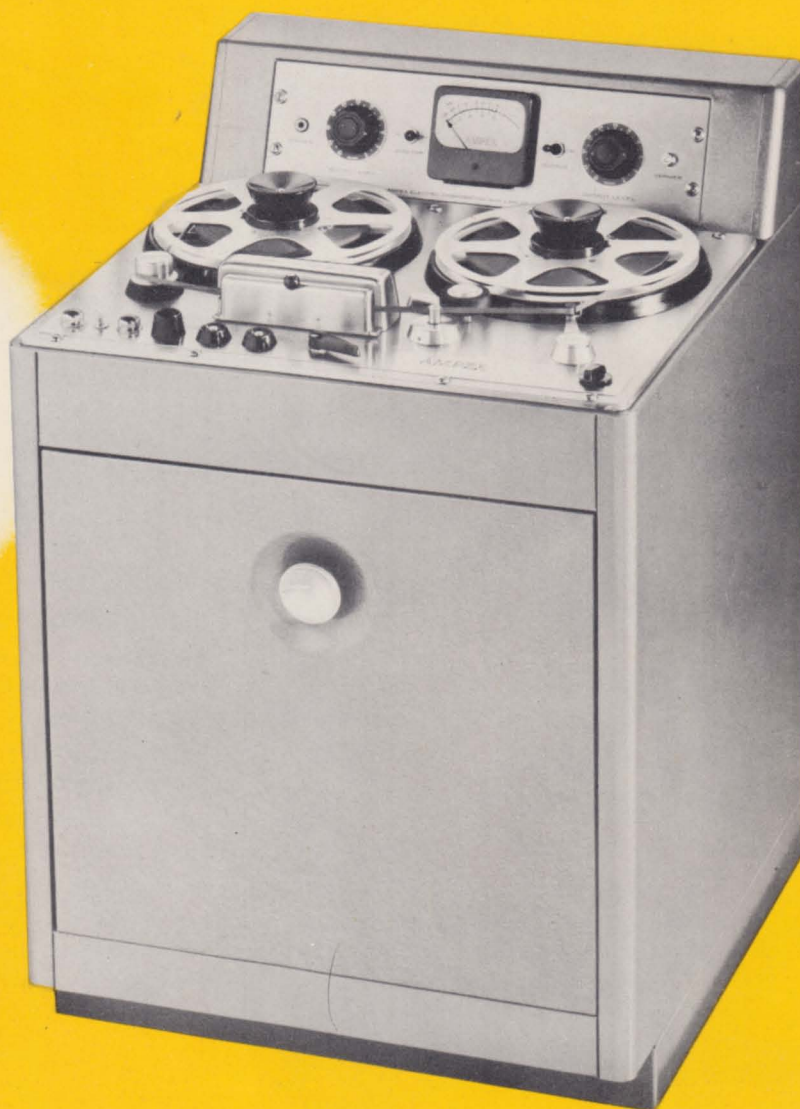


Model  
**300**



Precision Built  
*for*  
Long-Life

dependability

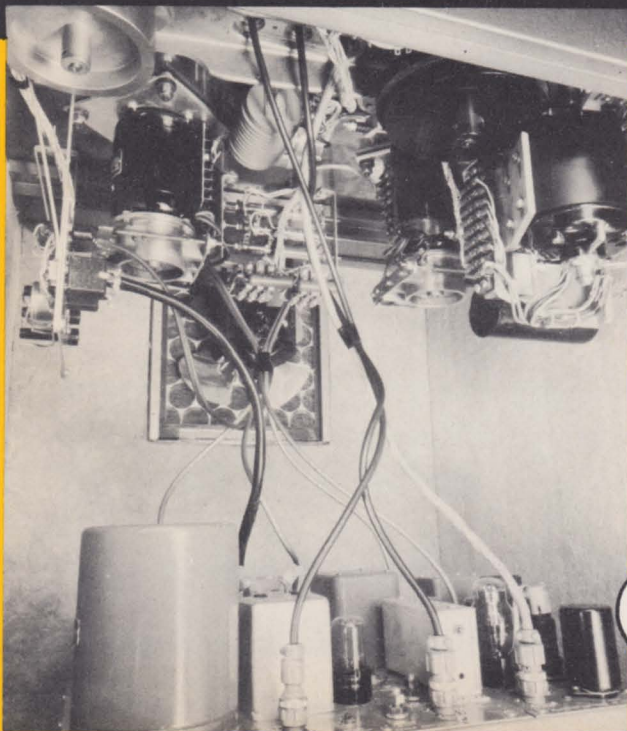
**AMPEX** *Magnetic Tape*  
**RECORDERS**



# Features.....

- 1 LONG-LIFE MAGNETIC HEADS**  
*(Uniform characteristics during their long life)*
- 2 WIDE RANGE RECORDING**  
*(30 to 15,000 cps at 15 & 7 1/2 inches per second)*
- 3 RELIABLE FAST START**  
*(Full speed in less than 1/10 of a second)*
- 4 SOLENOID PUSH BUTTON OPERATION**  
*(Adaptable for remote control)*
- 5 QUICK ACTING MECHANICAL BRAKES**  
*(On turntable motors)*
- 6 EFFORTLESS TAPE THREADING**  
*("Drop-in" and self-aligning)*
- 7 DEPENDABLE PRECISION TIMING**  
*(Varies less than 3.6 seconds in 30 minutes including tape stretch from humidity and temperature change)*
- 8 EASY EDITING**  
*(Fast operating selector switch)*
- 9 NEGLIGIBLE MAINTENANCE**  
*(Rugged precision drive)*

**STAYS IN ADJUSTMENT**  
....eliminates costly servicing



## HEAVY-DUTY RECORDING is *EASY* for Model 300!

*Ampex Model 300 Recorder completely dominates the heavy-duty recording field. In radio network broadcasting, studio quality recording, show transcription, disc record manufacture and master tape recording of numerous types, Ampex Model 300 has been adopted in preference to other methods and equipment. The reason, complete dependability. This reflects in a very real dollar saving. These savings come from greatly reduced maintenance, elimination of mechanical breakdowns, and negligible out-of-service periods. Many users have more than paid for their Ampex Model 300 out of these sizable savings.*

*Ampex Model 300 can deliver on these promises because it is a masterpiece in precision manufacture. It has extra capacities in power, ruggedness and wide range recording abilities, making it ideal for grueling continuous service. Superb mechanical stability, together with the finest magnetic heads ever built, faithfully capture wide range tonal qualities of voice and instrument. The precision speeds of the tape transport system successfully avoid objectionable flutter and produces split-second program timing. Studio engineers are able to devote full attention to programming because Ampex Model 300 responds instantly and reliably to its principal modes of operation, either by top plate push-button control or by remote control.*

View inside Model 300 . . . note extra rugged construction. Large, quiet ventilating fan removes objectionable heat. Arrangement makes all elements accessible for inspection. Entire cabinet is sound proofed.

**Unerring  
CONTINUOUS  
Performance**

**Captures EVERY Mood, Level**





**Realistic  
Reproduction**  
*Year-after-Year*

The ability of Model 300 to maintain its initial accuracy of motion is largely due to its carefully designed capstan drive. By precision manufacture and rigid unit assembly construction both flutter and mechanical vibration are eliminated. Under continuous duty Model 300's reserve capacity pays off in unequalled recording performance and negligible maintenance and servicing requirements.

**PRECISION DRIVE MOTORS  
SPECIALLY BUILT FOR MODEL 300**

**FINEST TAPE TRANSPORT MECHANISM *Ever Built for Audio Recording!***

**SPECIFICATIONS**

All performance characteristics of the Model 300 Magnetic Tape Recorder equal or exceed the standards of the NAB (National Association of Broadcasters). All Ampex audio recorders produce a tape frequency characteristic which has been accepted as standard by NAB.

**TAPE SPEED**

15 inches per second and 7.5 inches per second, with speed change effected by a single control. The same control also provides the necessary equalization change to compensate for the change in speed.

**FREQUENCY RESPONSE**

15 inches  $\pm 2$  db. 30-15,000 cycles.  
7 1/2 inches  $\pm 4$  db. 40-15,000 cycles.  
 $\pm 2$  db. 40-10,000 cycles.

**SIGNAL-TO-NOISE RATIO**

Over 70 db. unweighted noise to maximum recording level. Over 60 db, as defined by NAB standards. By NAB definition, the signal-to-noise ratio is the ratio of peak recording level to the total unweighted playback noise when erasing a signal of peak recording level and in the absence of a new signal. Thus bias and erase noise are included, as well as playback amplifier noise. All frequencies between 50 and 15,000 cycles are measured. The peak recording level is defined as that level at which the overall (input to output) total rms harmonic distortion does not exceed 3% when measured on a 400 cycle tone.

**STARTING TIME**

Instantaneous. (When starting in the Normal Play mode of operation, the tape is up to full speed in less than 1/10 second.)

**STOPPING TIME**

When playing at 15 inches per second, tape moves less than 2 inches after depressing Stop button.

**FLUTTER AND WOW**

At 15 inches per second, well under 0.1% rms, measuring all flutter components from 0 to 300 cycles, using a tone of 3,000 cycles. At 7.5 inches, under 0.2%.

**PLAYBACK TIMING ACCURACY**

0.2% or  $\pm 3.6$  seconds for a 30 minute recording.

**PLAYING TIME**

33 minutes at 15 inch speed on standard NAB reel, 66 minutes at 7.5 inch speed. The Model 300 will also accommodate the standard RMA reel in various thicknesses.

**REWIND TIME**

One minute for the full NAB reel (2400 feet).

**CONTROLS**

Start, Stop and Record are push-button, relay operated and may be remote controlled. Normal Play, Fast Forward, and Rewind on a selector switch, with rapid shuttling back and forth made possible by instantly changing from one mode of operation to the other without stopping in between.

**COMPLETE PLUG-IN HEAD HOUSING**

Double mumetal shield cans on playback head, equivalent shielding on record head, matching self-aligned covers on hinged gate. Drop-in threading.

**SIMULTANEOUS MONITORING**

Independent record and playback systems allow the tape to be monitored while recording.

**RECORD AMPLIFIER**

10,000 ohms bridging input, normally set up for +4 VU in balanced or unbalanced.

**PLAYBACK AMPLIFIER**

Adjusted for +4 VU output, 600 ohms or 150 ohms balanced or unbalanced. Will deliver +20 dbm without exceeding 1% total harmonic distortion at any frequency from 30-15,000 cycles.

**DIMENSIONS**

Mechanical unit on 24 1/2" panel and Electronic unit on 12 1/4" panel. For standard rack, console or two case portable mounting.

**SHIPPING WEIGHTS AND MOUNTING**

Console 270 pounds, 2 Case Portable 175 pounds, Rack 140 pounds.

**POWER INPUT REQUIRED**

3 amperes, 115 volts, 60 cycles. (Also available for 50 cycles.)

**METER CONTROL PANEL**

Available at extra cost with features outlined as follows: Mounted on 5 1/4" panel for rack, console, or portable case mounting. Bridge Input step control will adjust record level for any input greater than -20 VU, 10,000 ohm bridging, any balanced or unbalanced line. Output Step control will adjust level up to +8 VU with normal of tape level - 600 ohm or 150 ohm balanced or unbalanced line. VU meter will meter playback output while recording or playing back. Calibrated for +4 VU output. Output key (line or cue). Phone Jack with input-output key (A-B Key).

CATALOG NUMBER  
(115-120 Volt AC)

MODEL NUMBER		60 cycle	50 cycle
300-C . . . . .	Console	560-C	3389
300-R . . . . .	Rack Mounted	560-R	3390
300-S . . . . .	Two Case Portable	560-S	3391

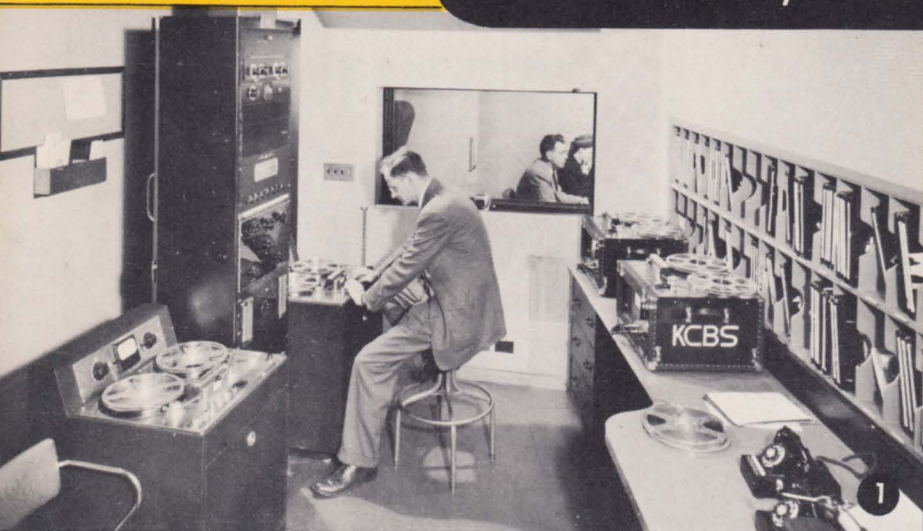
NOTE: The above Catalog Numbers do not include Control Panel. When ordering Bridging Meter Control Panel specify Catalog Number 515-2.

el, Pace and Inflection of **VOICE** and **INSTRUMENT**

**NEGLECTIBLE MAINTENANCE COST**



**UNEQUALLED** for all **HEAVY-DUTY RECORDING NEEDS**



- 1 In San Francisco, Station KCBS operates two Model 300's and two Model 400's.
- 2 Ampex Model 300 Recorders at Station WENR, Chicago.
- 3 Capitol Records use Ampex exclusively because they demand 100% of the artist's ability on the tape.
- 4 Bob Crosby, Star of Radio, Screen and Television programs "Club 15" on Model 300's.
- 5 ABC in Hollywood relies on Ampex performance.



# AMPEX *Magnetic Tape* RECORDERS

• Leader in **AUDIO** and **DATA** Recording

**AMPEX ELECTRIC CORPORATION** Redwood City, California

*Distributed by*