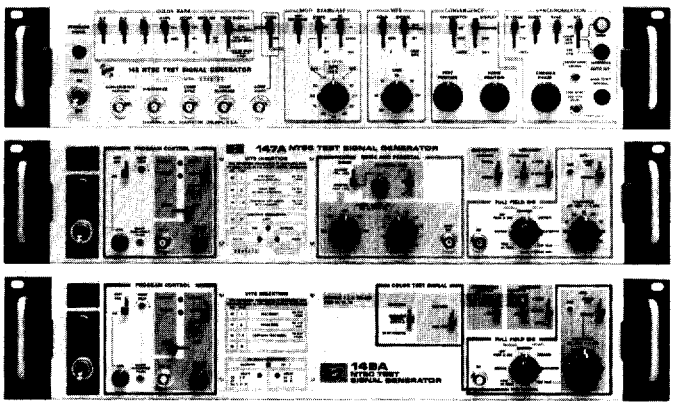
For more than twenty years, Tektronix, Inc. has produced products used in detecting and measuring television signal distortions. TEKTRONIX Television Products have led the way to better signal quality. Our waveform monitors, vectorscopes, test signal and synchronizing generators and picture monitors are in constant use at almost every point in world-wide television broadcasting systems. Our engineering and marketing people play an active part within the television engineering community developing measurements and techniques that help make the color picture a quality color picture. Tektronix means quality among the world community of television professionals.

TEST SIGNAL AND SYNC PULSE GENERATORS



NTSC Test Signals Available from TEKTRONIX Generators

Signal	140	144	146	147A	149A	1430
Vertical Interval Reference Signal (VIRS)				VITS only	VITS only	
EIA Color Bar	●	●	●			
Color Bar Luminance Signal		●	●		●	
Full-Field Color Bar	●	●	●		●●	
Modulated 5 Step Staircase	●	●	●	●●	●●	
Modulated 10 Step Staircase	●	●	●	●●	●●	
Modulated Ramp				●●	●●	
Modulated Pedestal	●	●	●		●●	
Composite Test Signal				●●	●●	
Convergence Pattern	●	●	●			
Full/Reduced Amplitude Multiburst				●●	●●	
Sin² Pulse & Bar				●●	●●	
Sin² Pulse & Window				●	●	
Field Square Wave				●	●	
Noise Measuring Capability				●●		●●
Flat Field (Variable Level)	●	●	●	●	●	
Flat-Field Bouncing APL				●	●	
Test Signal/Variable APL	●	●	●	●	●	

A few signals may require reprogramming and some signals may not be available simultaneously.

● Full-Field Signal ●● Full-Field signal, also available as VITS.

NTSC Timing Signals

	140	144	146	147A	149A
Gen-lock Input			●	●	●
Comp Sync Output	●	●	●	●*	●*
Subcarrier Output	●	●	●	●*	●*
Comp Blanking Output	●	●	●		
Burst Flag Output	●	●	●		
H Drive Output	●	●	●		
V Drive Output	●	●	●		
External Comp Sync Input	●	●			
External Subcarrier Input	●	●	●		

*When Gen-locked

The 140-Series Signal Generators are compact sources of high-quality television test, drive and convergence signals. All signals needed to time and accurately test, evaluate and adjust both standard broadcast and closed circuit color video equipment are provided. Complete information will be found in the TEKTRONIX TELEVISION PRODUCTS CATALOG.

PAL and PAL-M Signals

Test Signals	Pal			Pal-M		
Signal	**141A**	**145**	**148**	**142**	**145M**	**148M**
EBU Color Bars	●	●				
Full-Field Color Bars				●	●	
Color Bars/Luminance Reference		●		●	●	
Color Bars/Red Reference		●			●	
Modulated 5 Step Staircase	●	●	●●	●	●	●●
Modulated 10 Step Staircase		●	●●	●	●	●●
Modulated Ramp			●●			●●
Modulated Pedestal		●		●	●	
Composite Test Signal			●●			●●
Multiburst			●●			●●
Sin² Pulse and Window			●●			●●
Field Square Wave			●			●
Flat Field			●			●
ALP Bounce			●			●
Noise Measuring Capability			●●			●●
Convergence Signal	Order Option 1	●		●	●	
ITS, International Per EBU						
Line 17			●●			
Line 18			●●			
Line 330			●●			
Line 331			●●			

Signals are not necessarily simultaneous and a few require simple reprogramming.

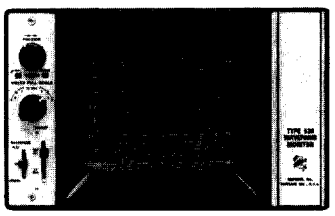
● Full Field only ●● ITS plus Full Field

See Tektronix TV Products Catalog for additional signals and specifications.

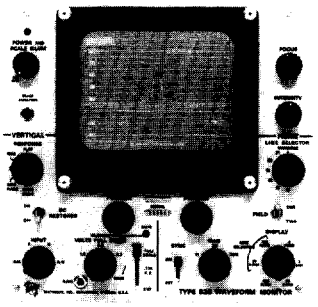
Sync & Timing	Pal			Pal-M		
	141A	145	148	142	145M	148M
Composite Sync	●	●	●	●	●	●
Composite Blanking	●	●		●	●	
Subcarrier	●	●	●	●	●	●
Burst Flag	●	●		●	●	
PAL Pulse	●	●		●	●	
Line Drive	●	●		●	●	
Field Drive	●	●		●	●	
1 MHz Reference	●	●				
25 Hz	●	●				
12.5 Hz	●	●				
30 Hz					●	
15 Hz					●	

● Indicates that the product has this feature.

WAVEFORM MONITORS



528 Waveform Monitor



529 Waveform Monitor

A television waveform monitor is a specialized oscilloscope with vertical amplifier characteristics and time-base features tailored to display and measure television signal waveforms. Tektronix, Inc. makes two families of waveform monitors, the 528 and 529. Versions are available for all standards and in configurations suitable for inclusion in varied installations.

COLOR PICTURE MONITORS

TEKTRONIX 650-Series and 670-Series Color Picture Monitors have the features and accuracy to reliably assess picture quality. There are now versions of the 650 and 670 Series for use in the scanning standard and color system appropriate to your location. A special Sony Trinitron*, with its simplicity of convergence and its adaptability to multi-standard usage, is the heart of each monitor. The construction of the monitor allows us to economically produce monitors for any standard used anywhere in the world. All versions maintain a uniform quality of performance previously unavailable.

The 650-Series Color Picture Monitors are particularly adaptable to precisely determine signal quality, since they feature differential (A-B) inputs. Differential inputs are very useful in matching systems for cable length delays. The 670-Series Monitors have many of the features of the 650 Series and are excellent for applications requiring a larger picture.

MONOCHROME PICTURE MONITOR

The TEKTRONIX Monochrome Picture Monitor is designed for measurement and qualitative evaluation of 525/60 and 625/50 standards. The monitor has many features such as a choice of D6500 or W9300 K phosphors. High resolution is maintained at full drive. Bandwidth is 6 MHz within 0.5 dB with 100% white amplitude. The monitor is all solid-state (except kinescope). A rectangular kinescope with 3:4 aspect ratio is used.

*Registered Trademark Sony Corporation.

VIRSatility Products for Automatic Video Signal Correction

1440 Automatic Video Corrector

The TEKTRONIX 1440 Automatic Video Corrector adds a totally new dimension to video signal quality control—FULL AUTOMATIC VIDEO SIGNAL MONITORING AND CORRECTION. Overall video gain, black level, color saturation, burst phase and gain, and sync level may be automatically monitored and corrected by the 1440. The necessity for continuous readjustment of proc amp controls to meet changing video signal conditions is done away with. Consistent, high quality video signals are the result.

The 1440 is a VIRS (Vertical Interval Reference Signal) controlled video processing amplifier. When VIRS is present on the video signal, the 1440 samples VIRS and, if necessary, automatically corrects the VIRS and the video signal to the same characteristics achieved at the point of VIRS insertion which is normally program origin. Other TEKTRONIX VIRSatility products are described in our TV Products Catalog.

Complete information is in Tektronix TV Products Catalog.
Use free request postcard enclosed.