hiway 24, Colorado Springs, Colo.	I.S.I. Tape Recorder for rack or portable mounting \$465.00	30-15,000 cycles (±2 db) at 7½" and 15"/sec. 30-8,000 cycles (±2 db) at 3¾"/sec.	Portable, two-speed, dual-track recorder with Isimetri Drive and automatic servo control. Single-knob contro for play, record, skip and rewind. Includes play an record electronics with cathode follower output, mike an line inputs with mixing controls, electronic-eye level ir dicator, and 3 heads with provision for adding 3 more Two-speed hysteresis synchronous capstan motor, aut matic cut-off and tape lifter. Playback noise, 55 db c more below peak output on virgin tape. Overall noise 50 db or more below peak output. Distortion not ove 1% at normal level. Playback, std. NARTB curve. Ski & rewind, less than 60 sec. for 1200 ft. Weight, unde 40 lb, in portable case.
JAMES INSTRUMENT LABORATORY 9110 South 52nd Court, Oak Lawn, III.	Audikon Model V-12 For rack or console mtg. \$460.00 Carrying Cases \$60.00	40-15,000 cycles (±3 db) at 15"/sec. 40-12,000 cycles (±3 db) at 71/2"/sec.	Two-speed, dual track recorder with $10\frac{1}{2}''$ reel capacit and 3-motor drive. Hysteresis synchronous direct-driv capstan. Push-button, interlocked relay control. Thre heads, monitors from tape while recording. Provisio for 1 extra head. Fast forward and rewind, 40 sec. fo 1200 ft. Timing accuracy, \pm 3 sec. in 30 min. Signa to-noise, 52 db. Flutter and wow: below 0.25% a 71/2"/sec., below 0.15% at 15"/sec. Inputs: mixing c mike and hi-level inputs, 50 ohm balanced and 500,00 ohm unbalanced. Cathode follower output for extern amilifer. 8 watts at 10 ohms to drive speaker or phone Weight: mechanism 36 lb., amplifier 10 lb.
KEYSTONE CAMERA COMPANY, INC. Hallet Square, Boston 24, Mass.	Keystone Load-O-Matic Tape Recorder Model K-400 \$199.50	40-15,000 cycles (±3 db) at 71/2″/sec.	Portable two-speed dual-track recorder with automat tape-cartridge "magazine loading" that eliminates threa- ing. Also accommodates standard 7" reels. Flutter an wow, less than 0.5% at $71/2$ "/sec. Electronic eye recor- ing level indicator. Pause control for recording or editin Drum-type index counter. Power output, 8 watts. Thre- speakers — one 6 x 9 "woofer" and two 4" "tweeters Separate PA input and separate output for extern speaker, PA system or monitoring signal while recor- ing. Includes pencil-type ceramic microphone, radio pate cord and phono input.

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Manufacturer	Model and Price	Frequency Response	Data
	PT6-55A Recorder with Case \$365.00 Without Case \$340 PT6-55J Amplifier with Case \$260.00 Without Case \$240	50-15,000 cycles (±2 db) at 15"/sec. 50-7,500 cycles (±2 db) at 7½"/sec.	Portable, two-speed, single-track recorder with speed change switch and hysteresis synchronous drive motor Signal-to-noise, 50 db unweighted. Flutter: 0.3% a 15''/sec., $0.4%$ at $7/2''$ /sec. Rewind time, 40 sec. fo 1200 ft. with automatic tape lift. Erase and record/play back heads. VU meter for bias, record and playbac level. Monitoring by 5'' speaker and phone jack fror tape or input. 10 watt power amplifier. Microphone an- unbalanced bridging inputs. 4 and 16 ohm power out puts, 600 ohm line output.
	Magnecord \$36-B Recorder and Preamp. with Case \$395 Without Case 370	50-15,000 cycles (±2 db) at 15"/sec. 50-10,000 cycles (±2 db) at 7½"/sec.	Single unit recorder and preamplifier for rack or port able mounting. Two-speed, single-track, with capstar speed change and hysteresis synchronous motor drive Signal-to-noise, 50 dh unweighted. Flutter, 0.3%. Re wind time, 40 sec. for 1200 ft. Erase and record/play back heads. VU meter for record and playback level Phone jack for monitoring. Microphone and unbalance bridging inputs. 600 ohm balanced or unbalanced lin output.
MAGNECORD INC. 1101 S. Kilbourn Ave. Chicago 24, III.	Magnecord P60 Recorder/Amp. with case \$765 without case 680 Tape Transport with case \$465 without case 415	40-15,000 cycles (±2 db) at 15"/sec. 40-12,000 cycles (±2 db) at 7½"/sec.	Rack-mounted or portable full-track recorder with $101/2'$ reel capacity. Direct drive hysteresis synchronous motor Push-button controls, instantaneous start and stop, fail safe brakes and tape break control. Signal-to-noise, 5' db unweighted. Flutter; 0.2% at $15''$ /sec., 0.25% a 71/2''/sec. Rewind time, 100 sec. for 2400 ft. Timing accuracy, ± 3 sec. in 30 min. Separate erase, record and playback heads. VU meter for bias, record and playback level. Adjustable bias and high-speed cueing control Microphone and unbalanced bridging inputs. Phone jack for monitoring from tape or input. 600 ohm unbalanced line output.
	Magnecord P63 Recorder/Amp. with case \$839 without case 764 Tape Transport with case \$465 without case 415	50-15,000 cycles (±2 db) at 15"/sec. 50-10,000 cycles (±2 db) at 7½"/sec.	Tape transport mechanism similar to above, but designe for use with P63-J amplifier instead of P60-C, permittin conversion of existing equipment to new, improved per formance standards. Signal-to-noise, 50 db unweighted Microphone input, 50 to 250 ohms balanced or un balanced. Unbalanced bridge input. Monitoring by 5 speaker and phone iack from tape or input. Amplifier 600 ohm balanced line output, 4 or 16 ohm, 10 wat speaker output.
	Magnecord M90 Tape Transport with case \$995 without case 935 Amplifier with case \$390 without case 360 Recorder/Amp. with case \$1375 without case 1285 Recorder/Amp. and Console Cabinet, \$1450	30-15,000 cycles (±2 db) at 15"/sec. 30-15,000 cycles (±4 db) at 71/2"/sec.	Portable, professional-type two speed recorder/amplifie units, also available in console cabinet mounting. Elec trically interlocked push-button controls. Direct-driv- hysteresis synchronous motor. Separate erase, record an- playback heads—interchangeable assemblies for full track half-track or instrumentation. Instantaneous start and stop, automatic tape lift. Separate record and plavbaci amplifiers for simultaneous monitoring from tape. Higi speed cueing control. Signal-to-noise, 58 db unweighted Flutter: 0.1% at 15"/sec., 0.15% at 71/2"/sec. Rewino- time, 55 sec. for 2400 ft. VU meter for bias, record and playback level. 50 or 250 ohm balanced or urbalance- microphone input, balanced or unbalanced.
MAGNETIC RECORDERS COMPANY 7120 Melrose Ave. Los Angeles 46, Cal.	Portable "Reporter" Standard Model \$199.50 Deluxe Model \$237.50	80-7,000 cycles	Portable, battery-operated recorder with spring mote drive. Power for amplifier furnished by dry batterie Spring drive lasts for 7 minutes at 71/2"/sec. tape speed Can also be adjusted for 33/4"/sec. tape speed. Can b rewound while recording. Single control — off, palvbac record. Complete with batteries, micronhone, head phon (or speaker) and tape. Standard Model includes provisio for headphone plavback only. Deluxe Model includes ou put amplifier and loudspeaker. Weight, 12 lb. Made i England.

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Manufacturer	Model and Price	Frequency Response	Data
	Synchrotone Dual Model ML-63 \$375	to 10,000 cycles at 7½″/sec.	Two independent channels, each with independent recording-playback facility; simultaneous recording on channel 1 and playback of channel 2; simultaneous play- back of channel 1 and channel 2; facilities for listening optionally to channel 1 or channel 2 or to both channels; split-a-word control for instantaneous stop and start of tape without slurring. Record safety interlock. Loud- speaker or headphone listening; two speeds (3 ³ / ₄ and 7 ¹ / ₂ inches per second): single operation of record, listen, fast forward, rewind and stop. Weight: 33 lb.
MAGNETIC RECORDING INDUSTRIES	Synchro- Magneticon Dual Model ML-65 \$225 (in portable case, \$245.50)	to 7,500 cycles at 3 ¾ ″/sec.	Two separate channels permitting simultaneous recording on channel 1 and playback of channel 2; simultaneous playback of channel 1 and channel 2; 3 ³ / ₄ " per second speed; single control operation for record, listen, fast forward, fast reverse and stop. Fully automatic operation eliminates external record-listen control. Record safety interlock. Weight: 19 lbs. in portable case.
New York 3, N. Y.	Synchro-Magneticon Dual Tape-Disc Recorder-Reproducer Model ML-66, \$275 (in portable case, \$295)	to 8,000 (tape) to 5,000 (disc)	Educational language recorder using standard tape and pre-grooved, reusable magnetic discs. Instant stop-start without slurring. Remote control of magnetic disc. Tape speeds 33/4 or 71/2". Weight: 22 lbs.
	Voice-Master Magnetic Disc Recorders		Fully automatic magnetic disc dictating and transcribing machine, recording on pre-grooved, reusable and foldable magnetic discs. Features include semi-automatic or fully automatic controls, automatic error correction, direct disc indexing, instant stop-start, and syllable controlled back- spacing (from mike or footcontrol). No record-listen switch. Weight: 8 or 10 lbs.
	Voice-Master Streamliner \$195 Voice-Master Challenger 295 Voice-Master Companion 229 Voice-Master Ordertaker 155	100-5,000 cps 100-5,000 cps 100-7,000 cps 100-4,500 cps	Semi-automatic dictating-transcribing unit Fully automatic dictating-transcribing unit Fully automatic transcribing unit Telephone recording unit
MARK SIMPSON MFG. CO. INC. 32-28 49th St., Long Island City 3, N. Y.	"MASCO" Model 500 \$168.50	50-12,000 cycles (±3 db) at 7½"/sec. 50-7,000 cycles (±3 db) at 3¾"/sec.	Portable two-speed, dual track recorder with single shift- knob control of all functions. Signal-to-noise, over 45 db. Wow, less than 0.3%. Power output, 5 watts. Includes standby and monitor switch, two neon recording level in- dicators, safety record-lock button, 5" x 7" oval speaker, ceramic microphone and patch cord. Fast forward and rewind, 90 sec. for 1200 ft. Immediate stop from any speed. Inputs for microphone and radio-phono. Outputs for external speaker and external amplifier. Weight, 23 lbs.
MOHAWK BUSINESS MACHINES CORP.	Mohawk "Midgetape" Battery Operated Portable \$249.50	200-5,000 cycles (±5 db) at 1%"/sec.	Portable, dual-track recorder. Self-contained battery power supply. Battery life 45 hours. Battery life indicator light. Cartridge-loaded ($\frac{1}{2}$ hour to a side.) Rewind, manual. two minutes for $\frac{1}{2}$ hour recording. 3 controls: On-Off, Play-Record, and Volume. Wow and flutter, less than 0.7%. Signal-to-noise ratio, 42 db. One microphone input. high impedance (1 mv min.). Output for earphone or ex- ternal amplifier. Tape, $\frac{1}{4}$ ", "Mylar" base. Supplied with microphone. earphone. batteries, and tape. Accessories available. Size: $\frac{81}{2}$ " x $\frac{37}{8}$ " x $\frac{17}{8}$ ". Weight, 3 lb.
Brocklyn 33, N.Y.	Mohawk Message Repeater Record-Playback Unit \$159.50 Playback Unit \$79,50	200-5,500 cycles (±11½ db) at 3¾″/sec.	Midget, recorder/playback unit with continuous-loop tape cartridges of from 15 to 240 seconds capacity. Repeats message continuously or intermittently by external switch control. No rewinding necessary. Neon bulb recording level indicator. Built-in 5" speaker. Output, 1.2 watts. Plug-in sockets for microphone, external start, external amplifier or speaker. Overall size, $61/2$ " x $53/4$ " x $51/2$ ". Weight: $53/4$ lb.
THE PENTRON CORPORATION 777 South Tripp Avenue, Chicago 24, III.	Pentron "Clipper" Model RWN \$139.95	50-9,000 cycles at 7 1/2"/sec. 50-5,000 cycles at 3 3/4"/sec.	Portable two speed, dual-track recorder with Monomatic single slide-knob control for tape speed, record, play, fast forward and rewind. Signal-to-noise, 42 db. Flutter, under 0.5% at $7!/_2$ "/sec. Power output, 4 watts. Neon bulb recording level indicator. Inputs for microphone and radio-phono. Outputs for auxiliary speaker and amplifier. Microphone included. Also available with single track heads. Weight, 23 lb.

Manufacturer	Model and Price	Frequency Response	Data
	Pentron "Pacemaker" Model T-90 \$199.95	50-10,500 cycles at 7 1/2"/sec. 50-5,000 cycles at 3 3/4"/sec.	Portable dual-track. two speed recorder with Unimagic single-lever control for play, record. fast forward and rewind. One knob speed change. Signal-to-noise, 50 db. Flutter, less than 0.3% at $71/2$ per sec. Fast forward and rewind, 70 seconds for 1200 ft. Power output 5 watts. Electronic eye recording level indicator. Two Alnico V speakers, 1 woofer and 1 tweeter. Automatic index counter. Inputs for microphone and radio-phono. Outputs for external speaker or amplifier. Weight, 27 lb.
	Pentron "Emperor" Model HFW-500 \$299.95	40-12,000 cycles at 7½"/sec. 40-6,000 cycles at 3¾"/sec.	Mechanically similar to Model T-90. Has illuminated VU meter and three-speaker sound system with two 6" woof- ers and separate 4" "roving" tweeter. LC crossover net- work at 1000 cycles. Power output, 10 watts push-pull. Weight, 33 lb.
THE PENTRON CORPORATION	Pentron "Encore" Tape Player Model TP-3 \$149.95	50-8,000 cycles at 7 1/2"/sec. 50-5,000 cycles at 3 3/4"/sec.	Portable two-speed, dual-track tape playback unit with "Uninagic" single-lever control for play, fast forward and rewind. Plays any standard 71/2"/sec. and 33/4"/sec. recorded tape. Complete with amplifier and speaker. Single-track units also available (\$154.95).
777 South Tripp Avenue, Chicago 24, III.	Pentron Stereophonic Tape Player Model PS-1 \$249.95	(as above)	Consists of two-speed tape deck and two preamplifiers in consolette wood cabinet. Plays stacked stereo, stag- gered stereo, full track or half-track tapes at 71/2" or 3/4"/sec. Preamps equalized to NARTB standards. Sepa- rate volume, tone and master gain controls. "Unimagic" single lever control for play, fast forward and rewind. Instantaneous automatic braking. Shipping weight, 33 lb.
	Pentron "Dynacord" Model DM-2 Tape Mechanism \$395.00 Model DS-10 Preamplifier \$130.00 Tape Mechanism Case, \$30.00 Amplifier Case, \$25.00	40-15,000 cycles (±2 db) at 15"/sec. 40-10,000 cycles (±2 db) at 7½"/sec.	Professional type. dual-speed recorder for rack or portable mounting. Standard speed, $71/2''$ and $15''$ /sec. Also avail- able for $33/4''$ and $71/2''$ speeds. Signal-to-noise. over 55 db Flutter and wow. under 0.2% at $15''$ /sec. Starting and stopping time, 0.1 second at $15''$ /sec. Playback timing accuracy, $\pm 0.2\%$. Rewind time, less than 60 sec. for 2400 ft. reel. Three separate heads. High inertia, direct capstan drive. Dynamic braking. Push-button controls with automatic cycling for record, fast traverse, play and stop. Erase interlock, automatic stop and instantaneous stop bar. Monitors from input or from tape while re- cording.
PREMIER ELECTRONIC LABORATORIES 382 Lafayette St. New York 3, N. Y.	"Tapesonic" Model 70-C \$398.75	30-18,000 cycles (±3 db) at 15"/sec. 30-15,000 cycles (±3 db) at 7½"/sec. 30-7,500 cycles (±3 áb) at 3¾"/sec.	Portable professional type three-speed recorder. Three motors, including hysteresis synchronous drive motor. $41/2$ " VU meter. Push button operation using seven relays and one solenoid. Three separate heads, permitting instantaneous monitoring from tape while recording. A.B. switch permits comparison between original and recorded program. Flutter and wow 0.1%. Mixing channels for mike, radio or phono inputs. Full protection against accidental erase. Bass and treble controls with flat response setting. Fast forward and rewind, less than one minute for 2400 ft. Electro dynamic brake action and tape tension, never requires adjustment. D.C. on preamp heaters. Push-pull 12 watts audio output.

Manufacturer	Model and	Price	Frequency Response	Data
		Model SR-27 Complete with A-920 amplifier \$485.00 Model A-920 Amplifier \$324.00	50-15,000 cycles at 15"/sec. 50-10,000 cycles at 7 1/2"/sec.	Professional type two-speed equipment for portable or stationary use. Tape transport mechanism has true three- motor drive and separate erase, record and reproducing heads. A-920 amplifier consists of microphone preamp, reproduce preamp, power amplifier and power supply. Includes twin speakers for playback. Monitors from input or tape while recording. Input for microphone or high impedance bridging. Output; 10 watts at 15 ohms, line level at 500 ohms. Monitor ouput for headphones. Max. reel size, 8".
PRESTO RECORDING CORPORATION P. O. Box 500,		Model R-11 Recording Mechanism (in carrying case) \$827.00 Chassis Only \$775.00 Model SR-11 Recording	50-15,000 cycles at 15"/sec. 50-10,000 cycles at $7 \frac{1}{2}$ "/sec. 50-8,000 cycles at	Professional type portable tape mechanism with three- head assembly: erase — record — reproduce. Brakes and capstan pressure pulley solenoid operated. Dual-speed motor heavy-duty capstan drive unit, with tape reels mounted directly on individual torque motors. Flutter 0.15% at 15"/sec. Signal-to-noise. 55 db. Simplified threading, easy access to heads. Professional console-type unit, consists of R-11 mechanism and 901-A amplifier. 900-A amplifier may be substituted
Paramus, New Jersey	•	Console \$1,250.00	3 3/4"/sec.	if desired. Tape transport panel and amplifier panel are hinged — every component readily accessible.
		Model PB-17A Tape Reproducing Mechanism \$700.00 Model A-904 Amplifier \$146.00	50-8,000 cycles at 3 ¾ ″/sec.	Dual-track reproducing mechanism with 3¼" tape speed and automatic reversal, giving up to 8 hours of continuous music on a 4800-ft. reel. At end of this time, mechanism may be made to recycle or stop. Heavy duty capstan drive unit with individual torque motors for each reel. Signal- to-noise, 55 db. Flutter 0.35% at 3¾" speed.
	Continuous Tape Reproducing Console \$996.00			Long-playing tape reproducing unit consisting of PB-17A tape transport mechanism and A-904 Amplifier in console cabinet with dust-protective plastic top. Dynamic range, 45 db. Also available with PB-15A mechanism, which is similar to PB-17A except with $101/2^{"}$ reel capacity only.
		The Congressional Model 7TR2 \$159.95	90-8,000 cycles at $7 \frac{1}{2}$ "/sec.	Portable, two-speed, dual-track recorders with push- button control. Normal and overload neon recording level indicators. Ceramic microphone with 7-ft. cable fits into storage well. Take up to 7" reels. Rewind time, 2 min. for 1200 ft. Inputs for microphone and radio-
RADIO CORPORATION OF AMERICA		The Judicial Model 7TR3 \$199.95	70-12,000 cycles at 71/ ₂ "/sec.	phono. Model 7TR2 has 5" x 7" speaker. Model 7TR3 has Panoramic Speaker System—one $6\frac{1}{2}$ " and two $3\frac{1}{2}$ " speakers. Also window counter, voice-music switch, remote control unit and provision for plugging in external speaker.
RCA Victor Division Camden 2,	The Legislator Mo \$279.9		60-12,000 cycles at 71/ ₂ "/sec.	Consists of Model 7TR3 recorder chassis mounted in console type wooden cabinet with Panoramic Speaker System—one 8" speaker and two 31/2" speakers.
N. J.		"Victrola" Stereotape Players Portable Model 8STP1 \$295.95 Consolette Model 8STP2 \$350.00	70 to 12,000 cycles at 7 ¼2″/sec.	Stereophonic tape playback units in portable and consol- ette models. Plays both single-track and dual-track tapes. Two matched cases—one with tape mechanism and left channel speaker system, the other with right channel speaker system. Tape player has in-line (stacked heads), and push-button controls for fast forward, rewind, stop and two play buttons—one for stereo and one for con- ventional tapes. Two-channel amplifier provides $2\frac{1}{2}$ watt output for each channel. Each Panoramic Speaker System consists of one $6\frac{1}{2}$ " speaker and two $3\frac{1}{2}$ " speakers. Consolette model available in mahogany or light oak finish.

Manufacturer	Model and Pri	ce	Frequency Response	Data
RADIO CORPORATION OF AMERICA RCA Victor Division Camden 2, N. J.	Orthophonic Intermatched High-Fidelity Recorder - Reproducer Chassis Type SRT-2 \$490.00		Playback from standard tape, 30-15,000 cycles (±3 db) 40-12,000 cycles (±2 db) Record and playback 40-12,000 cycles (±3 db)	Semi-professional type recorder/reproducer chassis with direct synchronous motor tape drive. Recording speed of $7\frac{1}{2}$ " and $3\frac{3}{4}$ "/sec., by selector switch. Electro dy namic tape tension and braking. Signal-to-noise, bette than 50 db with less than 3% distortion. Flutter and wow, less than 0.2% . Fast forward and rewind, 45 sec for 1200 ft., with automatic tape lift. VU meter fo recording level indication. Transistor record and play back amplifier with printed wiring. High impedance bridging input and low impedance microphone input Outputs, $0.6 v$ into $10,000$ ohms or more and hig impedance monitoring jack. Can be mounted horizontall- or vertically. Dimensions: $10\frac{1}{2}$ " x 19 " x $8\frac{1}{2}$ ". Weight 35 lbs.
RANGERTONE	Por	"Rangerette" rtable Model A-2 \$1,500.00 complete	45-15,000 cycles (\pm 2 db) at 15"/sec. 50-8,000 cycles (\pm 2 db) at 7 ¹ / ₂ "/sec.	FOR SYNCHRONOUS SOUND RECORDING Professional-type, single-track. dual-speed recorders, with choice of $3\frac{3}{4}$ ", $7\frac{1}{2}$ ", 15" or 30" per second tape speeds Up to 2 hours recording at $7\frac{1}{2}$ " per sec. on 14" ree Distortion, less than 2% total harmonic. Maximum signal to-tape noise, 55 db. Double-puck, tight-loop tape drive Peak-to-peak flutter, less than 0.1% at 15"/sec. Rewinn
73 Winthrop St., Newark 4, N. J.		Console Model R-5C With synchronizer Price on Request)	$\frac{45-15,000}{cycles (\pm 2 db)}$ at 15"/sec. 50-8,000 cycles (\pm 2 db) at 71/2"/sec.	speed controllable continuously from 0 to 250"/sec. in both forward and rewind. Meets all N.A.B. adopted standards. Complete monitoring and mixing facilities VU meter, signal indicator and footage counter calibrated in minutes and seconds. Complete tape editing facilities Also available with positive "sprocketless" synchroniza tion for motion picture and TV applications. Weight o Rangerette — 30 lb. Kits added to other professional recorders for Synchronou Sound Recording for \$295.00.
REVERE Model TR-800 B& CAMERA Model T-10 B&M		Model T-700D \$225.00 Model TR-800D (with radio) \$275.00 Model T-700 \$235.00 Model TR-800 (with radio) \$287.50	40-14,500 cycles (\pm 3 db) at 7 $\frac{1}{2}$ /sec. 40-7,500 cycles (\pm 3 db) at 3 $\frac{3}{4}$ "/sec. 80-8,000 cycles (\pm 3 db) at 3 $\frac{3}{4}$ "/sec.	Portable dual track recorder available in either single of dual speed. Convenient keyboard control, electrical sole noid operated. Signal to noise ratio over 48 db on dua speed machines and 50 db on single. Distortion less tha 0.65% on normal levels. Rewind and fast forward speed 170 ips. Flutter and wow less than 0.3%. Two neon lamp for accurate level setting. Precision revolution inde counter, for instant location of recording. Can be op
	Model T-700 B&M \$245.0 Model TR-800 B&M (with		60-15,000 cycles (=3 db) at 71/2"/sec.	erated as a PA system. Provision for electrical remote controls. Table models (as above) in solid blonde oak or soli Honduras mahogany. Special pressure relief port for est
	Model T-10 B&M \$255.00 Model TR-20 B&M (with		85-7,000 cycles (±3 db) at 3 ³ / ₄ "/sec. 75-12,000 cycles (±3 db) at 7 ¹ / ₂ "/sec.	Portable dual track recorder available in either si (33/4 ips.) or dual (33/4 · 71/2 ips.) speed. Signal to n ratio over 48 db on either machine. Distortion less t 1% at normal levels. Rewind and fast forward, 170
	Model T-900 \$199.50 Model TR-1000 (with radio) \$224.50	\$199.50 Model TR-1000 (with radio)	85-7,500 cycles (±3 db) at 3¾"/sec.	Flutter less than 0.3%. Single knob control automaticall returns to stop when power is turned off. Dual level ind cator. Revolution index counter. Instant stop buttor Two-speed knob can be changed while in any functior Rugged fiberglass case. Two speakers. Can be operate as a PA. Weight, 28 lb.
		Model T- 100 \$169.50 Model TR-200 (with radio) \$224.50	85-7,500 cycles (±3 db) at 3¾"/sec.	Portable, dual-track recorder available in either 1½ o 3¾ ips. tape speed. Signal-to-noise ratio, over 45 db a either speed. Distortion, less than 1.5%. Rewind an
	Model T-500 \$179.50 Model TR-600 (with radio) \$234.50		100-5,000 cycles (±3 db) at 1%"/sec.	Two level recording indicator. 5" x 7" Alnico V speake Weight, 25 lb.

Manufacturer	Model and Price	Frequency Response	Data
REVERE CAMERA COMPANY 230 East 21st St. Chicago 16, III.	Model T-11 \$284.50	40-16,000 cycles (±3 db) at 7½″/sec.	High fidelity $101/2''$ reel tape recorder for professional use and custom installations. Guaranteed specifications, signal-to-noise, over 50 db, wow and flutter less than 0.2%. Features: One volt cathode follower pre-amplifier output. Monitor amplifier with $21/2$ watt output. Adjust- able 70Kc bias-erase oscillator with indicator. Less than 1/2 second start and stop. Automatic head demagnetizing. Precision revolution tape counter. Electrical remote with automatic drive roller release.
SOUND- SCRIBER CORPORATION 146 Munson Si., New Haven 9, Conn.	SoundScriber 24-hour (21/2"/min.) recorder/reproducer Model 5-124 \$650 SoundScriber 12-hour (33/4"/min.) recorder/reproducer Model F-112 \$650	ample for voice communication	All-purpose, single channel voice and signal recorders capable of recording continuously for up to 24 hours and 12 hours respectively. Electronic recording level in- dicator. Signal being recorded may be monitored through external headset. Use special, quick-change reels of 2" wide tape on $1/2$ -mil "Mylar" hase, printed with time in minutes, indicating elapsed recording time or exact time of recorded signal. Tape can be bulk erased for immediate re-use. Inputs for telephone, line, microphone. Outputs: speaker/headset. Dimensions: $17" \times 11/2" \times 53/4"$. Weight, approx. 25 lb.
	Model R-5 \$1,575.00	50-15,000 cycles (±1 db) αt 15"/sec.	Portable, professional-type, single-track recorder with tape speeds of $7\frac{1}{2}$ and $15''$ (or $3\frac{3}{4}$ and $7\frac{1}{2}''$) per sec. Signal-to-noise ratio, over 60 db. Separate record and playback heads and amplifiers with independent monitor amplifier and speaker.
THE STANCIL- HOFFMAN CORP.	Model Só Synchronous Magnetic Film Recorder \$1,500.00	45-10,000 cycles (±2 db) 16mm and 17.5mm film	Synchronous magnetic film equipment for motion picture and TV sound recording. Designed for 24 volt battery operation, 110 volt single phase or 220 volt 3 phase. The equipment is very lightweight and housed in small light- weight cases for easy portability. Signal-to-noise: at least 55 db. Maximum harmonic distortion: 1.5% from full level. Film capacity: 1000 feet.
921 North Highland Ave., Hollywood 38, Cal.	Model CRM-15 Multi-Channel Communications Recorder (Prices on Request)	200-7,500 cycles (±3 db) at 7½"/sec. 200-3,500 cycles (±3 db) at 3¾"/sec.	Provides up to 15 simultaneous recording channels on 0.7" wide tape. Recording time, up to $4\frac{1}{2}$ hours for 5,000 foot reel. Two units, with automatic sequence control permit continuous, 24-hour recording. Signal-to-noise, at least 40 db. Distortion, not more than 5% total harmonic at "0" input level. Negligible crosstalk between channels. Push-button control. Fast forward and rewind, Automatic stop.
TANDBERG 10 East 52nd St., New York 22, N. Y.	Tandberg Model 2 (two speed) \$249.50 Model 2F (remote controlled) \$279.50 Model 3 Hi-Fi (three speed) \$349.50	50-4,000 cycles (± 2 db) at 1 ⁷ / ₈ "/sec. 40-7,500 cycles (± 2 db) at 3 ³ / ₄ "/sec. 30-15,000 cycles (± 2 db) at 7 ¹ / ₂ "/sec.	Portable, dual-track recorder and playback unit with extra-heavy flywheel and wow-proof belt drive. Flutter and wow: below 0.1% at $71/2$ "/sec., 0.2% at $33/4$ "/sec. and 0.25% at $17/6$ "/sec. Signal-to-noise: 60 db at $71/2$ "/sec., 50 db at $33/4$ " and $17/6$ "/sec. Playback output. $21/2$ watts, low level and high level. Electronic eye recording level indicator. 5" by 7" speaker. Three-speed unit has built-in program counter dial. Weight, 22 lb with transport case, 27 lb.
TELECTRO- SONIC CORPORATION 35-18 37th St., Long Island City 1, N. Y.	Telectro- tape Portable Model 556 \$79.95	flat to about 6500 cycles at 3 ¾ ″/sec.	Light-weight, dual-track recorder with 3 ³ / ₄ " tape speed. Handles up to 5" reels, providing up to 1 hour recording time. Wow and flutter, approximately 0.5%. High im- pedance microphone input may also be used for radio input. Extremely simple threading and operation. Neon bulb recording level indicator. Weight, 16 lb. Includes crystal microphone with stand. Built-in speaker.

Manufacturer	Model and Price	Frequency Response	Data		
	Telectro- tape Custom 220 \$99.50 (without case)	50-12,000 cycles (±3 db) αt 7½″/sec.	Basic dual speed recorder $(7\frac{1}{2}'' \text{ and } 3\frac{3}{4}''/\text{sec.})$ unit with recording amplifier, playback pre-amp and crase oscillator for custom, table or portable mounting. Signal- to-noise, 45 db. Distortion, less than 2% . Flutter and wow, less than 0.3% RMS. Max. reel size, 7". Electronic eye recording level indicator. Inputs for microphone and radio-phono. Also available: Custom 220P monaural tape player (\$49.50) and Custom 220BMP binaural and monaural tape player. (\$61.50). Tape player prices cover mechanism only.		
TELECTRO- SONIC CORPORATION 35-18 37th St., Long Island City 1, N. Y.	Telectro-tape Professional 1000 Two-Unit Portable (Price on request)	30-15,000 cycles (±2 db) at 15"/sec. 30-15,000 cycles (±4 db) at 7½"/sec. 30-10,000 cycles (±2 db) at 7½"/sec.	Professional type two-unit, dual-track portable with and $7\frac{1}{2}$ " tape speeds. Signal-to-noise, over 55 db at speeds. Distortion, less than 2% RMS. Flutter and less than 0.2% at 15"/sec. Starting time, less thar second. Stopping distance, less than 2" at 15"/sec. back timing accuracy, better than 0.2%. Max. reel $10\frac{1}{2}$ ". Pushbutton controls, A-B monitor switch, is selector switch, VU meter switch for playback level, re- level, bias and erase current. Output, 600 ohms balan Remote control available.		
	Multi-Channel Data Recorder Model TR-150-5 (Price on request)	200-20,000 cycles (±3 db) at 15"/sec. 200-40,000 cycles (±3 db) at 30"/sec. 100-80,000 cycles (±3 db) at 60"/sec.	Multi-channel data recorder/reproducer, available in models using up to 14 channels. Consists of 5 separate units for 19" rack mounting. Record, erase and repro- duce heads in one plug-in assembly for one and two channel units. Multi-channel units do not have erase heads. Signal-to-noise, 55 db below tape saturation level. Flutter and wow, under 0.1% rms. Three speed hyster- esis synchronous motor drive. Rewind time, 1 min. for 2400 ft. Push-button controls for all functions. Monitors from tape while recording. Harmonic distortion, 1% rms at normal level. Input, 100,000 ohms unbalanced. Out- put, 600 ohms unbalanced. Height, in rack, 52". Weight, 320 lb.		
VIKING OF MINNEAPOLIS 6900 Aldrich	Viking 75 Series Tape Decks		Tape Playback and Record Playback units for custom installation in hi-fi systems. Tape speed, 71/2"/sec with belt change for 33/4"/sec. Signal-to-noise, 45 db or more. Flutter, 0.2% or less. Maximum reel size, 7". Total har- monic distortion, less than 1.0% with NARTB com- pensated preamplifier and NARTB recorded tape. Also available with tapelifter and pressure pad. Weight, basic unit, 9 lb.		
Ave. \$0.,		40-14,000	Viking PB60 playback preamplifier—\$24.50.		
Minneapolis 20, Minn.	FF75 Monaural Playback \$59.95 FF75R Monaural Record/Playback 67.45	cycles (±2 db) at 7½″/sec.	Viking RP61 record-playback preamplifier—\$74.50. Matched Viking RP61-S Stereophonic "Slave Record,		
Sales Office: 2207 Lyndale Ave. So.,	FF75RM Mon. RecMonitor-Playback 76.66 FF75B 2-Channel, Half-Track Heads, Staggered 69.95		Playback Preamplifier—\$74.50. Viking "PRO": Consists of FF75R-LP Deck (Monaura Record/Playback) and RP61 Record/Playback Preampli fier installed in D396 Portable Carrying Case. Tota		
Minneapolis 5, Minn.	FF75SU Universal Stereo Playback (in-line and staggered heads) 97.65 FF75SR Stereo (in-line head) plus Monaural Erase-Record 107.50		weight 23 lb.—\$174.50. D390 Portable Carrying Case for any FF75 Series Deck and one or two PB60's. Weight of case and FF75 deck 18 lb. Case only \$19.95.		
V-M CORPORATION	"tape-o-matic" Portable Model 710 \$189.95	 "tape-o-matic" Portable Model 710 \$189.95 "tape-o-matic" Portable Model 710 \$189.95 "tape-o-matic" Stereo/Playback Portable Model 711 Model 711 pophonic playback. External amplifier Power output, 5 erase. Better than 0.4% RMS flutte cision tape index "distort" light, at monitor switch, pa receptacle and stor flutter and wow. better than 45 db 6" x 9" woofer at 	Records and plays back monaurally. Convertible to stere- ophonic playback. Two speeds, dual tracks, two speakers. External amplifier jack, two-way external speaker jack. Power output, 5 watts. 75 KC record bias and power erase. Better than 45 db signal-to-noise ratio. Less than 0.4% RMS flutter and wow. Push-button controls, pre- cision tape index counter, "recording normal" light, "distort" light, automatic shutoff, balanced tone control, monitor switch, pause button, safety switch, 3-way input receptacle and storage compartment.		
Benton Harbor, Michigan	Stereo/Playback Portable Model 711		Portable, two-speed, dual-track recorder equipped to team with any other amplifier-speaker for stereophonic playback. Power output, 5 watts. Less than 0.4% RMS flutter and wow. 75 KC record bias and power erase, better than 45 db signal-to-noise ratio. Two speakers 6" x 9" woofer and 3.5" tweeter. Other features same as for Model 710 above.		

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Manufacturer	Model and Pri	ce	Frequency Response	Data
V-M CORPORATION Benton Harbor, Michigan	A A A A A A A A A A A A A A A A A A A	''Celeste'' Stereo/Playback Table Model 750 \$259.95	40-15,000 cycles (±5 db) at 71/2"/sec.	Teams with any other amplifier-speaker for stereophonic playback. Two-speed, dual-track monaural recorder with 3 speakers—two heavy-duty 8" woofers and a 3.5" tweeter. Power output, 5 watts. 75 KC record bias and power erase. Better than 45 db signal-to-noise ratio. Less than 0.4% RMS flutter and wow. External amplifier and speaker jacks, push-button controls, precision tape index counter, "recording normal" light, "distort" light, auto- matic shutoff, balanced tone control, monitor switch, pause button, safety switch, 3-way input receptacle and storage compartment. Blonde or mahogany furniture- finished cabinets. Optional legs convert it to consolette.
J. C. WARREN CORPORATION 21 Hanse Ave.,	Tapo Model 777 (blue) Traveler Model 777-2 (gray		to at cps 3,500 - 1½"/sec. 6,000 - 3¼"/sec. 12,000 - 7½"/sec.	Portable dual track tape recorders with completely self- contained battery powered tape transport, amplifier and speaker for playback. Rechargeable battery cycle up to eight hours depending on tape speed. Has self-contained battery recharger. May be operated on 110 AC. Rewind is electric: speed 10 to 1. Maximum reel size, 5". May be operated with door open or closed. Monitors while recording. Inputs for microphone and headphone moni- toring. Crystal or ceramic microphone included. Acces- sories include snap-on retractable legs, canvas carrying case and shoulder strap. Weight 21 lbs. Size 6" x 10" x 15".
Freeport, N. Y.		Privateer Mark VIII \$379.00	to 3,500 cycles at 1 <i>%</i> "/sec.	Portable dual track tape recorder, self-contained recharge- able batteries. Rewind electric. No batteries to replace. Battery charger separate unit but included in price. Units may be operated in covert fashion in briefcase from external concealed switch and making use of external concealed microphone. Available accessories include input level indicator, headset, external microphone, telephone recording adaptor.
WEBSTER- CHICAGO CORPORATION		Webcor "Royal" with Radio \$229.95 without Radio \$189.95	50-10,000 cycles at 7 1/2"/sec. 50-7,500 cycles at 3 3/4"/sec.	Portable, two speed, dual-track recorder with two record- ing heads permitting track change without reel turnover. Signal-to-noise, 50 db. Wow and flutter, less than 0.4%. Electronic eye recording level indicator. Four-way master control. Automatic shut-off at either end of tape. Speed- ometer-type footage counter. Power output, 8 watts. 6" wide range speaker. Output selector switch for normal recording, monitoring or external amplifier. Inputs for microphone, radio-phono, other tape recorder. Weight, 47 lb. Radio tuner (when furnished) is transistor type with printed circuit.
5610 Bloomingdale Ave., Chicago 39, III.		Webcor "Royal Coronet" with Radio \$279.95 without Radio \$239.95	50-12,000 cycles at 71/2"/sec. 50-8,000 cycles at 33/4"/sec.	All features same as "Royal" model, except in larger case with three-speaker system consisting of two 6" and one 4" speaker with total cone area of 65 sq. in. Weight, 54 lb.
WEBSTER ELECTRIC CO. Racine, Wisconsin	Model 252	"Ekotape" Model 250 (Portable) \$269.50 Model 252 (Limed Oak) \$289.50 Model 254 (Mahogany) \$289.50	30-10,000 cycles at 71/2"/sec. 50-5,500 cycles at 33/4"/sec.	Two speed, dual-track recorders in portable and consol- ette models. Signal-to-noise, 38 db. Wow, not over 0.3% at $71/2''$ /sec. or 0.5% at $334''$ /sec. Meter-type recording level indicator with red sector to show excessive level. Program selection finder. Central control for fast for- ward, standard forward, rewind and stop. Fast forward ratio, 15 to 1. Rewind ratio, 15 to 1 at $71/2''$ /sec., 30 to 1 at $334''$ /sec. Provision for foot, manual and elec- tric controls. Two matched 5'' speakers. Power output, 6 watts at 5% distortion. Inputs for microphone and rario-phono. Outputs for external speaker and hi-fi sys- tem. Weight, 33 lb. Consolette models have one 6'' by 9'' oval speaker and a 3'' round "tweeter.'' Matched bass reflex speaker available.

Frequency Data Manufacturer Model and Price Response WEBSTER 40-7,000 Portable, two-speed, dual-track recorder similar to Model "Ekotape" cycles at **ELECTRIC** 250 on Page 16 except as follows. Signal-to-noise, 35 db. 71/2"/sec. Portable Neon glow tube recording level indicator. Output jack CO. for external speaker. Power output, 21/2 watts at 5% distortion. Weight, 29 lb. Model 260 40-4,000 Racine. \$225.00 cycles at Wisconsin 3 3/4"/sec. Model 375 Portable, single speed, dual-track recorders with "Prest-\$99.95 85-7,000 push-button keyboard. Signal-to-noise, 35 db. Omatic'' cycles at minimum. Wow and flutter: 0.5% at 33/4"/sec., 0.35% Model 620 at 71/2"/sec. Neon normal and overload recording level (Special 375) at 3/4"/sec. indicators. Record lock button prevents accidental erase. \$109.95 Fast forward and rewind, less than 23/4 min. for 1200 ft. Amplifier, 3 watts output. Input for radio-phono-TV. Output for carphone monitoring or external speaker. Includes 4" round speaker and crystal microphone. Weight, 26 lb. "Special" models same as above, but in Model 750 85-8,000 \$99.95 cycles at Model 621 7 1/2"/sec. deluxe tu-tone case. (Special 750) "Recordio" \$109.95 Portable, dual-track recorder with 33/4"/sec. tape speed and cartridge tape loading. Signal-to-noise, 35 db mini-mum. Wow and flutter, 0.5%. "Magic Eye" recording The Jet 65-9,000 Model CL622 level indicator. Record lock button. Amplifier, 3 watts cycles at Cartridge output. Output for earphone monitoring or external speaker. Includes 4" x 6" speaker, microphone, and at 3 3/4"/sec. Loader cartridge of pre-recorded tape. Weight 22 lb. \$129.95 Portable, two-speed, dual-track recorders with tape speeds of 71/2'' and 33/4''/sec. by switch control. Signal-to-noise, 35 db minimum. Wow and flutter: 0.3% at 71/2''/sec., 0.5% at 23/4''/sec. The Master 80-8.500 WILCOX-GAY Model 642 cycles at $7\frac{1}{2}$ "/sec. 0.5% at $3\frac{3}{4}$ /sec. Neon normal and overload recording level indicators. Other recorder features same as for Models 375 and 750 above. Model 642 has one $5'' \ge 7''$ elliptical and one 4'' round speaker. Weight 33 lb. (2 speakers) CORPORATION \$149.95 The Deulxe Models 375 and 750 above. Model 642 has one 5° x 7 elliptical and one 4" round speaker. Weight 33 lb. Model 651 has tape timer and one 6" x 9" elliptical, one 4" round speaker and one "tweeter". Weight, 35 lb. Model 674 has tape timer, 7 watt amplifier output and 5 speakers — one 6" x 9", two 4" and two "tweeters". Also three extension speaker jacks. Weight, 40 lb. Steel twick loss exponent particle unit to chair 65-10,000 Charlotte, Model 651 cycles at Michigan (3 speakers) 71/2"/sec. \$189.95 The Convertible 65-12,500 Model 674 cycles at $7\frac{1}{2}$ "/sec. 40 lb. Steel tube legs convert portable unit to chair-(5 speakers) side consolette. \$229.95 Portable, two-speed, dual-track recorder with 71/2'' and Fortable, two-speed, utabilities recorder with 792° and 334° /sec. tape speeds, visual tape timer, remote control and six speakers—two 6" round, two 4" round and two high frequency electrostatic "tweeters". Signal-to-noise, 35 db minimum. Wow and flutter: 0.2% at $71/2^{\circ}$ /sec., 0.38% at 334° /sec. Amplifier output, 8 watts. Other recorder features same as for Model 674 above. Weight, 12.04 kb/2.5 sec. as Model 674 above. Weight, The Imperial Model 686 (6 speakers) \$269.95 65-15,000 cycles at The Coronet speakers and built-in Telechron-timed 8-tube clock radio. Speaker system includes two 6" round, two 4", two high-frequency electrostatic "tweeters" plus one roving 12" P.A. type speaker in base with 25' extension cord. Weight, 50 lb. 7 1/2"/sec. Model 785 (7 speakers, clock radio) \$329.95 Portable combination tape and disc recording and reproducing unit with $3\frac{3}{4}$ " tape speed and 78 rpm disc speed. 80-6,000 cycles **Tape-Disc Recordio** Records tape, discs, tape to disc or disc to tape. Weight, at 3¾"/sec. Model 4C-10 \$199.95 30 lb.

All specifications and performance data on tape recorders listed in this directory are based on information supplied by the manufacturer. Performance data are generally based on average values and individual machines sometimes vary widely from published figures, depending on the amount of quality control exercised in manufacture.

Prices subject to change without notice. Consult manufacturer or local dealer for exact price, as some prices are list and other net.

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The COMPLETE LINE of professional quality

audiota 0

"it speaks for itself"

· · · · · · · · · · · · · · · · · · ·	Description	Type No.*	Length	Reel †	List Price Each
audiotape	PLASTIC-BASE AUDIOTAPE on 1½-mil cellulose acetate (in the Red Box) Meets the most exacting requirements of the pro- fessional, educational and home recordist at minimum cost. Known the world over for its matchless performance and consistent uniform quality. Series 51.	151 351 651 1251 2551H 2551R ‡2551FS 5051H 5051R	150 ft. 300 ft. 600 ft. 1200 ft. 2500 ft. 2500 ft. 5000 ft.	3" Plastic 4" Plastic 5" Plastic 7" Plastic NARTB Hub 10½" Aluminum Reel 10½" Fiberglass (RETMA) NARTB Hub 14" Aluminum Reel	\$ 0.70 1.35 2.25 3.50 8.50 10.90 10.90 17.00 22.10
O,	COLORED PLASTIC-BASE AUDIOTAPE on 11/2-mil cellulose acetate {in same box as above with label for color) Green and blue colored Audiotape, in con- junction with the standard red-brown tape, provide instant visual identification of recorded selections spliced into a single reel (as shown) - permit fast and easy color cueing and color coding. Eliminate need for identifying leaders between selections.	GREEN BLUE 151G 151B 351G 351B 651G 651B 1251G 1251B 2551HG 2551HB 2551FSG 2551FB 5051HG 5051HB 5051HG 5051HB 5051HG 5051HB	150 fr. 300 fr. 600 fr. 1200 fr. 2500 fr. 2500 fr. 5000 fr. 5000 fr.	3" Plastic 4" Plastic 5" Plastic 7" Plastic NARTB Hub 101/2" fiberglass (RETMA) NARTB Hub 14" Aluminum Reel	.70 1.35 2.25 3.50 8.50 10.90 10.90 17.00 22.10
Standards and Control of Control	"LR" LONGER-RECORDING AUDIOTAPE on 1-mil Mylar° polyester film (in the Black and Red Box) 50% more recording time per reel. The strong, super-durable polyester film base assures trouble-free operation even under severe con- ditions of heat and humidity. Series 61. °DuPont Trade Mark	261 961 1861 3661H 3661R \$3661FS 7261H 7261R	225 ft. 900 ft. 1800 ft. 3600 ft. 3600 ft. 3600 ft. 7200 ft.	3" Plastic in Self-Mailer Pkg 5" Plastic 7" Plastic NARTB Hub 101/2" Aluminum Reel 101/2" Fiberglass (RETMA) NARTB Hub 14" Aluminum Reel	1.00 3.75 6.50 12.50 15.00 15.00 26.00 32.00
Raise and a comparison of the service service service and the service service service service service and the service service service service service and the service service service service service service and the service service service service service service and the service service service service service service service service and the service	PLASTIC-BASE "LR" AUDIOTAPE on 1-mil cellulose acetate (in the Blue Box) 50% more recording and playback time on low-cost 1-mil cellulose acetate base, afford- ing maximum economy for applications where high strength is not required. Series 41.	941 1841 3641H 3641R 3641FS 7241H 7241R	900 ft. 1800 ft. 3600 ft. 3600 ft. 3600 ft. 7200 ft. 7200 ft.	5" Plastic 7" Plastic NARTB Hub 101/2" Aluminum Reel 101/2" Fiberglass (RETMA) NARTB Hub 14" Aluminum Reel	3.50 5.50 10.00 12.85 12.85 20.00 26.00
And Aller	AUDIOTAPE ON 11/2-MIL "MYLAR" (in the Green Box) A premium-quality professional tape that pro- vides the utmost in mechanical strength and immunity to temperature and humidity. Will not dry out or embrittle with age. Series 71.	671 1271 2571H 2571R ‡2571FS \$071H 5071R	600 ft. 1200 ft. 2500 ft. 2500 ft. 2500 ft. 5000 ft. 5000 ft.	5" Plastic 7" Plastic NARTB Hub 10/2" Aluminum Reel 101/2" Fiberglass (RETMA) NARTB Hub 14" Aluminum Reel	4.25 7.00 12.75 15.15 15.15 30.30 36.30
SUPR-SUM candidores	SUPER-THIN AUDIOTAPE on 1/2-mil "Mylar" (in the Yellow Box) Twice as much recording time per reel as stand- ard plastic-base tape. Suitable for extended- play applications where tape tension is not excessive. Series 31.	1231 2431	1200 ft. 2400 ft.	5" Plastic 7" Plastic	5.00 9.25

* Type Numbers listed cover red oxide wound on reel with OXIDE IN. For tape wound with Oxide Out, change last digit of Type No. from "1" to "0". E.g. Audictape 1250 covers 1200 ft. reel of plastic base tape wound with Oxide Out. COLORED PLASTIC REELS. Audiotape on 5" and 7" plastic reels can be supplied on colored reels at no increase in price when ordered in lots of

30 reels or more of any one color. To designate color of reel (Red, Yellow, Green or Blue) add letters "RR" and "YR", "GR" or "BR" to Type No. Listed. E.g.-Type 1251YR covers 1200 feet of standard plastic-base tape on Yellow Reel. Type 1251GBR covers 1200 feet of Green plastic-base tape on Blue Reel. \ddagger ''FS'' in Type No. indicate Fiberglass reel with solid hub and 5/16'' center hole.

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MISCELLANEOUS AUDIOTAPE ITEMS

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Item	Type No.	Description	List Price \$.25 .45 .60 .75 4.00 4.00 7.40 .70
EMPTY AUDIOTAPE REELS IN INDIVIDUAL BOXES Standard Reels	3PB 4PB 5PB 7PB 10RB 10FS 14RB 10H	3" Plastic Reel in Box 4" Plastic Reel in Box 5" Plastic Reel in Box 7" Plastic Reel in Box 10½" Aluminum Reel in Box 10½" Fiberglass (RETMA) in Box 14" Aluminum Reel in Box NARTB Metal Hub	
Colored Plastic Reels	5PBR 5PBY 5PBG 5PBB 7PBR	Red Yellow Green Blue Red Red	.60
	7PBY 7PBG 7PBB	Yellow 7" Plastic Reel in Box Green Blue	.75
EMPTY AUDIOTAPE BOXES	3B 4B 5B 73 103 14B	For 3" Reel For 4" Reel For 5" Reel For 7" Reel For 10½" Reel For 14" Reel	.15 .20 .20 .75 1.00
CORRUGATED MAILING BOXES Strong, re-usable containers	5M 7M 10M	For 5" Reels For 7" Reels For 10½" Reels	.15 .20 .30
RECORDING HEAD CLEANER Superior to carbon tetrachloride	1нс	One oz. Bottle with Brush	.65
AUDIO SELF-TIMING LEADER TYPE A strong, durable leader tape of white "Mylar" material with spaced markings to permit accurate rate timing of leader intervals.	3L	100 ft., 14" wide, Individually Boxed	.55
ADHESIVE REEL LABELS Provide positive identification of your tapes, right on the reel. Sim- ply press to apply, pull aff to remove.	30AL	Envelope of 30, 2'' x 2½'' lobels	.20
AUDIO HEAD DEMAGNETIZER Removes all permanent magnetism from recording and reproducing heads in a motter of seconds.	400	With 7-ft. Cord, Individually Boxed	10.00
AUDIO HEAD ALIGNING TAPE Pre-recarded at 2,000, 10,000 and 15,000 cps (15"/sec.) with precisely correct head alignment. Individually boxed, with instructions	200	300 ft. on 5" reel, individually boxed, with instructions	10.00
how to make GOOD TAPE RECORDINGS This completely new handbook of tape recording contains up-to-the-minute in-	25C	Deluxe cloth-bound edition	2.50
formation of interest and real practical value to every tape recordist. Profusely illustrated with photographs, charts and diagrams prepared especially for this book, it contains 150 pages of valu- able information on all phases of mod- ern tape recording.	15P	Paper-bound edition	1.50

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