

AMPEX 960

STEREOPHONIC

RECORDER/REPRODUCER



RECORDS STEREO
OR MONAURAL

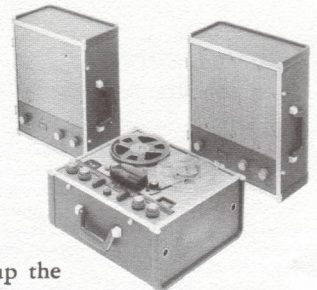
Stereo Portable PLUS!

Guiding the Ampex engineers who created the 960 was a dual objective—that of building a machine which was not only a superb example of engineering skill, but one which would also offer its user a range of capabilities far exceeding that of any other recorder made today. The result was not merely an improved stereo recorder, but *an entirely new concept* in home entertainment.

The STEREO 960 fits into family life in literally dozens of ways, contributing many tangible benefits in musical, educational and recreational fun. You'll use it to keep up the family correspondence by sending "letters in sound", to tape stereo programs off the air, to preserve your best monaural and stereo discs on tape, and to acquire new musical and language skills. You'll have endless fun exploring the 960's many fascinating recording capabilities, including sound-on-sound, echo chamber effects, and other advanced techniques.

ABOVE--960 PORTABLE STEREO
RECORDER/REPRODUCER

BELOW--MODEL 2560 PORTABLE
STEREO SYSTEM CONSISTING OF
960 AND PAIR OF 2010
AMPLIFIER-SPEAKERS



AMPEX STEREO

SIGNATURE OF PERFECTION IN SOUND

RECORDER/REPRODUCER SPECIFICATIONS

The true values of a recorder are best assessed through careful evaluation of its performance specifications and operating features. It is worthwhile noting here that these specifications are based not on theoretical design parameters but on actual performance tests. They are specifications which the recorder not only meets or exceeds today, but which years from now will still hold true. The Ampex Model 960 Stereophonic Recorder/Reproducer is capable of essentially distortionless frequency response from 30 to 20,000 cycles per second at the operating speed of 7 1/2 inches per second, and from 30 to 15,000 cycles per second at 3 3/4 inches per second. Its precision-engineered timing accuracy is such that it offers perfection of pitch held to tolerances of less than one-third of a half-tone. Playing times, using standard (.002"), long play (.0015"), and extra-long play (.001") tapes are as follows:

	(a) 4-Track Stereo Tapes	(b) 2-Track Stereo Tapes	(c) Monaural Tapes, half-track
1200 foot reel	3 3/4 ips - 2 hrs. 8 min. 7 1/2 ips - 1 hr 4 min.	3 3/4 ips - 1 hr. 4 min. 7 1/2 ips - 32 minutes	3 3/4 ips - 2 hrs. 8 min. 7 1/2 ips - 1 hr 4 min.
1800 foot reel	3 3/4 ips - 3 hrs. 12 min. 7 1/2 ips - 1 hr 36 min.	3 3/4 ips - 1 hr. 36 min. 7 1/2 ips - 48 minutes	3 3/4 ips - 3 hrs. 12 min. 7 1/2 ips - 1 hr 36 min.
2400 foot reel	3 3/4 ips - 4 hrs. 16 min. 7 1/2 ips - 2 hrs. 8 min.	3 3/4 ips - 2 hrs. 8 min. 7 1/2 ips - 1 hr. 4 min.	3 3/4 ips - 4 hrs. 16 min. 7 1/2 ips - 2 hrs. 8 min.

RECORD INPUTS: High impedance line inputs (radio/TV/phono/auxiliary) 0.3V rms for program level; high impedance microphone inputs

PLAYBACK OUTPUTS: Approximately 0.5V rms from cathode follower when playing program level tapes

PLAYBACK FREQUENCY RESPONSE: 30-20,000 cps at 7 1/2 ips; 30-15,000 cps at 3 3/4 ips
Within ±2 db 50-15,000 cps at 7 1/2 ips, 55 db dynamic range
Within ±2 db 50-10,000 cps at 3 3/4 ips, 50 db dynamic range

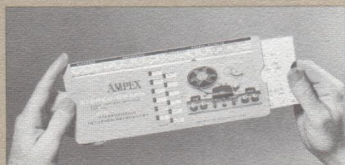
FLUTTER AND WOW: Under 0.2% rms at 7 1/2 ips; under 0.25% rms at 3 3/4 ips

HEADS: Manufactured to the same standards of precision that exist in Ampex broadcast and recording studio equipment. Surfaces are lapped to an optical flatness so precise that they reflect specified wavelengths of light, resulting in uniform performance characteristics and greatly minimizing the effects of head wear. Azimuth alignment of stereo head gaps in the same stack is held within 20 seconds of arc, equivalent to less than 10 millionths of an inch—a degree of precision achieved through use of a unique process involving micro-accurate optical measurements within a controlled environment. Head gap width is 90 millionths of an inch ±5 millionths of an inch.

KEY TO THE EXCITING FUN FEATURES OF THE 960 --

THE AMPEX STEREO-GRAPH

Here's the simplest, quickest answer to almost every question about how to perform the operations illustrated at right and numerous other recording functions. The Ampex Stereo-Graph shows you, quickly and clearly, the proper dial settings to make for more than a dozen of the most popular uses for the 960 . . . including sound-on-sound, language and music instruction,

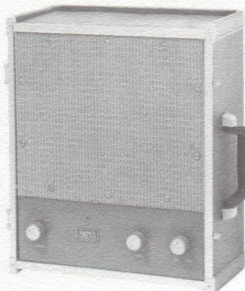


and other special effects. A convenient tape footage/playing time indicator is included on the reverse side.

MODEL 2010 MATCHING AMPLIFIER-SPEAKER

The Ampex Model 2010's ten-watt (20 watts peak) amplifier section provides operating characteristics (unequalized) flat within ±0.1 db, with total harmonic distortion less than 0.5 of 1%, throughout the maximum range of human hearing ability, at rated output. Noise and hum are 80 db below rated output, and input sensitivity is 0.18V to develop rated power.

The specially designed 8" speaker provides smooth, peak-free response throughout a remarkably wide audio range. Such superior design features as its massive die-cast frame and edgewise-wound ribbon coil contribute effectively to higher levels of performance than ever before achieved with a speaker this size.



AMPEX AUDIO, INC. • SUNNYVALE, CALIFORNIA

AANS

Relax and enjoy the show—let your Ampex do the narration! With the commentary on tape, your color slide shows are more professional, more complete, and more fun!

Your favorite LP's and Stereo Discs are at their exciting best while they're new and unscratched. That's when to tape them on your Ampex, and preserve their original quality for keeps!

When you tape it "off the air" your only cost is for blank tape. Yet your musical repertoire can soon equal that of all the stations you hear!

There's a real future in family fun like this—with your Ampex you can live such happy moments over and over again, with a quality so lifelike you're almost literally carried back.

In the Ampex "Speech Testing Game", you pit your wits against the trigger-quick memory of the Ampex recorder/reproducer. You can't win, but it's fun trying.

Letter-writing is no longer a problem, with an Ampex in the house . . . now it's a family project. And even more fun than sending letters in sound is receiving them!

For "letters in sound", the 3" tape reel holds as much as a 10-page letter, mails first class anywhere in the United States for 8c.

A command performance, exclusively for you! Whether you prefer jazz, pops, or classical, the privacy of headphone listening is a unique pleasure. You don't disturb the rest of the family, and they don't disturb you!

The Ampex, in private rehearsal, can be a wonderful confidence-builder for people who normally develop rubber knees when faced with the prospect of speaking before a group.

Learning to speak a new language is made immeasurably easier on the Ampex; you can record your own phrases side-by-side with those of the instructor, and play them back for comparison at any time.

When you strike up the band in stereo, you don't need professional musicians to make a professional recording. Advanced techniques are amazingly easy on the Ampex.