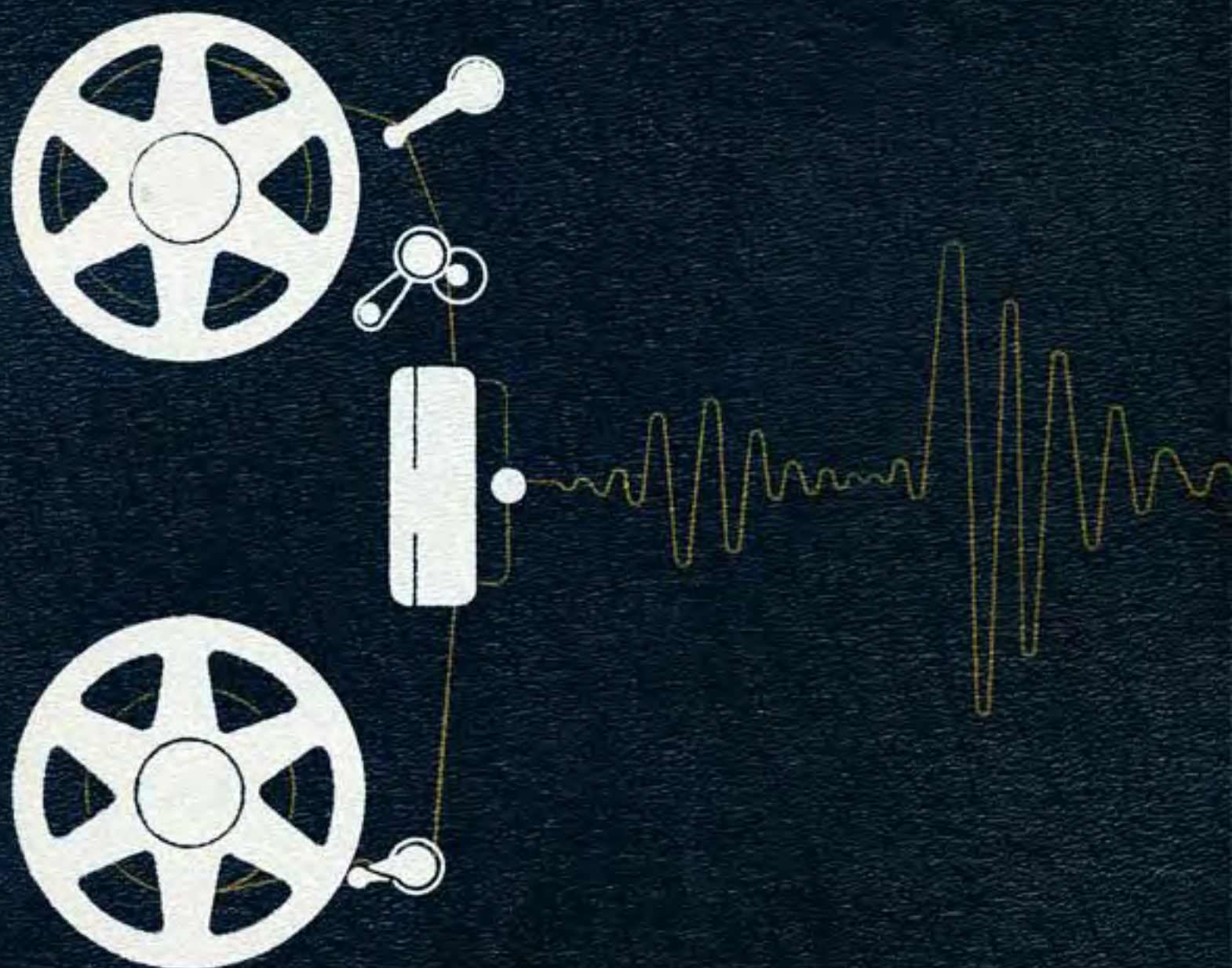


# AMPEX

MODEL 600



AUDIO DIVISION

AMPEX CORPORATION

934 CHARTER STREET, REDWOOD CITY, CALIFORNIA

DESCRIPTION AND SPECIFICATIONS

The AMPEX Model 600 is a lightweight portable magnetic tape recorder designed to meet the needs of both professional and non-professional users in remote pickups, custom home installations, and studio applications.

The AMPEX 600 is available in various combinations of operating conditions as listed below:

Power Input . . . . . 117 volts, 50 or 60 cycles,  
 Tape Speed . . . . . 7-1/2 or 3-3/4 inches per second,  
 Head Assembly . . . . . full-track or half-track,  
 Electronics Input . . . . . high or low impedance,

Sections I through VI of this manual are concerned primarily with the basic version of the Model 600; a 7-1/2 ips, full track, high impedance input portable recorder to be used with 117 v, 50 or 60 cps power. Additional notes and information on standard variations of this basic machine are given in the supplement, Section VII, which also covers accessory equipment for machines in this series. It is suggested that service personnel refer to the appropriate parts of Section VII as a preliminary to the operation and servicing of machines other than the basic version.

The complete basic equipment, as shipped from the factory, includes the following:

<u>Item</u>	<u>Ampex Cat. No.</u>
(1) Tape Transport (7-1/2 in/sec, full track)	6200
(1) Electronic Assembly	6350
(1) Carrying Case (with hardware)	9417
(1) Power Cord	CS-2
(1) 7-inch RTMA Plastic Reel	RD-4
(2) Reel Hold-Down Knobs	6319
(1) Microphone Plug	PL-33P
(1) Phone Plug	PL-324P
(1) RTMA Pin Plug	PL-323P
(1) Operator's Guide	

The performance specifications and physical characteristics of the "basic" machine are as follows:

TAPE SPEED

7-1/2 in/sec, full track

REEL SIZE

7 in, RTMA reel maximum

## FREQUENCY RESPONSE

40 to 15,000 cycles/sec  
 $\pm 2$  db 50 to 10,000 cycles/sec  
down no more than 4 db at 15 Kc

## SIGNAL TO NOISE RATIO

Over 55 db below Peak Record Level (defined as 3% total rms harmonic distortion when measured on 400 cycle tone; noise includes bias, erase, and playback amplifier noise).

## FLUTTER AND WOW

Below 0.25%

## STARTING TIME

Instantaneous - (tape accelerates to full play-record speed in less than one second)

## STOPPING TIME

Less than one second

## PLAYING TIME

32 minutes with 7 in. reel (1200 feet)

## FAST FORWARD OR REWIND TIME

90 seconds for full 1200-foot reel

## PLAYBACK TIMING ACCURACY

$\pm 0.2\%$  ( $\pm 3.6$  seconds in a 30-minute recording)

## OPERATING MODES

Play-Record: Selector Switch (safety button must be pressed when going from Play to Record)

Fast Forward-Rewind: Selector Switch (interlocked with Play-Record Switch)

## LEVEL CONTROLS

Separate Mixing Controls: Microphone Record Level, and Line Record Level

## RECORD INPUTS

Microphone: Accommodates any high impedance microphone (may be modified for low impedance microphone by adding accessory transformer).

Line: 0.5 volt required for program level (1% distortion)

## PLAYBACK OUTPUT

1.25 Volts into 10,000 ohms at program level

## MONITORING

Phone jack and illuminated VU meter. Either program input or playback output may be monitored while recording, depending on position of Monitor Selector switch. (A-B)

## HEAD ASSEMBLY

Separate erase, record, and playback heads contained in a single housing.

## POWER REQUIREMENTS

117 volts, 50 or 60 cycles; .52 amperes, 61 watts (power line frequency is indicated on serial number plate on side of case).

## DIMENSIONS

Tape Transport:	9-5/16" x 12-1/2" x 5"
Electronics:	6-1/8" x 12-1/2" x 5"
Overall Size, Including Case:	16-1/2" x 13-3/4" x 8"

## WEIGHT

26 pounds, including case

## ACCESSORIES

Low impedance Microphone Transformer Kit: Catalog No. 9359