



# AMPEX

## 601-2



## Portable Two-Track Stereophonic Recorder

*Full Professional Quality in  
Recording and Reproducing  
Stereophonic Sound...with  
the utmost in convenience  
and portability*

### Check these Ampex-engineered features!

- Precision In-Line Stereo heads for recording and playback
- Freedom from inter-channel crosstalk
- Separate mixing facility on each channel between microphone and other inputs
- Records both stereo and single channel tapes
- Plays back stereo, full or half track tapes

### PLUS these performance-proved features of the Ampex 601!

- Instantaneous starting
- Illuminated record safety button
- Low impedance output
- Plug-in low impedance microphone transformer

### COMBINES PERFECTION WITH PORTABILITY

The Ampex 601-2 offers a new high level of perfection in professional stereophonic recording and reproduction, and makes it available in its most compact, portable form. Tapes recorded on the 601-2 are indistinguishable from those recorded at the same tape speed on Ampex Models 300-2 and 350-2.

The recorder safely handles "50% extra playing time" tapes to give you 48 minutes of stereophonic recording time at 7½ i.p.s.

### VERSATILITY FOR BROAD APPLICATION

Stereophonic tapes recorded on the Ampex 601-2 offer authentic realism, not only because of wide frequency and dynamic ranges, but also because of the audio perspective, the depth and direction afforded by true stereophonic sound. Among the many applications for stereophonic sound are these: broadcasting, research on sounds, acoustical and noise reduction studies, music and dramatic rehearsal, court room and conference reporting, military uses, re-creation of music in the home or auditorium, and sales promotion or demonstration programs.

A particularly advantageous use of the 601-2 is in making two-channel recordings for monaural playback. In recording a soloist against an orchestral background, for example, the soloist can be recorded on one channel and the orchestra on the second channel. On playback, the balance of sound level between the soloist and orchestra can be continuously monitored

and adjusted while re-recording on single channel tape or disc. This technique also lends itself to special acoustic effects such as selective addition of echo to one channel.



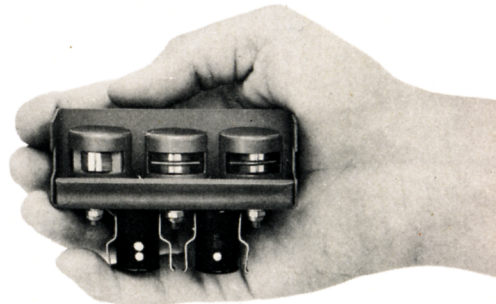
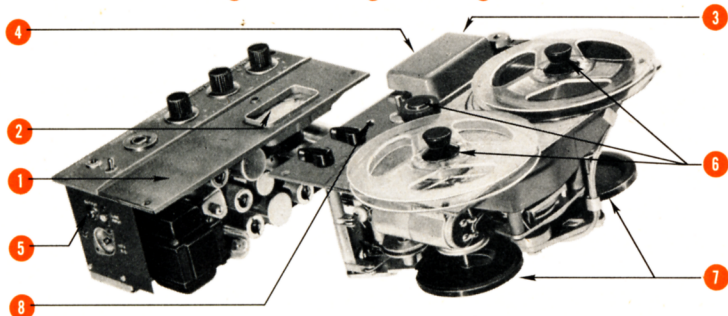


## AMPEX DESIGN plus AMPEX ENGINEERING makes AMPEX QUALITY

Year-in, year-out, Ampex recorders offer a dependability of performance that has made them the standard of the recording industry. Rugged, die-cast parts, high-quality components, and safety factors well above specifications all add up to unmatched reliability and freedom from mechanical and electrical failures. Quiet, vibrationless operation and precision speed control are assured by shock-mounted synchronous power

drive, positive shaft alignments, and lifetime bearings. Ampex recorders are characterized by absolute uniformity, part-to-part and recorder-to-recorder. This uniformity comes not only from rigid adherence to tolerances and specifications, but even more from a basic uniformity in the processes of design, engineering and construction. The overall result is an unmatched uniformity of performance.

### Check these design and engineering features that add up to AMPEX PERFORMANCE



- 1 Separate record and playback amplifiers
- 2 Direct reading meter for both playback and recording levels
- 3 Separate erase, record and playback heads
- 4 Magnetic playback head gap width: .00025"
- 5 Low impedance output
- 6 Extremely close tolerances in all bearings and shafts
- 7 Tape tension controlled to 8 ounces maximum
- 8 Illuminated safety button to indicate recording mode.

The head assembly consists of a Full-Track ERASE, Two-Track RECORD, and Two-Track PLAYBACK arrangement, in this order.

MODEL

**601-2**

### GENERAL PERFORMANCE CHARACTERISTICS AND SPECIFICATIONS

<b>HEADS</b>	Full-track erase, 2 channel (in-line) record, and 2 channel (in-line) playback heads, in that order.
<b>TAPE SPEED</b>	7 1/2 in/sec.
<b>REEL SIZE</b>	7" RETMA reel maximum; top may be closed with 5" reels.
<b>FREQUENCY RESPONSE</b>	30 to 15,000 cycles/sec.; down no more than 4 db at 15,000; ± 2 db from 40 to 10,000 cycles/sec.
<b>SIGNAL-TO-NOISE RATIO</b>	Over 50 db at 3% harmonic distortion.
<b>EFFECTIVE INTER-TRACK CROSSTALK REJECTION</b>	In excess of 50 db.
<b>FLUTTER AND WOW</b>	Below 0.17%.
<b>STARTING TIME</b>	Instantaneous (tape accelerates to full play mode in less than one-fifth second).
<b>STOPPING TIME</b>	Less than one second.
<b>PLAYING TIME</b>	32 minutes with 7-inch, 1200-foot reel; 48 minutes with 7-inch, 1800-foot reel.
<b>FAST FORWARD OR REWIND TIME</b>	90 seconds for full 1200-foot reel.
<b>PLAYBACK TIMING ACCURACY</b>	± 0.2% (± 3.6 seconds in a 30 minute recording).
<b>OPERATING MODES</b>	<i>Play—Record</i> : Selector Switch (safety button must be pressed when going from Play to Record). Safety button is illuminated in record mode. <i>Fast Forward—Rewind</i> : Selector Switch (interlocked with <i>Play—Record</i> Switch).
<b>LEVEL CONTROLS</b>	Separate Mixing Controls for each channel: <i>Microphone Record Level</i> , and <i>Line Record Level</i> . Two Professional Meters read directly all operating levels on each channel.
<b>RECORD INPUTS (EACH CHANNEL)</b>	Microphone: Accommodates high or low impedance microphone (Low impedance microphone input secured by adding accessory plug-in transformer Ampex Cat. No. 17331-1). Line (unbalanced): 0.5 volt required for program record level.
<b>PLAYBACK OUTPUT (EACH CHANNEL)</b>	600 ohms, 1.23 volts. Balanced or unbalanced (from tapes recorded at program level).
<b>MONITORING</b>	Two phone jacks permit monitoring the 2 channel input to the record head or the 2 channel playback output of the tape while recording. This is done with Monitor Selector Knobs which may be turned to "Input" or "Tape."
<b>AMPLIFIERS (EACH CHANNEL)</b>	Separate record, playback, microphone and line input amplifiers are used. Amplifier distortion at any operating level is negligible (maximum 1% distortion).
<b>HEAD HOUSING</b>	Three separate heads: erase, 2 channel record, 2 channel playback. Heads are contained in a single head housing.
<b>POWER REQUIREMENTS</b>	117 volts, 60 cycle, 85 watts.
<b>DIMENSIONS</b>	Transport top area: 9 5/8" x 12 1/2". Electronic top area (each of 2): 6 1/8" x 12 1/4". Depth below top plate: 5". Overall size, including carrying case: 8" x 13" x 24 1/2".
<b>WEIGHT</b>	42 pounds.
<b>ACCESSORIES</b>	Plug-in Low Impedance Microphone Transformer: Catalog No. 17331-1. Amplifier-speaker unit in matching case: Ampex 620.
<b>OPTIONS TO SPECIFY WHEN ORDERING</b>	Portable case or unmounted chassis. 60 cycle operation (50 cycles available on special order). 7 1/2 ips tape speed (3 3/4 ips available on special order).

**SIGNATURE OF PERFECTION IN SOUND**

**AMPEX**  
CORPORATION

934 Charter Street  
Redwood City, California