Specifications

RECORDER-STEREOPHONIC REPRODUCER

The Ampex tape recorder is a professional instrument, capable of an essentially distortionless frequency response of from 30 to over 16,000 cps. Precision engineered timing accuracy affords perfection of pitch to tolerances of less than ⅓ of a half tone. The recorder accommodates both standard (.002") and thin (.0015") tape thicknesses and handles tape so gently that it may even be used with the new "Superthin" (.001") tape to provide over 4 hours playing time from a single reel of tape. Maximum reel size 7".

Operating Characteristics

HEADS: Manufactured to the same standards of precision that exist in the Ampex Broadcast and Recording studio recorders. All Ampex heads are lapped to an optical flatness so precise that they reflect specified wavelengths of light. This results in reducing head and tape wear to an absolute minimum. Half-track record and erase heads; in-line stereo head stack — capable of half-track, full-track, or stereo playback.

TAPE SPEED: 7½ and 3¾ inches per second.

FREQUENCY RESPONSE:
at 7½ ips, 30 to 16,000 cps ± 2 db 50 to 10,000 cps.
at 3¾ ips, 30 to 8,000 cps ± 2 db 50 to 5,000 cps.

SIGNAL-TO-NOISE: Better than 55 db below peak record level (3% distortion at 400 cps) at 7½ ips. Better than 50 db at 3¾ ips.

FLUTTER AND WOW:
Under 0.25% rms at 7½ ips. Under 0.3% rms at 3¾ ips.

PLAYING TIME:* 7 Inch Reels, Half-Track
1200 ft. reel — 7½ ips, 1 hr. 4 min. — 3¾ ips, 2 hrs. 8 min.
1800 ft. reel — 7½ ips, 1 hr. 36 min. — 3¾ ips, 3 hrs. 12 min.
2400 ft. reel — 7½ ips, 2 hrs. 8 min. — 3¾ ips, 4 hrs. 16 min.
*Playing times for stereo reels ½ that shown above, since both tracks are in use simultaneously.

REWIND TIME: Less than 90 sec. for full 1200 ft. reel.

RECORD INPUTS: High impedance line input (Radio/Phono/TV) 0.4 V rms for program level. High impedance microphone input.

PLAYBACK OUTPUT: Greater than 0.75 rms (from program level tapes) from cathode follower into high impedance load (100k ohms or greater).

Additional specifications available upon request.

Prepared by Boland Associates

Printed in U.S.A.

AMPEX

STEREOPHONIC SOUND

for the home

AMPEX AUDIO INC.

Memorable Musical Moment

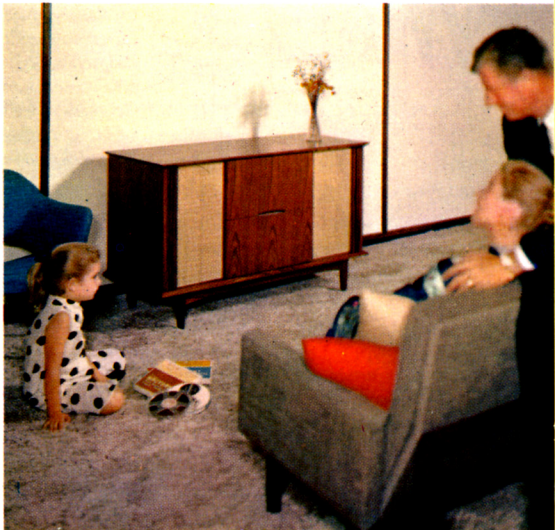
It was the evening of March 3, 1956. At the San Francisco Opera House, conductor Enrique Jordá took the podium before a hushed audience and turned to face the world-renowned San Francisco Symphony Orchestra. The baton rose, held tremulously for two seconds, then came down with a sweeping authority to command the presentation of the Overture to "The Marriage of Figaro."

It was a brilliant performance, and – as the audience was soon to discover – a historic one. Halfway through, a strange thing happened. Conductor Jordá put down his baton, the musicians laid their instruments aside, and the music played on! The "Marriage of Figaro" had never sounded better – yet the astonished audience could now see that the musicians had been plucking at silent strings and blowing into silenced horns. The actual sound was coming from recorded tape; Ampex Stereophonic Sound had proved, to an alert and discriminating audience, that it was indistinguishable from an actual flesh-and-blood performance!

Ampex is a name synonymous with perfection in sound throughout the musical world. Ampex equipment is used by every major broadcast network, by leading recording companies and by professionals in every branch of the audio field.

The amazing new Videotape recorder that captures both the sight and sound of TV on tape is an Ampex achievement. So is the thrilling sound in Todd-AO "Around the World in 80 Days," and in award-winning Cinemascope productions.

Now the tremendous engineering skill and technical know-how of Ampex brings a new high level of enjoyment into your home . . . *True* Stereophonic Sound by Ampex – a new dimension in listening entertainment, *as dramatically alive as the original performance.*



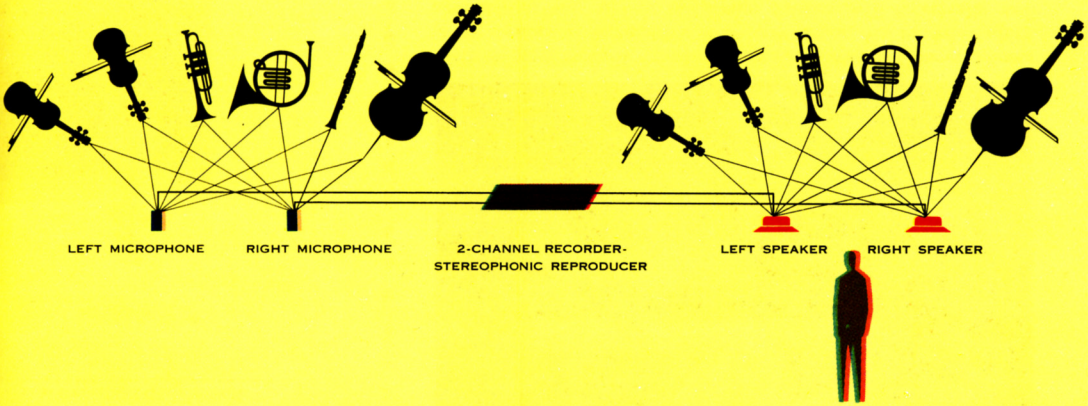
AMPEX STEREOPHONIC SOUND

a magnificent sonic panorama of full color, three-dimensional sound . . . that re-creates the spatial aura of the original performance and puts you right in front of the orchestra

Ampex Stereophonic Sound is as different from ordinary "high fidelity" as a 3-D stereo photograph in full color is different from a flat, regular black and white snapshot. The 3-D picture seen by both eyes shows perspective and depth. When you close one eye, the illusion of space and depth disappears.

Similarly, listening to ordinary high-fidelity, single-channel sound, there is no audio perspective, no sense of depth.

Ampex Stereophonic Sound is sound for *both* ears. Two separate microphones are used to record two separate tracks on the tape. Played back through two separate amplifiers and speakers, the original spatial relationship is preserved to bring you absolute realism. Listening to an Ampex-recorded symphony orchestra, for example, you hear the strings to the left, the brasses to the right, the soloist front and center. The combined effect of the two speakers is to produce sounds not merely from two specific directions, but from *all* directions, and not just *between* the speakers, but *beyond* them. If you listen to a stereophonic recording of a freight train going by, for example, you first hear it coming from a point way beyond the confines of the room. As it approaches from the left, the apparent angle changes gradually as the sound intensity increases. Suddenly it is thundering across the foreground, and you instinctively turn your head to the right. Then its rumble fades to a whisper and its whistle recedes into the distance at the far right. . . .



Ampex Stereophonic Sound spreads the entire orchestra out in front of you; the sound of each instrument reaches you from the same apparent source and direction "heard" by the recording microphones.

AMPEX
AUDIO INC.