

MODEL 300

HIGH FIDELITY
**MAGNETIC TAPE
RECORDERS**



AMPEX

DISTRIBUTED BY
BING CROSBY ENTERPRISES, INC.
ELECTRONICS DIVISION

9030 SUNSET BLVD. LOS ANGELES 46, CALIF.
CRestview 4-5171 • BRadshaw 2-2771

Unrivalled **PERFORMANCE and RELIABILITY**

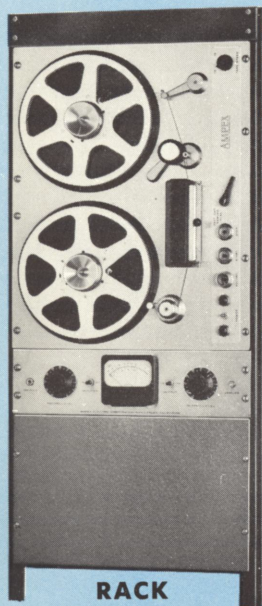
"STANDARD OF THE GREAT RADIO SHOWS"

THE MOST

Exact

PROGRAMMING and RECORDING

...safely entrusted to **AMPEX**



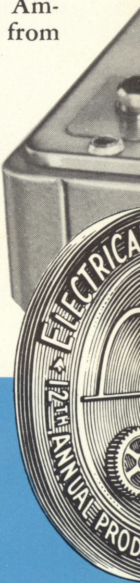
RACK
MOUNTING

(Models 300-R and 301-R)

The Model 300 Ampex offers the professional recording engineer the only dependable way of obtaining maximum performance from all magnetic tapes. This recorder is the advanced development of the history making Ampex Model 200. That famous forerunner of Model 300 revolutionized the recording methods of the world. The advanced design of Model 300 incorporates every proven feature and performance characteristic of the Model 200 plus uniformity of performance and operating simplicity not obtainable in any other magnetic tape recorder. The precision-performance of the Model 300 is so superior to ordinary tape recorders that leading broadcast networks have chosen it as standard and have supplanted most of their earlier equipment with it. The recording of live shows on Ampex tape is standard practice of almost 100% of the commercial recording studios and of manufacturers of wax disc records. In the latter use the master discs are made from Ampex tape. The buyer of the Model 300 has the complete satisfaction that comes only from owning the finest tape recorder ever made.

Due to advanced design concepts and precision manufacture, tapes recorded on the Model 300 can be reproduced anywhere on any other Model 300 with complete preservation of the original program quality. Such interchangeability of tape is the result of precision-built component parts, each critically matched to standard performance curves. The Ampex design incorporates three magnetic heads each thoroughly shielded within a single housing. The recording head establishes the highest signal definition yet attained in the field of magnetic tape recording. The extremely sensitive playback head guarantees that the maximum signal is reproduced in all its original fidelity.

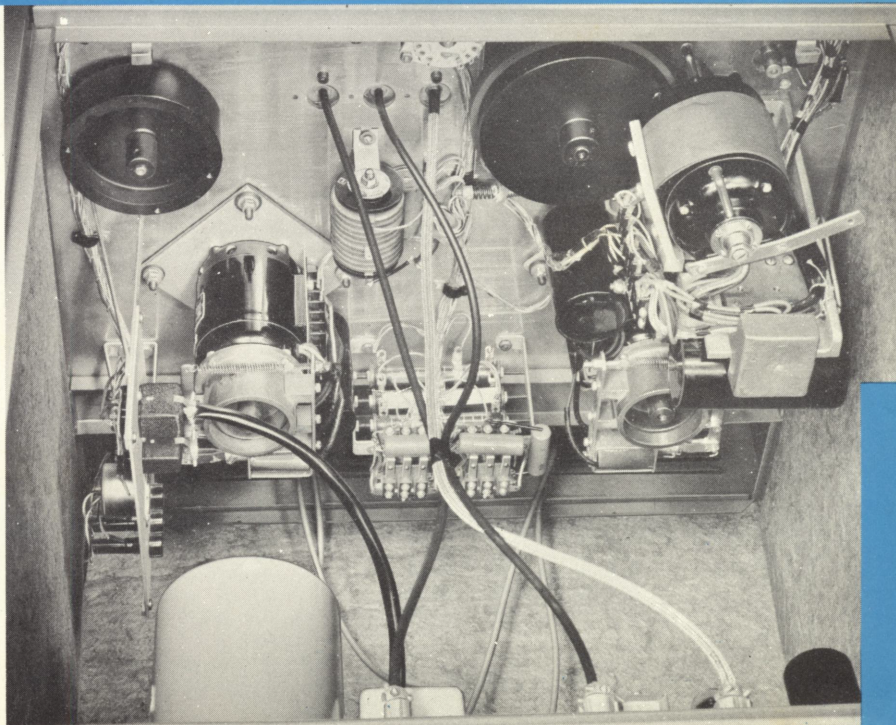
Highest Award won by Model 300
for skillfully integrated design combining superior workmanship, engineering, research and unequalled performance.

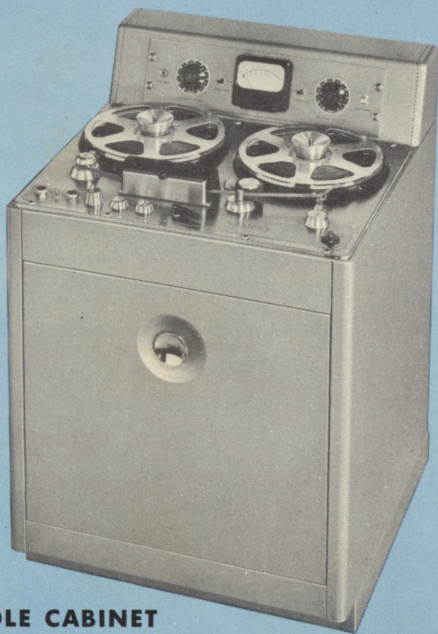
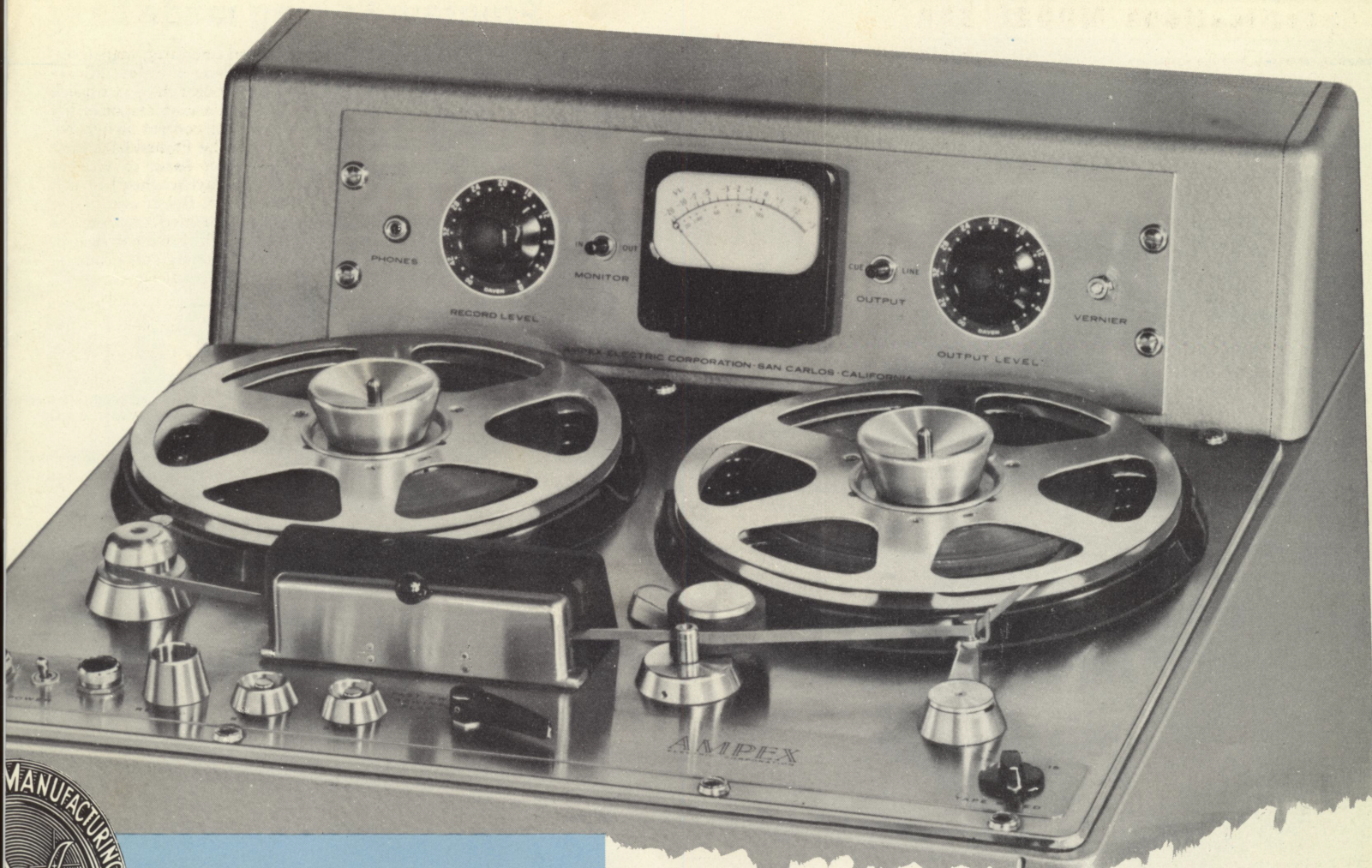


Vital to overall precision performance is superiority in research, development, design and manufacture. Model 300 added to the prestige of Ampex by winning the top award of the Electrical Manufacturing Products Competition for highest achievement in integrated design. All told the Ampex claim to highest known fidelity has been proven time after time by every possible comparison. Every Ampex Model 300 is subjected to thorough checks and tests and must pass far within published performance specifications prior to shipment. Intermediate checks are made of individual components through every step of production to meet exacting tolerances—as a result Ampex alone offers the great advantage of complete interchangeability of elements including magnetic heads and amplifiers.

AMPEX QUALITY INSIDE and OUT ➔

The view at right shows the Model 300 drive as arranged in the console cabinet. There is no skimping here—Ampex puts in plenty of driving power; oversize, instant-acting brakes; thick, glass-wool, sound muffling linings; and especially built Ampex electronic units and carefully balanced circuits... without equal in the tape recording industry.





CONSOLE CABINET
(Models 300-C and 301-C)

TRUE-TO-LIFE FIDELITY made AMPEX

"STANDARD OF THE GREAT RADIO SHOWS"

QUICK ACTING Constant Performance **MECHANISM** • **EASIEST TO UNDERSTAND** • **SIMPLEST TO OPERATE** • Only 6 Controls • **Automatic SPEED & EQUALIZATION Change** • **SIMULTANEOUS MONITORING** of Recording • Smallest known amounts of Flutter & Wow • **SWIFT** Tape Shuttling for quick editing • **DROP-IN** Tape Threading • **PYREX** Tape Guides save wear on Heads • **UNIT HOUSED** Erase, Record and Playback Heads • **Exclusive AMPEX-ALTEC** Installation Service • **PRECISION** Construction Throughout • **POWERFUL** Adjustable **BRAKES** • And many other Refinements that make Ampex the most imitated tape recorder.

USES ANY MAKE OF PROFESSIONAL QUALITY TAPE

Ampex Recorders are factory adjusted on "3-M" Type 111 tape but operate equally well on any tape of equivalent quality... use of the large NAB reels is recommended for top performance.



PORTABLE CASES
(Models 300-S and 301-S)

AMPEX

... ITS PRECISION-PERFORMANCE IS UNSURPASSED

Specifications MODEL 300

All performance characteristics of Ampex Model 300 and 301 Recorders equal or exceed the standards recommended by the NAB Subcommittee on Magnetic Recording.

TAPE SPEED

Model 300—15 & 7½ inches per second. Model 301—30 & 15 inches per second. Single control lever changes speeds, also provides necessary equalization change to compensate for change in speed.

FREQUENCY RESPONSE

At 30 in. per sec. ± 2 db. 50-15,000 cycles
At 15 in. per sec. ± 2 db. 50-15,000 cycles
At 7½ in. per sec. ± 2 db. 50-7,500 cycles

STARTING TIME

Practically instantaneous. For example: tape is at full speed in less than 1/10 second when starting in the normal play mode of operation.

STOPPING TIME

When playing at 15 ips tape moves less than 2 inches after stop button is depressed.

FLUTTER and WOW

At 15 ips well under 0.1% r.m.s. measuring all flutter components from 0 to 300 cycles, using a tone of 3,000 cycles (less than 0.2% at 7½ ips).

SEPARATE HEADS

Models 300 and 301 are equipped with separate record and playback heads and amplifiers to provide simultaneous record-monitoring.

TIMING ACCURACY

Time variation between recording and playing back of same material is less than 0.2%.

PLAYING TIME

33 minutes @ 15 ips or 66 minutes at 7½ ips on standard NAB reel. Models 300 and 301 accommodate standard RMA reel in various thicknesses.

REWIND TIME

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

CONTROLS

Push-button controls used for START-STOP-RECORD; these are relay operated and may be remote controlled. Single selector switch gives instant change, without stopping, for NORMAL PLAY-FAST FORWARD-REWIND; permits fast shuttling of tape across heads during editing.

COMPLETE PLUG-IN HEAD HOUSING

Double mumetal shield cans on playback head and equivalent shielding on record head. Tape is "drop-in" threaded between heads and self-aligning matching shield covers mounted on hinged gate.

RECORD AMPLIFIER

Bridging input factory pre-set at +4 V.U. input.

PLAYBACK AMPLIFIER

Normally +4 V.U. output. Will deliver 20 dbm without exceeding 1% total harmonic distortion at any frequency from 30 to 15,000 cycles.

DIMENSIONS

Electronic and mechanical units are both on 24½" panels for standard rack mounting.

MOUNTINGS

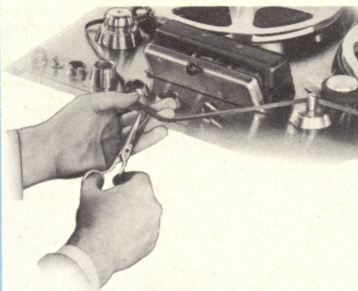
Available in console, portable cases or rack mounting styles. Shipping Weights: Console 270#; Portable Cases 175#; Rack 140#.

METER CONTROL PANEL

At extra cost. Bridge Input step control will adjust record level for any input greater than -20 V.U., 10,000 ohm bridging, any balanced or unbalanced line. Output step control will adjust level up to +8 V.U. regardless of tape level—600 ohm or 150 ohm balanced or unbalanced line. V.U. meter will meter playback output while recording or playing back. Output key (line or cue). Phone Jack with input-output key (A-B Key).

TOP PLATE - DUST COVER

Snug-fitting, transparent cover, for use on console or rack mounted models available if desired at extra cost.



SIMPLIFIED OPERATING CONTROLS

Ampex operation is exceptionally simple and foolproof. By fingering the controls anyone can quickly learn each operating mode. There are but six manual controls—all banked along front edge of top plate for quick accessibility.

POWER PILOT LIGHT (glows amber); indicates whether main power switch is on or off.

MAIN POWER SWITCH; all power input comes through here. Standard Ampex Recorders operate on 115-V, 60-cycle current. Special recorders on order.

RECORDING PILOT LIGHT (glows red); indicates that both "erase" and "record" heads are energized and ready for "play" mode of tape travel.

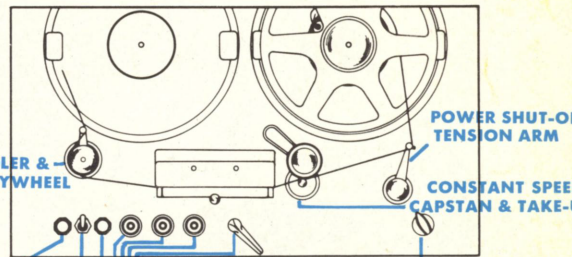
RECORDING BUTTON energizes "erasing" and "recording" heads simultaneously.

START TAPE MOTION. Pressing this button accelerates tape almost instantaneously to full speed and in mode as indicated on selector control.

STOP TAPE MOTION. Tape travels less than 2 inches from full speed to stop when this button is pressed.

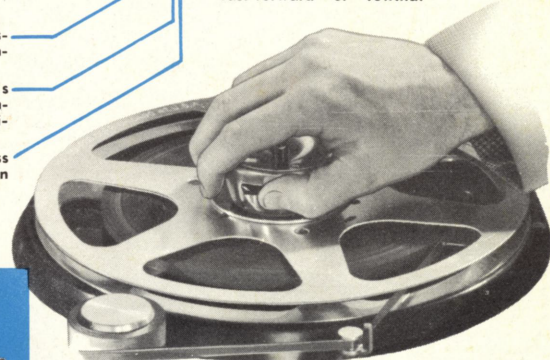
Program Editing made Easy

Ampex Model 300 has unequalled operating maneuverability and tape editing speed. These priceless advantages are due to its powerful three motor drive, its quick acting mechanical brakes, and its instant response between every mode of operation. The control switch between fast forward and rewind can be flipped back-and-forth in lightning sequence without harm to tape or recorder. Editing tape across the playback head in this unrestricted, almost reckless manner, is but one of the many outstanding features that have made Ampex the incomparably better tape recorder. Professional recording engineers find that Ampex saves time and produces better results under every recording requirement.



PLAY SPEED CHANGE & EQUALIZATION. Models 300 & 301 offer 15-7½ and 30-15 ips tape speeds respectively. Turn of this switch selects speed and automatically equalizes all mechanical and electrical functions to correspond.

SELECTOR CONTROL. Three position control selects operating mode of recorder; allows instant changes between "play," "fast forward" or "rewind."

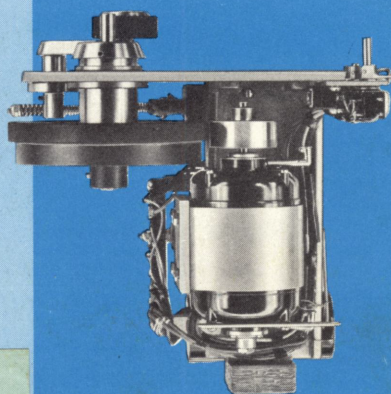


POSITIVE REEL LOCKING HUB and Editing Knob

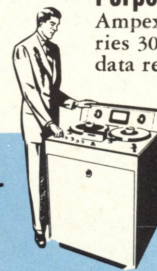
Once a reel of tape is placed on the Model 300 it is sure to stay "put" until it is intentionally taken off. The unique design of the Ampex reel locking hub automatically centers the reel and securely locks it against slippage or tape spilling under every mode of operation including the remarkably fast full speed reverse-to-forward change for which the Model 300 is noted. The locking hub is conveniently shaped to serve as an editing knob in the final step of "inching" into any given spot on the tape.

Unsurpassed for Instrumentation and Special Purpose Applications

Ampex Magnetic Tape Recorders (Series 300) are available for wide range data recording including 2 to 14 channel recording and 40,000 cps applications. Model 302 is a production model having a frequency range of 50-40,000 cps. On special order 70,000 cps recorders can be furnished. Ask for Bulletins on Ampex Instrumentation Equipment.



Precision drive system and capstan—one of the reasons for the flawless performance of Series 300 Ampex Recorders.



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