### **MODEL 352 TAPE REPRODUCER**



# for high fidelity playback of pre-recorded tapes

The Ampex Model 352 is a reproducer that plays prerecorded tapes much as a turntable plays disc records. For those many applications where only the playback function is needed, it serves in lieu of a high quality tape recorder and has special advantages of its own.

No accidental erasures — Since the Model 352 has no recording or erase heads, irreplaceable tape recordings are fully protected from accidental erasure. Thus the 352 is particularly suitable where non-technical personnel will play tapes — or in professional applications where loss through erasure could be high.

Highest quality of reproduction — The finest tape recordings can be reproduced "perfectly" on the Ampex Model 352. It is identical in performance to the playback functions of the Ampex Model 350 Recorder which is so widely used in radio network broadcasting and professional studio recording.

**Lower cost** — The Ampex 352 Tape Reproducer costs less than a recorder of comparable quality. Radio stations, recording studios and educational institutions can in many places use a tape reproducer in lieu of another recorder. Equipment costs are cut without sacrificing quality.

#### APPLICATIONS

**In radio broadcasting** the Model 352 plays transcribed programs and time-delayed network material. In addition it is the safest machine for editing.

For advertising agencies and theatrical and radio booking agents, it is an ideal machine for auditioning taped radio programs, dramatic performances and commercials.

In the professional recording studio, the Ampex 352 provides high quality playback for checking, editing and hearings by studio clients, critics and others.

For educational institutions, it is an exceedingly durable machine for playing pre-recorded tapes. It can be entrusted to student use with minimum danger to tapes.

## The AMPEX Standard of excellence...

The 352 Tape Reproducer incorporates those characteristics that have put Ampex Tape Recorders in a class by themselves.

ADHERENCE TO SPECIFICATIONS. All published specifications are conservative ratings, not exaggerated claims. Each Ampex is instrument-tested to equal or exceed every performance figure (see back page).

15,000 CYCLE/SEC. RESPONSE AT

71/2 IN/SEC. Ampex machines meet NARTB primary standards at a tape speed of 71/2 in/sec. as well as at 15 in/sec. Tapes maintain these characteristics when interchanged between any Ampex equipment.

FREEDOM FROM NOISE AND DISTORTION.

Signal-to-noise ratio of single track Model 352 Reproducers is over 60 db at the level of 3% distortion of a 400 cycle tone. Flutter and wow are well under 0.2% rms at 15 in/sec. and under 0.25% rms at 7½ in/sec **ACCURACY OF TIMING.** Timing is accurate within  $\pm$  3.6 seconds in 30 minutes program time. Timing accuracy is a "built-in feature"—not a precarious balance of adjustments. It is standard from one Ampex to another.

FAST RESPONSE TO CONTROLS. Starting time is "instantaneous" — full stable tape speed in less than 1/10th second. In stopping, the tape moves less than 2 inches even at 15 in/sec. tape speed. Exact cueing is routine on an Ampex.



# GENERAL PERFORMANCE CHARACTERISTICS AND SPECIFICATIONS

TAPE SPEEDS

FREQUENCY RESPONSE

71/2 and 15 in/sec.

15 in/sec.  $\pm$  2 db 30 to 15,000 cycles/sec.

Half Track 65 db

 $7\frac{1}{2}$  in/sec.  $\pm$  4 db 30 to 15,000 cycles/sec. ( $\pm$  2 db 40 to 10,000 cycles/sec.)

SIGNAL-TO-NOISE RATIO

Max. Record Level
Speed to Unweighted Noise
15" Full track 70 db
Half track 65 db
71/2" Full track 70 db

Peak Record Level to Unweighted Noise Full track 60 db Half track 55 db

Full track 60 db Half track 55 db Full track 60 db Half track 55 db The peak record level is defined as that level at which an overall (input to output) total RMS harmonic distortion is 3% when measured on a 400 cycle tone. Noise is measured when erasing a signal of peak recording level and in absence of new signal. Thus, bias and erase noise are included as well as playback amplifier noise. All frequencies between 30 and 15,-000 cycles are measured.

FLUTTER AND WOW

15 in/sec. 7½ in/sec. Well below 0.2% Well below 0.25% The flutter and wow measurements, include all components between 0 and 300 cycles/sec. using an RMS meter calibrated to read the peak value of constant amplitude sinusoidal flutter.

32 min.

64 min.

**PLAYING TIMES** 

## Speed - ## Speed - ## 15 in/sec. reels (2400 feet of tape) ## 7½ in/sec. 7½ in/sec.

Half Track 64 min. 2 hrs. 8 min. Full Track

STARTING TIME

STOPPING TIME

Instantaneous (tape accelerates to full speed in less than 1/10 second).

At 15 in/sec. speed, tape moves less than two inches after pressing "Stop" button.

PLAYBACK TIMING ACCURACY

 $\pm$  0.2% ( $\pm$  3.6 seconds in a thirty minute recording).

REWIND TIME

Approximately one minute for 2400-foot NARTB reel; 30 seconds for 1200-foot RMA reel.

CONTROLS

Tape motion controlled by four pushbuttons; Start, Stop, Fast Forward and Rewind. Tape speed changed by a Motor Speed Switch and Equalization Switch. Reel Size Switch provides proper tape tensions for NARTB 101/2" reels or RMA 5" and 7" reels.

OUTPUT

Plus 4 VU output into 600 ohms, balanced or unbalanced. Will feed a high input impedance amplifier directly with approximately one volt.

PLUG-IN HEAD HOUSING

POWER REQUIREMENTS

Playback heads are contained in a single plug-in head housing.

Either half or full-track machines require 2.4 amperes at 117 volts A.C. Machines are available for either 50 or 60 cycle operation.

**RACK SPACE** 

Standard 19 inch wide panel with commercial notching.

Tape Transport, 1534 inches of rack space, weight . . . 50 lbs. Electronic Assembly, 51/4 inches of rack space, weight . . . . 131/2 lbs. Power Panel, 134 inches of rack space, weight . . . . 1 lb.

**CONSOLE DIMENSIONS** 

35'' high x  $24\frac{1}{4}''$  wide x  $24\frac{3}{4}''$  deep; weight 109 lbs.

### OPTIONS TO SPECIFY WHEN ORDERING

MOUNTING STYLE

TRACK WIDTH

Console or rack-mount\_
Full track or half track\_

Ton mack of man macks

POWER LINE FREQUENCY 60 or 50 cycle/sec.\_

#### ACCESSORIES

REMOTE CONTROL UNITS (Cat. #5763 and Cat. #5763-1)

> VU METER PANEL Cat. #4331-1)

Controls, **Start, Stop, Fast Forward,** and **Rewind** from a remote location. Catalog #5763 is mounted in a wooden case and is completely wired. Catalog #5763-1 is mounted on a flat plate for flush mounting in studio consoles and is not wired.

Includes VU meter, attenuation controls and phone jack. The attenuator and VU meter permit control of output level (otherwise output of the 352 Reproducer has a fixed setting of 4 VU and must be controlled externally).

AMPEX

DISTRIBUTED BY

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