

AMPEX

VR-1100 Videotape Television Recorder

A low-cost, transistorized recorder with broadcast quality, broadcast dependability, for all fixed or mobile applications.



Proven Performance and Value

When Ampex created the VR-1100 it was for this purpose: To provide broadcast quality in a basic, transistorized recorder at a price that is consistent with quality demands of the industry. In the VR-1100 you have the proven electromechanical performance of the thousands of Ampex studio recorders now in service. In addition, you have the very latest in the application of solid state technology to video tape recording. This combination results in a machine that not only delivers quality, but delivers it dependably, in rigorous service, around-the-clock. In keeping with the objective of meeting 90% of all monochrome production requirements, the operation and maintenance of the VR-1100 are reduced to utter simplicity. Operator training time and maintenance down time are minimal.

Full Compatibility, Unlimited Flexibility

For extended usefulness through increased flexibility, the VR-1100 has been designed to accept the full range of Ampex accessories — for geometric correction, synchronizing with other signal sources, equalization, remote control, editing, and other functions.

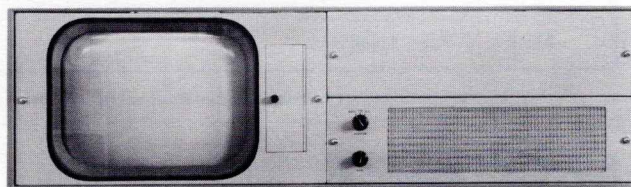
In all cases, the VR-1100 is fully compatible with all other four-head recorders: it operates at 7½ or 15 ips. With its small size and weight, the VR-1100 is easily adaptable to mobile installation or to restricted studio space.

Features

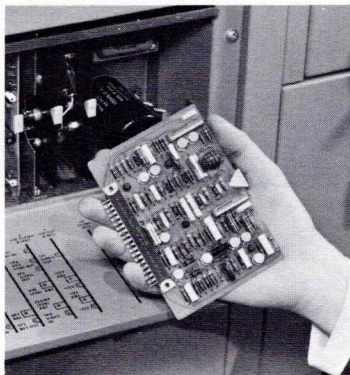
Broadcast quality at a moderate price • Proven electromechanical design and solid state electronics • Fully compatible with all other four-head recorders • Simple to operate • Easy to maintain • Small, light weight • Accepts full range of Ampex accessories, including electronic splicing • Recording time up to three hours on a reel • Low power consumption • Low heat dissipation • Two speed operation.

Monitor Bridge and Custom Configurations

In addition to the wide range of accessory options offered, there are several possible configurations for the monitor bridge, depending on user requirements for picture monitors, scopes, speakers, or other facilities. The entire VR-1100 may be ordered in sectionalized form, where transport, electronics, and monitoring facilities are divided into separate modules which may be physically connected or operated independently.

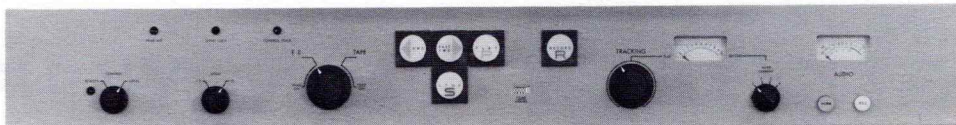


Complete systems for closed circuit and broadcast television



Individual electronic functions are contained on rugged, tested, glass fiber circuit boards. Test and adjustment points are clearly labeled, and an extender board permits fast checking and maintenance.

Controls are simplified to reduce operator training time.



Applications

Broadcasting . . . An ideal "first" recorder for the small studio, since it can be expanded to perform virtually all production services. A workhorse in the larger studios, completely at home in the field.

Education . . . Priced for the institutional budget, easy to operate and maintain, can be expanded to meet every ETV requirement.

Military . . . Moderately small and lightweight, rugged enough for the most stringent service, land, sea, and air.

Accessories

AMTEC* System: For perfect picture geometry.

Electronic Editor: For accurate electronic splicing; substitute individual scenes at will or scene-by-scene assembly of complete programs.

INTERSYNC* System: For no-roll locking to several signal sources, for use with special effects systems.

Cue Channel: Provides a non-program audio track for director's notes, editing instructions, cue tones for actuating other equipment.

Monitoring Facilities: Great variety of combinations.

Channel Equalizers: For full equalization of previously recorded tapes.

Remote Control: For fully remote operation.

*TM Ampex Corporation

Specifications

Physical

DIMENSIONS

Height: 60" (1.52 meters) without monitor bridge; 74" (1.88 meters) with monitor bridge

Weight: Less than 800 lbs. (363 kg.) without monitor bridge

Width: 42" (1.062 meters)

Depth: 24" (0.60 meter) without monitor bridge; 27" (0.62 meter) with monitor bridge

Note: Supplied on casters for rollaway mobility.

TEMPERATURE AND HUMIDITY

Temperature: 32° to 131°F (0° to 55°C)

Relative Humidity: 30% to 90%

POWER REQUIREMENTS

Input Power: Less than 2.4 KVA, 50 or 60Hz at 115V (220V auto transformer is included where required)

Convenience Outlet: Two outlets, 8 amps total

SIGNAL REQUIREMENTS

Video Composite Signal: 0.5V to 2.0V, peak-to-peak

Sync Input: 75 ohms, 4V peak-to-peak (or high impedance, 4V)

AUDIO INPUT

Program Line: 15,000 ohms balanced or unbalanced bridge for 500/600 ohm line at -10dBm minimum level

Cue Line: Same as program line

Operating

RECORDING TIME, 14" (35.6 cm) REEL

15 ips (38 cm/sec): 96 minutes for 7200' of tape

7½ ips (19 cm/sec): 192 minutes for 7200' of tape

Note: Normally supplied with 12" (30.5 cm) reels.

PICTURE AND SOUND SEPARATION

15 ips: 18½ frame sound lead

7½ ips: 37 frame sound lead

TAPE SPEED

7½ or 15 ips: Selected by front panel switch

MONITORING FACILITIES

In addition to the Ampex audio monitor amplifier, an 8" (20 cm) picture monitor with Model RM-529 Tektronix waveform monitor, or 14" (35.6 cm) picture monitor, is available.

Response

VIDEO

Bandwidth: ±2dB, 20Hz to 4MHz (525 line standard)
±2dB, 20Hz to 5MHz (625 line standard)

Signal-to-Noise Ratio: 40dB or better on interchanged basis, peak-to-peak video to rms noise, using 10-mil heads

Transient Response: On a test signal of .125 μsec, rise time sine squared window at 1V peak-to-peak, black-to-white overshoot off tape will not exceed 12%. Rise time of signal off tape will not exceed 0.2 μsec (10% to 90% points).

Transfer Characteristics: Shades of gray between black and white vary no more than 10% with respect to input signals, measured with standard (10) step generator.

Input Level: 0.5V peak-to-peak minimum; 75 ohms unbalanced

AUDIO

Bandwidth: ±2dB, 50Hz to 10kHz at 15 ips (38 cm/sec)
±3dB, 50Hz to 6kHz at 7½ ips (19 cm/sec)

Signal-to-Noise Ratio: 50dB below 3% distortion

Flutter and Wow: Less than 0.10% rms at 15 ips
Less than 0.15% rms at 7½ ips

CUE TRACK

Bandwidth: ±3dB, 50Hz to 6kHz at 15 ips (38 cm/sec)
±3dB, 50Hz to 4kHz at 7½ ips (19 cm/sec)

Signal-to-Noise Ratio: 45dB below peak operating level (peak operating level is +14dBm)

Note: Response has 20dB notch at 240Hz on 60Hz systems; 20dB notch at 250Hz on 50Hz systems.

Flutter and Wow: Less than 0.10% rms at 15 ips
Less than 0.15% rms at 7½ ips

These specifications supersede all previous specifications, stated or implied. Term financing and leasing available on all Ampex television products.

AMPEX

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