

AMPEX

Video
Production
Recording
System



VPR-7950A

VPR-7950A



for the ultimate
in 1" videotape
teleproduction capability

VIDEO RECORDER, DIGITAL TBC SYSTEM,
AND MONITORING DISPLAYS IN A SINGLE
CONSOLE

- Sets the industry's highest standards for 1" videotape teleproduction performance
- Incorporates the finest 1" videotape recorder and TBC system by Ampex
- Available with or without overhead monitoring
- Full professional editing capability
- Utmost reliability
- Engineered for easy control and maintenance

The world's finest 1" videotape teleproduction recorder and TBC system in a free-standing, fully equipped console. This is the system that sets the highest standards of the industry for 1" videotape recording—the VPR-7950A, by Ampex.

Here is a combination which affords the utmost in operating convenience, ease of maintenance, and reliability.

The system is available in two versions, each of which includes the Ampex VPR-7900 video recorder, and the TBC-800 Time Base Correction system as standard, integral equipment, with a single control panel. A lowboy version includes the recorder and TBC system only. A more versatile version adds an overhead monitoring bridge with a video waveform monitor, an optional color

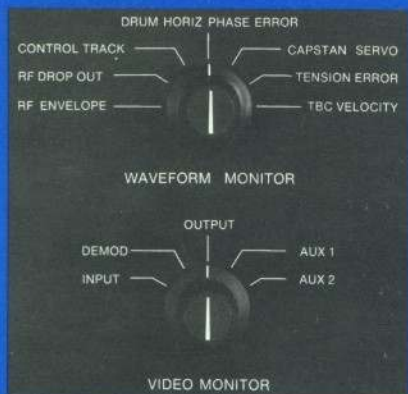
or monochrome picture monitor, and an optional vector display scope.

PROFESSIONAL EDITING CAPABILITY

The VPR-7950A permits full insert and assemble editing capability—an advantage made possible by the exclusive Ampex format. This format provides three independent recording tracks—one for video and two for audio—which may be recorded or rerecorded separately, or in any combination. Vertical interval switching produces a clean, professional splice with every edit. The three independent tracks afford an open-end versatility for special creative effects, as well as such practical advantages as the ability to record location sound, or cueing instructions, on the second audio track.

THE VIDEOTAPE RECORDER

The recording unit is identical to the Ampex VPR-7900, the most advanced 1" video recorder in the industry. Its exclusive features include the same VHC (Very High Carrier) Mode as that of high-performance quadruplex recorders, the Ampex recording format, a 12.5 Hz control track, a digital servo system, and a split capstan. Other important features include



an internal reference system, Hot-Pressed Ferrite video head, flying erase head, vertical interval editing, and five printed circuit motors.

TIME BASE CORRECTOR

A new digital Time Base Corrector, identical to the Ampex TBC-800, is standard equipment on the VPR-7950A. This TBC features a wide correction window (± 1 H), and gives the machine extremely fast lockup time (4 seconds).

In combination with the excellent color output of the recorder, the picture stability insured by the digital TBC gives users of the VPR-7590A a top-quality picture in any application. Playback stability is equal to the finest quadruplex recorders, free of vertical jitter and hooking, and stable enough to meet FCC broadcast standards. The output signal

can be mixed, distributed and used like a camera signal. Edits and all kinds of special effects can be executed professionally. The resulting master tape can be copied to any video format for distribution, or transferred to film.

The basic TBC system processes both color and monochrome signals. Output decoding is synchronous with station references. Also included as standard elements are: a SYNC GENERATOR that supplies sync signals for the TBC when external sync is not available, or that can be gen-locked to a station sync generator; and a DROPOUT COMPENSATOR to eliminate the effects of dropouts in color or monochrome playback.

MONITORING SYSTEM

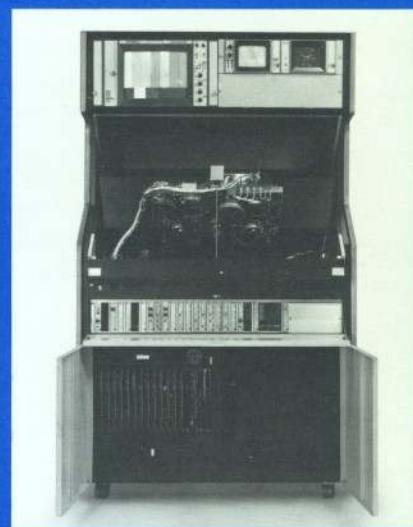
Options for the monitoring system include: (1) a color monitor, video waveform monitor and vector scope display; (2) monochrome monitor with video waveform monitor or (3) monochrome monitor only.

The monitoring units are recognized as the finest of their kind in the industry*. The vector display monitor is custom-made for the VPR-7950A system.

THE CONSOLE

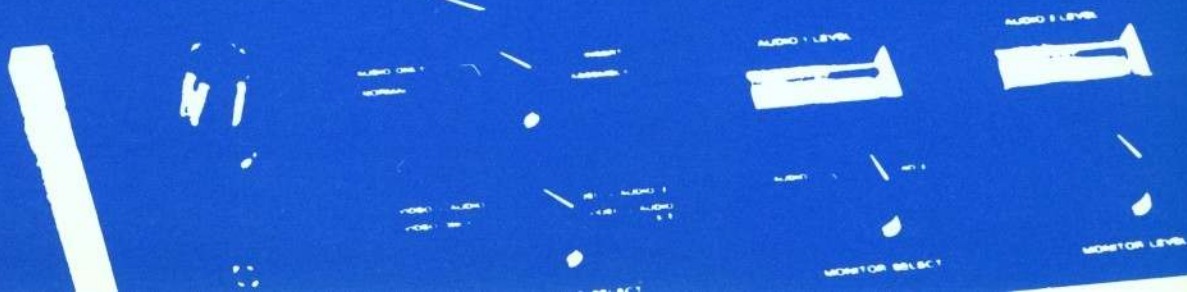
Ampex design and engineering pays off with ease of operation as well as maintenance, and increased reliability of individual elements because of proper mounting, and such elements as a plexiglass dust cover which

protects the head assembly and tape transport during operation. A single control panel includes separate selector switches for video waveform monitor and picture monitor functions. These controls may be used either together or independently, thus permitting complete isolation of picture and video waveform monitoring—a desirable advantage in many applications. Controls also al-



Control panel may be flipped over and transport may be raised for easy maintenance. Recorder and TBC electronics are easily accessible below.

*Tektronix color monitor, vector display monitor, and waveform monitor.



low the operator to use the video waveform monitor as a substitute for an oscilloscope display to monitor various operational signals in the system, while monitoring the video signal at the same time.

In addition to the standard confidence lights of the VPR-7900, the VPR-7950A includes three extra groups: Record Reference Indicators, Drum Lock Modes, and Capstan Status Indicators.

ACCESSORIES

The capability of the VPR-7950A can be enhanced by adding one or more of the following accessories:

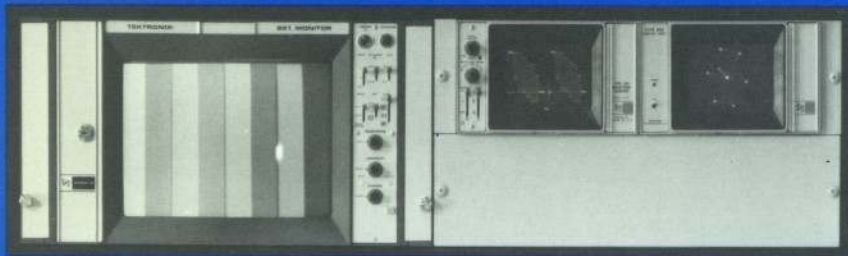
VELOCITY COMPENSATOR

This unit corrects playback errors due to mechanical differences between recorders, and further improves the capability of the system for producing high-quality color dubs through many generations.

TENSION MEMORY

This unit automatically compensates for any variation in tape tension be-

Control panel



The system is available with or without picture and video waveform monitors, and a vector scope display.

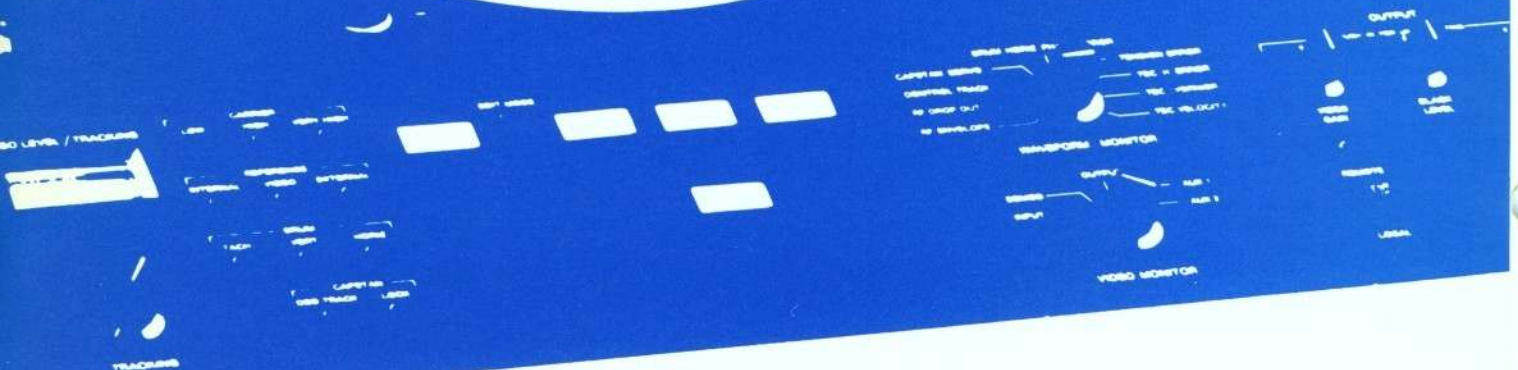
tween an original recording and subsequent edited segments. It thus further refines the editing capability of the system to the most critical degree possible by correcting for variations in tape tension due to temperature and humidity changes during storage.

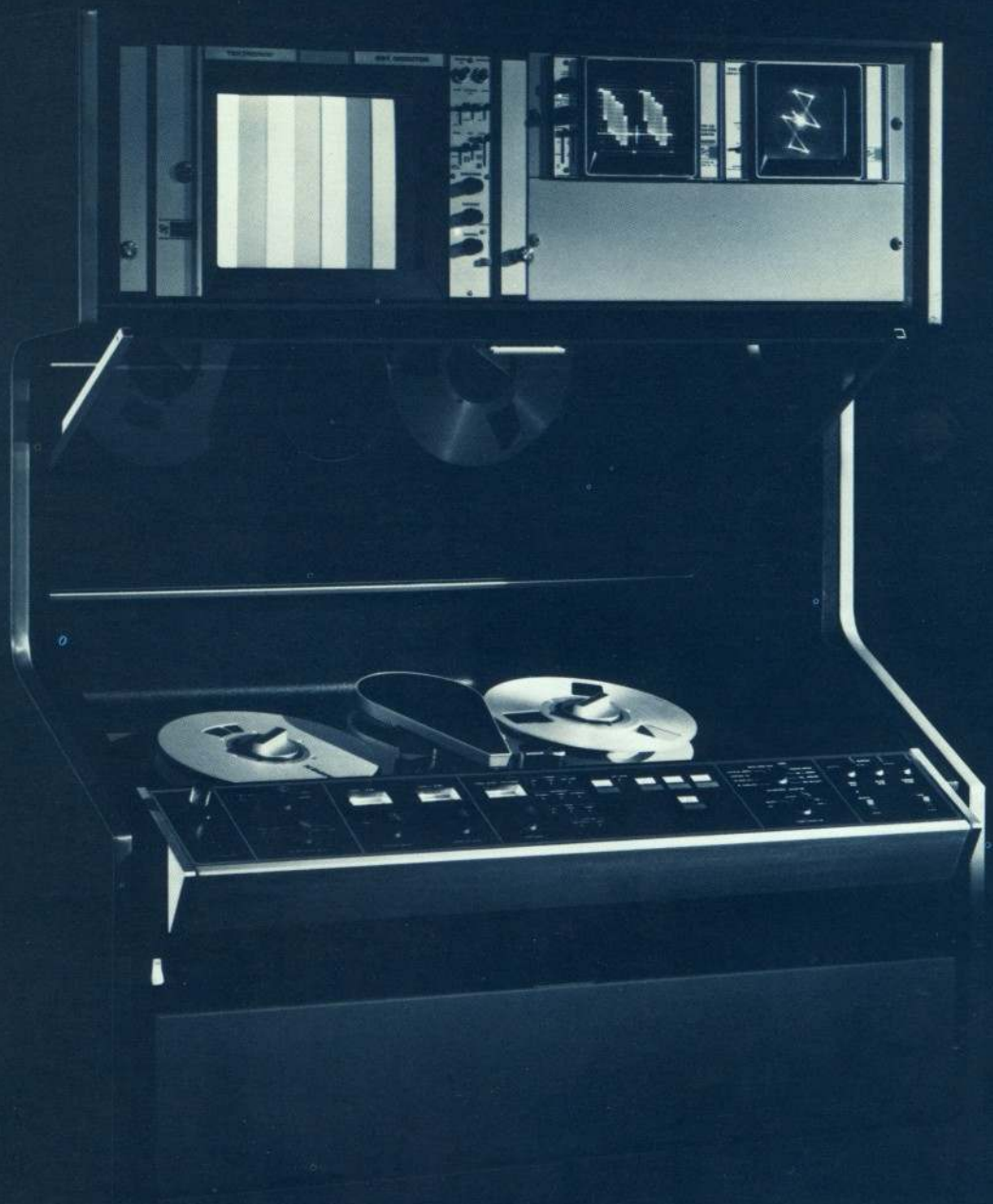
SYNC PULSE DRIVER

Whenever the Sync Generator in the Time Base Corrector is used for "station sync," the Sync Pulse Driver is necessary to provide pulses at the standard level to drive other equipment.

REMOTE CONTROL

Full remote control is available for all transport functions.





SPECIFICATIONS

VPR-7950A NTSC-525/60

GENERAL

Tape Speed:	9.6 ips
Video Writing Speed:	1000 ips
Carrier Mode:	Very High — 7.06-10.0 MHz
Input Power:	117 V or 234 V, 50/60 Hz, 15 amps @ 117 V
Size:	
Lowboy	48" high x 42" wide x 26" deep
With overhead monitoring	68" high x 42" wide x 26" deep
Weight:	
Lowboy	490 lb.
With overhead monitoring	600 lb.

VIDEO

Bandwidth:	± 1 dB, 30 Hz to 4.2 MHz < -3 dB @ 5.0 MHz
Signal-to-Noise Ratio:	-45 dB p-p video to rms noise
Differential Gain:	< 6%
Differential Phase:	< 6°
Horizontal and Vertical Tilt:	5% Max.
Transient Response:	2%, 2T pulse
Moire: (75% amplitude) (color bars)	-35 dB or greater
Lock-up Time:	4 sec max. (V-lock) 8 sec max. (H-lock)
Time Base Stability:	± 2.5 nsec color

AUDIO

Frequency Response:	
Audio 1:	+2, -3 dB, 50 Hz to 15 kHz
Audio 2:	± 3 dB, 50 Hz to 12 kHz
Signal-to-Noise Ratio:	
Audio 1:	-50 dB @ 3%, 3rd Harmonic Distortion
Audio 2:	-40 dB @ 3%, 3rd Harmonic Distortion
Wow & Flutter:	.15%

Ampex Corporation reserves the right to change specifications without notice and without obligation.
These specifications supersede all previous specifications, stated or implied.

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AMPEX

Ampex Corporation, Audio-Video Systems Division
401 Broadway
Redwood City, California 94063

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