Announcing...

AMPEX 600

MAGNETIC TAPE RECORDER



THE PERFECTION
IN SOUND RECORDING THAT ONLY AN AMPEX CAN PROVIDE
NOW IN A TRULY PORTABLE SIZE
AT A NEW LOWER PRICE



THE AMPEX 600-HIGHEST QUALITY IN THE SMALLEST



A TRUE AMPEX IN PERFORMANCE

Ampex Fidelity Assured . . . Like all Ampex models, specifications for the 600 are conservative ratings, not exaggerated claims. Each Model 600 Recorder is factory-tested to equal or exceed its published performance figures.

Studio Console Performance... At its $7\frac{1}{2}$ ips speed, the Model 600 has performance comparable to the larger Ampex machines in these important characteristics:

- Frequency response 40 to 15,000 cps.
- Sianal-to-noise ratio over 55 db.
- Flutter and wow under 0.25%.
- ullet Timing accuracy within \pm 3.6 seconds for its full tape length of 30 minutes.
- Direct-reading meter for record level
- 3 separate heads (erase, record and playback) and separate record and playback amplifiers.

Full or Half Track ... Full track machines are generally preferred by broadcast stations, recording studios and others who do extensive editing. Half track machines are used by musicians, schools, audiophiles and others for tape economy and for the playing of pre-recorded tapes. The half track machine can play back either full or half track recordings and may be used for editing provided material is recorded on only one track.



Never before could so much be recorded so well on a machine so small.

NEW VERSATILITY

... For Broadcast Studios

For outside or in, the Model 600 is a heavy duty, all-purpose machine. It combines high fidelity, accurate timing, durability and freedom from noise to a degree never before available at its price. For stations presently equipped with the larger Ampex machines, the 600 provides matching quality in truly portable equipment.

... For Musicians, Conservatories and Schools

It is the machine for music rehearsals where sound of constant pitch and imperceptible distortion is desired. It can be started and stopped at any place throughout its full tape length and still be in tune with the band, orchestra or soloist.

... For Audio Visual Education

Ampex 600's can be the "master recorders" of the school or school system. They provide quality where quality is needed in music, and in tapes for recopying, for radio broadcast, for competition or for demonstration. Yet the 600 is rugged, and readily portable from one classroom to another.

... For High Fidelity Enthusiasts

Its matchless Ampex fidelity makes it a possession of envy among "adventurers in recorded sound" and persons who know and appreciate truly fine reproduction of music.

PACKAGE

The Ampex 600 is a 28-pound professional tape recorder for highly critical users: broadcast stations, recording studios, high fidelity enthusiasts, educational institutions and others. It has the same performance excellence as its companion console model the Ampex 350. A recording made on the 600, when played back side-by-side with the same recording from the 350, gives the same class of fidelity and equal accuracy of timing and pitch.

WITH NEW LOWER PRICE

Model 600 gives proven Ampex quality at a price substantially lower than any previous Ampex equipment. It is lower in price than any comparable recorder of equivalent fidelity.

... Achieved by Greatly Simplified Design

The 600 uses the same quality of components as other Ampex machines, but it is much smaller in size and uses 5 or 7-inch (or smaller) RMA reels. It operates at the one most economical tape speed that achieves the recognized standards of Ampex performance. Through ingenious design and simplification, it has fewer electronic and mechanical parts.

... Gives More Hours of Reliable Service per Dollar

This machine will give exceptional service for years of heavy professional use. Vital mechanical parts have been severely lifetested at the equivalent of greater than 10 years operation; lesser parts have been tested for 30,000 to 40,000 operations. Prototype models have been tested by typical users in many fields and their comments and suggestions have been incorporated into the final design.

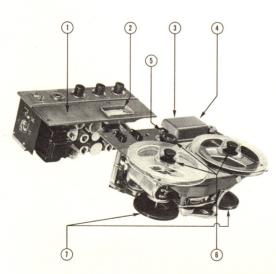
WITH NEW PORTABILITY

Weighs less than 28 pounds . . . The Ampex 600 is the lightest of any truly high fidelity professional tape recorder. It can be carried anywhere in one hand.

Rugged!... The 600 has a special deepribbed top-plate casting which is mounted in a rugged Samsonite case. All of its parts are life-tested for rough usage in the field. It withstands the bumps and hazards of transportation by car, bus, truck, train or plane.



NO OTHER PORTABLE RECORDER IS BUILT WITH...



SUCH PRECISION AND ALL THESE COMPONENTS

- Separate record and playback amplifiers.
- 2 Direct-reading meter for recording level.
- 3 Separate erase, record and playback heads.
- Magnetic playback head gap width: .00025 inches.
- Tape capstan runs true within .0002 inches (total indicator reading).
- 6 Extremely close tolerances in all bearings and shafts.
- Tape tension controlled to 8 ounces maximum.

LET PERFORMANCE BE YOUR GUIDE -- BUY



OTHER PRACTICAL FEATURES

EASE OF OPERATION

- "Wrap around" threading only one hand is needed to thread tape onto machine.
- Tape reaches full speed in less than one second.
- Can go from play to record (and erase) position and back again without stopping the tape.

ACCURATE PROGRAM CONTROL

- Meter indicates quantitative record levels.
 The exact program level is known at all times. There is no "guesswork" as is the case with flashing lights.
- Independent level controls for microphone and line provide a "built-in" two channel mixer.
- Phone jack permits monitoring input to record head or the playback output of tape while recording.
- Record safety button prevents unintentional erasures.

EASY ON TAPE

- Low tape tension in all operating modes (8 ounces maximum).
- Interlocking tape-motion controls permit quick change of direction without overstressing tape.

EASE OF MAINTENANCE

- "Lift out" accessibility—the mechanical and electronic assemblies can be removed independently.
- The machine may be operated and serviced in a vertical or horizontal position.

ADAPTABLE TO THE "HI-FI" HOME

 It is easy to adapt the Model 600 to console or "built-in" installation in the home.
 Its separate mechanical and electronic assemblies can be mounted in any most pleasing manner.





GENERAL PERFORMANCE CHARACTERISTICS AND SPECIFICATIONS

TAPE SPEED

71/2 in/sec.

REEL SIZE

7" RMA reel maximum; top may be closed with 5" reels.

FREQUENCY RESPONSE

40 to 15,000 cycles/sec.; down no more than 4 db at 15,000; \pm 2 db from 40 to 10,000 cycles/sec.

SIGNAL-TO-NOISE RATIO

Over 55 db at 3% harmonic distortion.

FLUTTER AND WOW

Below 0.25%.

STARTING TIME

Instantaneous (tape accelerates to full play mode in less than one second).

STOPPING TIME

Less than one second.

PLAYING TIME

32 minutes with 7 inch, 1200-foot reel. (32 minutes each direction on half-track machines)

FAST FORWARD OR REWIND TIME PLAYBACK TIMING ACCURACY 90 seconds for full 1200-foot reel.

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

OPERATING MODES

 ${\sf Play-Record: Selector\ Switch\ (safety\ button\ must\ be\ pressed\ when\ going\ from\ Play\ to\ Record).}$

Fast Forward — Rewind: Selector Switch (Interlocked with Play — Record Switch).

LEVEL CONTROLS

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

Professional Meter reads directly all operating levels.

RECORD INPUTS

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

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

PLAYBACK OUTPUT

1.25 volts into 10,000 ohm load at program level.

MONITORING

Phone jack permits monitoring the input to the record head or the playback output of the tape while recording. This is done with a Monitor Selector Knob which is turned to "Input" or "Tape."

AMPLIFIERS

Separate record, playback, microphone and line input amplifiers are used. Amplifier distortion at any operating level is negligible.

HEAD HOUSING

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

POWER REQUIREMENTS

117 volts, 0.52 amperes, 61 watts, (60 or 50 cycles optional).

DIMENSIONS

Transport top area: $9\frac{5}{16}$ " x $12\frac{1}{2}$ ". Electronic top area: $6\frac{1}{8}$ " x $12\frac{1}{4}$ ". Depth below top plate: 5".

Overall size, including carrying case: $8'' \times 13\frac{3}{4}'' \times 16\frac{1}{2}''$.

WEIGHT

Less than 28 pounds.

ACCESSORIES

Low Impedance Microphone Transformer Kit: Catalog No. 9359.

Amplifier-speaker unit in matching case: Ampex 620 $3^{3}/_{4}$ tape speed conversion kit: Catalog No. 7556 (60 cycle).

Rack mount adapter panel: Catalog No. 9684.

OPTIONS TO SPECIFY WHEN ORDERING

Full or half track

Portable case or unmounted chassis

60 or 50 cycle operation



CORPORATION

934 CHARTER STREET REDWOOD CITY, CALIFORNIA DISTRIBUTED BY