# GateSound Programming



GateSound is designed to provide you with a basic taped music library of selections with the widest possible appeal. These tapes are intended as a starter package of musical programming for automation systems, and are appropriately named the "Prelude" series. They are equally suitable for any broadcaster wishing to expand a tape library simply and economically.

TYPE OF MUSIC: All-time country and western favorites, show tunes, motion picture sound tracks and great standards are presented in vocal and instrumental arrangements, carefully selected for "middle-of-the-road" content, to serve as a sound base on which to build your future programming. Selections likely to become outdated are not included, to assure a modern, up-to-date sound for your listeners.

PRODUCTION QUALITY: The "Prelude" series is produced exclusively for Gates by AltoFonic Programming, Inc. While these tapes are completely separate from the library services of AltoFonic, the same expert programming know-how and professional recording techniques are utilized to produce tapes of amazing fidelity and consistency. These tapes are exclusive through GateSound, and not available elsewhere.

BASIC CATEGORIES: GateSound "Prelude" series separates music into these categories:

Prelude 200-Vocals, Male.

Up-tempo country and western selections.

Prelude 300-Vocals, Male.

Medium and slow tempo country and western selections. Prelude 400-Vocals, Female and Group.

Mixed tempo country and western selections.

Prelude 500-Instrumentals.

Mixed tempo country and western selections.

Prelude 600—Instrumentals.

Standard and popular selections, M-O-R.

Prelude 700—Instrumentals.

Standard and popular selections, M-O-R. Prelude 800-Vocals, Mixed.

Standard and popular selections, M-O-R.

Prelude 900-Instrumentals, Mixed.

Mixed tempo conservative standard selections.

Comprehensive coverage of all recording companies provides the most extensive musical variety within the categories. Complete listings are available on request for ordering information.

TAPE DATA: "Prelude" tapes are unannounced for maximum flexibility in any operation, and allow the use of local voices if desired. All tapes are supplied on 1.0 mil polyester tape. Bi-directional tapes are supplied with metallic foil at both ends for reversing systems. All music is matched at both ends (no fading).

A 25 Hz tone, 5 dB below program reference level and 1.5 seconds long, appears 1.5 seconds before the end of each selection. This tone is followed by one second of silence, then the next selection begins exactly 2.5 seconds after the beginning of the tone. On stereo tapes the tone appears on the left channel only.

Tapes are available in 10½ or 14 inch reel sizes, and in any popular track configuration. The entire GateSound library is available in monaural or stereo.





### **CRITERION 80**

From the originators of the tape cartridge system for broadcasting comes the ultimate in cartridge equipment for professional use . . . the Criterion 80 series, with built-in performance-proven features. From sleek slide-out chassis for complete accessibility to the tape deck and all plug-in electronics, to better timing, lower wow and flutter, and dependable direct-capstan drive, Criterion 80 represents twelve years experience in the design, engineering and manufacturing of broadcast tape cartridge equipment.

Renowned for dependability and quality in broadcasting, Criterion units are in continuous service in the largest and most respected radio and television stations throughout the world.

MODELS AND TYPES: Criterion 80 models are available in playback only, or record/playback, in monophonic and stereophonic versions. The basic Criterion 80 unit is housed in a trim-line desk cabinet, and may be attractively rackmounted using the optional 19-inch rack adapter panels. The primary 1 kHz cue tone is standard. Second and third cue tone operation is optional on all models with plug-in cue sensing kits. All versions of Gates Criterion 80 series meet or exceed National Association of Broadcasters' performance standards. Monophonic units are fully wired for immediate conversion to stereo.



PRECISION MECHANICAL CONSTRUCTION: The excellence of Criterion 80 performance lies in the outstanding engineering and quality of its tape deck, motor mechanism, and exclusive Micro-Set head assembly. The massive direct-drive capstan motor provides speed accuracy comparable to the finest reel-to-reel machines.

HIGH-QUALITY ELECTRONICS: All-silicon transistor amplifiers in Criterion 80 are on plug-in glass epoxy PC cards and are fully RFI-proofed for installation in the most demanding broadcast environments.

RECORDING UNITS: The Criterion 80 recording amplifier, like the playback unit, is housed in a trim-line desk console, and may be rack mounted with the appropriate adapter panel. Latest state-of-the-art circuitry in Criterion 80 electronics provides a master-quality recorder for professional use.

#### **SPECIFICATIONS**

#### PLAYBACK UNIT

POWER: 105-125 volts, 60 Hz or 50 Hz. 70 watts maximum.

FREQUENCY RESPONSE: ±2 dB 50 to 15,000 Hz.

NOISE: 45 dB (stereo), 48 dB (mono) below NAB standard reference. 52 dB (stereo), 55 dB (mono) below tape signal reference of 400 Hz, 3%

DISTORTION: Record to playback, less than 2% at 6 dB above NAB standard reference.

AUDIO OUTPUT: 600 ohms, balanced, 0 dBm nominal, +10 dBm maxi-

TAPE SPEED: 71/2 inches per second.

TAPE DRIVE SYSTEM: Direct capstan drive, sealed ball bearings. FLUTTER AND WOW: 0.2% or less.

TIMING ACCURACY: 0.1% or better.

TAPE START AND STOP TIME: Less than 0.1 second.

TAPE PULLING FORCE: 3 pounds.

DIMENSIONS AND WEIGHT: Desk top cabinet, 6" high, 13½" wide, 14" deep. With rack adapter, 7" high, 19" wide. Net weight, 30 lbs.

#### RECORDING AMPLIFIER

POWER SOURCE: From playback unit.

AUDIO INPUT: 600 ohms balanced line, input levels from -20 to  $\pm 10$ 

dBm, matching;  $\pm 10$  to  $\pm 40$  dBm bridging (20 K). REMOTE CONTROL: All functions and lamp indications.

BIAS OSCILLATOR: Push-pull, 80 kHz.

DIMENSIONS AND WEIGHT: Desk top cabinet, 4" high, 131/4" wide, 121/2" deep. With rack adapter, 51/4" high, 19" wide. Net Weight, 12 lbs.

#### ORDERING INFORMATION

Criterion 80 Playback, mono, 1-tone, desk mount	994-6701
As above, except stereo	
Criterion 80 Record/Playback, mono, 1-tone, desk mount	994-6729
As above, except stereo	994-6731
QS-150, 150 Hz cue sensor. Plugs into playback for 2-tone	
cueing	900-0154
QS-8, 8 kHz cue sensor. Plugs into playback for 3rd tone	
cueing	_900-0155
TO-23, 150 and 8000 Hz cue oscillator assembly, plugs into	
record amplifier for conversion to either 2 or 3 tone	900-0165
RA-P Rack Adapter Kit, playback. For 19" rack mounting	994-6790
RA-A Rack Adapter Kit, record amplifier. For 19" rack	
mounting	_994-6791

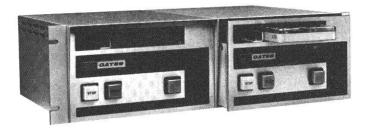
# CRITERION COMPACT PLAYBACK UNIT

The Criterion Compact is the newest, advance-design version of Gates' famous Criterion tape cartridge system. Designed for convenient installation in today's crowded studios, and to conserve valuable rack space in broadcast automation systems, the Criterion Compact playback retains all those features which have made Criterion the industry standard for cartridge machine excellence. These features include: rugged machined aluminum deck; massive 450 rpm direct drive capstan motor; and exclusive, improved Micro-Set precision head assembly. PLUS: new digital-logic cueing; single-card electronics for mono or stereo units; air-damped solenoid for whisper-quiet control room operation; and high-speed cueing (optional).

MODELS AND TYPES: The Criterion Compact playback is available for mono or stereo reproduction. Single or dual-channel playback amplifier cards plug into a common PC receptacle. For convenience, the Criterion Compact is designed for desk or rack mounting at the users' option. Two Compact series reproducers can be mounted side by side in a standard 19-inch equipment rack in the space normally required for a single machine. The Criterion Compact deck slides out of its housing for maintenance.

DIGITAL-CONTROLLED CUEING: 1 kHz primary, 150 Hz secondary, and 8 kHz tertiary cue tones are sensed on a single PC card, utilizing digital logic IC's. All Criterion Compact units are equipped for 3-tone cueing—simply plug in the appropriate relay for external control.

HIGH-SPEED CUEING: An optional feature for the Criterion Compact playback is a 4:1 (30 ips) high-speed drive for rapidly cueing cartridges to the 1 kHz primary cue tone after sensing the 150 Hz end-of-message signal. This can also be accomplished by manual override. The digital IC logic is automatically expanded for sensing in the cue mode, and





measures pulse width rather than frequency or level, for accurate control. All models are designed to add this feature when desired. See ordering information below.

**SUPERB ELECTRONICS:** Integrated circuits, digital logic, and silicon transistor audio circuitry are the basis for Criterion Compact's excellence in quality and reliability. Audio output capability is +18 dBm (+8 dBm nominal) to overcome losses in complex studio or system installations. Audio distortion is virtually unmeasurable, limited only by the recorded tape being played.

#### **SPECIFICATIONS**

POWER: 102-125 volts, 60 Hz (50 Hz on special order). 70 watts maximum. FREQUENCY RESPONSE: +2 dB 50 to 15,000 Hz.

NOISE: 45 dB (stereo), 48 dB (mono) below NAB standard reference. 52 dB (stereo), 55 dB (mono) below tape signal reference of 400 Hz, 3% THD.

DISTORTION: Less than 1% at NAB standard reference level.

AUDIO OUTPUT: 600 ohms, balanced, +8 dBm nominal, +18 dBm maximum.

TAPE SPEED:  $7\frac{1}{2}$  inches per second. Optional 30 ips fast cue accessory available.

TAPE DRIVE SYSTEM: Direct capstan drive, sealed ball bearings.

FLUTTER AND WOW: 0.2% or less.
TIMING ACCURACY: 0.1% or better.

TAPE START AND STOP TIME: Less than 0.1 second.

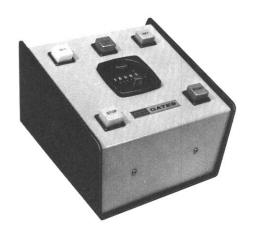
TAPE PULLING FORCE: 3 pounds.

DIMENSIONS AND WEIGHT: Desk Mount:  $5\%_6$  inches high,  $8\%_6$  inches wide,  $12\%_2$  inches deep. Net weight 20 pounds. Rack mount: 5% inches high, 19 inches wide (with rack mounting angles) for two Criterion Compact desk mount housings bolted side-by-side.

#### ORDERING INFORMATION

Criterion Compact Playback, monaural, desk mount	994-6794
Criterion Compact Playback, stereo, desk mount	994-6815
Rack Mounting Kit, for mounting two Criterion Compact play- backs in a single 19" rack	
Quick-Cue Kit for conversion of Criterion Compact to high- speed cueing	994-6816
2nd and 3rd Cue Tone Relay. Add one for each tone desired	574-0162

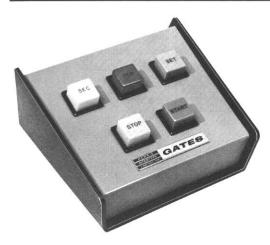




# REMOTE CONTROL/TIMER

Most control functions of the Criterion 80 record/playback unit can be remotely controlled with this attractive and convenient unit. A built-in timer registers the elapsed time of recording, simplifying production of multi-cut tapes. Starting the machine automatically activates the timer elapsed-seconds register. Stop, Start, Record Set, and all cue-tone functions of the Criterion 80 recorder are provided. Illuminated pushbuttons. Desk top unit measures  $7\frac{1}{4}$ " W. x 8" H. x  $4\frac{1}{2}$ " D.

RC-T-8 Remote Control with elapsed time indicator 900-0266



# RECORD/PLAYBACK REMOTE CONTROL

All control functions of the Criterion 80 record/playback unit are remotely controlled from this desk-top unit. Stop/Start switches, also Record Set, Secondary Cue, and Auxiliary Cue functions. When used with Criterion 80 recorder in playback mode, pushbuttons illuminate as cue tones are detected to facilitate checking encoded cartridges. Size:  $5\frac{3}{4}$  inches wide,  $5\frac{1}{2}$  inches high,  $2\frac{3}{4}$  inches deep.

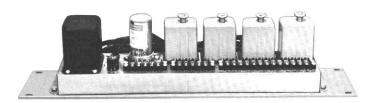
RC-RA-8 Remote Control 900-0267

## PLAYBACK REMOTE CONTROL

For remotely operating up to four Criterion 80 or four Criterion Compact playback units. Operates start circuit only. Includes ready lights and start switches (illuminated). Size: 5¾" W. x 5½" H. x 2¾" D.

RC-P4-8 Playback Control for Criterion 80\_\_\_\_\_\_\_\_900-0268
RC-P4-C Playback Control for Criterion Compact\_\_\_\_\_\_\_994-6817





#### **AUDIO SWITCHER PANEL**

Up to four Criterion 80 units can be switched into one console input through this panel. Use two panels for stereo. Not for Criterion Compact.

AMS-4A Automatic Master Switcher 900-0024





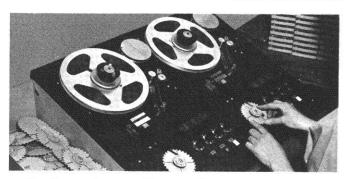
Gates tape cartridges are designed and manufactured to provide you with the finest over-all cartridge performance available today. Each careful production step assures this same high quality performance on the first and one-thousandth use of the cartridge. These tape cartridges meet and exceed all industry standards, and are fully compatible with all NAB standard tape machines.

In the manufacturing process, only the finest quality lubricated tape is used. It is wound on a precision automatic tape winding machine, and carefully spliced with magnifying glass attention. Special polyurethane pressure pads are installed in each cartridge to reduce wow and flutter to a minimum, while providing optimum tape-to-head contact.

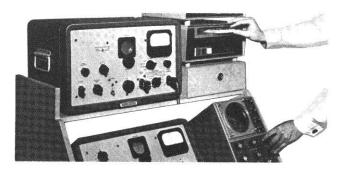
The final production steps include a careful checkout on a tape deck attached to a precision wow and flutter meter, and an additional test involving recording and playback to assure audio excellence. Only after these tests have been completed is the Gates "Label of Quality" added to each cartridge.

### ORDERING INFORMATION

A-300, 40 second cartridge	900-0077
A-300, 70 second cartridge	900-0078
A-300, 100 second cartridge	900-0079
A-300, 2½ minute cartridge	900-0080
A-300, 3½ minute cartridge	900-0081
A-300, 5½ minute cartridge	900-0082
A-300, 10½ minute cartridge	900-0083
B-600, 16 minute cartridge	900-0084
C-1200, 31 minute cartridge	900-0085
A-300 Empty cartridge	732-0220
B-600, Empty cartridge	732-0221
C-1200, Empty cartridge	732-0222
Cartridge Pressure Pads—(50 replacement foam plastic pads)	994-6430
Cartridge labels, 1000 (yellow, red, green, and white)	900-0065
FAL-1A Test Cartridge. Full track, for mono or stereo systems. Includes tones for azimuth alignment, frequency response, and	
standard level reference	900-0090



Tape is wound onto cartridge turntables with a precision tape winding machine to assure exact tape length and playing time.



Each cartridge is tested for recovery level of recorded tone to assure stable levels from cartridge to cartridge.



# TD-1 TAPE ERASER

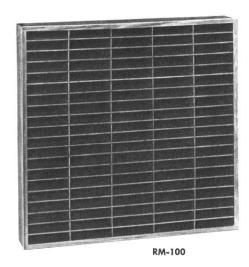
Professional model bulk magnetic tape eraser. Recommended for all sizes of tape cartridges, and reels up to 10½ inches. Lowers residual noise 3 to 6 dB below comparable hand-held units. Pushbutton operation. 117 volts, 50/60 Hz. Weight is 9 pounds. Manufactured by Audiolab.

# ORDERING INFORMATION

TD-1 Tape Eraser 732-0223



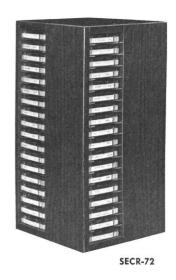
# Tape Cartridge Storage Units



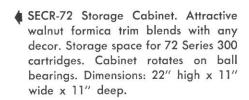
M-5986 Storage Rack. Conveniently stores forty "Type A" Series 300 cartridges in only 10½" of standard rack space.

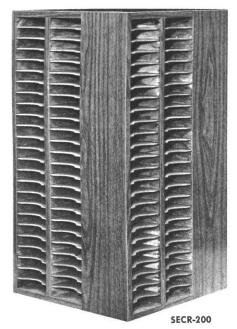


♠ RM-100 Wall Mount Cartridge Rack provides for storage of 100 Series 300 cartridges in minimum space. The unit can be wall or table top mounted. Walnut formica trim. Dimensions 2' H x 2' W x 4¾" D.



RS-200 Lazy Susan Revolving Cartridge Storage Rack—eight removable rack sections each store 25 "Type A" Series 300 cartridges, for a total of 200 for the unit. The RS-25 racks may be removed for use in other studios and are available separately.





♦ SECR-200 Storage Cabinet. Walnut formica trim for attractive over-all appearance. Capable of storing 200 Series 300 cartridges. Rotates on ball bearings. Dimensions: 29½" high x 15¾" wide x 15¾" deep.



RS-200

# ORDERING INFORMATION

M-5986 Storage Rack for 40 Series 300 cartridges	994-5986
RM-100 Storage Rack for 100 Series 300 cartridges	730-0834
RS-200 Storage Rack for 200 Series 300 cartridges	730-0835
RS-25 Storage Rack for 25 Series 300 cartridges (not shown)	730-0836
SECR-72 Storage Cabinet for 72 Series 300 cartridges	900-0147
SECR-200 Storage Cabinet for 200 Series 300 cartridges	900-0148