



● 5850V REAR PANEL



Vector Display for Composite Video Signals

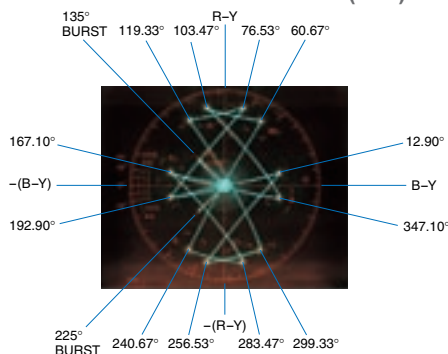
The 5850V and 5851V Vectorscopes are designed to simultaneously measure the amplitude and phase of chrominance components contained in a composite video signal.

To measure phase (i.e., direction with respect to burst signal) and amplitude (i.e., length from center) in vector format, the chrominance components containing color information of the video signal are first demodulated, and then displayed on the CRT. VITS and VIR can also be displayed in vector format by applying blanking signal output from the waveform monitor to the Z INPUT of the vectorscope.

FEATURES

- The 150 mm rectangular CRT with internal graticule (with the scale illumination), it can measure without parallax reading error.
- DP and DG measurements are made using the modulated staircase.
- Use with a waveform monitor to observe the vector VITS and VIR signals.
- Optional rackmount adapter enables a vectorscope, waveform monitor, pattern generator, and color monitor to be integrated in a system.

● THE ANGLES FOR EACH HUE 5851V (PAL)



5850V(NTSC)/5851V(PAL) SPECIFICATIONS

Model	5851V	5850V
CRT		
Type	150 mm rectangular, internal graticule with scale illumination	
Accelerating Potential	12 kV	
Effective Display Area	80 (V) × 100 (H) mm	
Beam Rotator	Adjustable from the front panel	
Graticule	Internal scale	Internal scale
	Allowable frame: ±20%/ ±10° of standard color bar, circle, angle, U axis, V axis DG and DP, ±5%/ ±3° of standard color bar, and ±20 %/ ±10° of burst signal	Allowable frame: ±20%/ ±10° of standard color bar, circle, angle, R-Y axis, B-Y axis, I axis, Q axis, DG and DP, ±2.5 IRE/±2.5° of standard color bar, and ±20 %/ ±10° of burst signal
Composite Video Signal Input		
Input	A, B and EXT REF on the rear panel (loop-through, BNC connector)	
Input Impedance	A, B: 2 MΩ, EXT REF: 10 kΩ	
Max. Input Voltage	±5 V (DC+peak AC)	
Calibrated Value	Color Saturation: 75%, 100%, full scale Amplitude: 1 Vp-p, 1.24 Vp-p Variable Range: 0.5 to 5 times of the calibrated value EXT REF Subcarrier: 2 Vp-p ±6 dB Black Burst: 0.45 Vp-p ±6 dB (5851V)/ 0.43 Vp-p ±6 dB (5850V)	
Blanking Input		
Sensitivity	DC ±1 V	
Polarity	Brightens with positive voltage	
Chrominance		
Bandwidth	Center: Fsc=4.43361875 MHz High Freq.=Fsc +500 kHz Low Freq.=Fsc -500 kHz	Center: Fsc=3.579545 MHz High Freq.=Fsc +500 kHz Low Freq.=Fsc -500 kHz
Phase Accuracy	±2°	
Amplitude Accuracy	±3%	
Differential Phase	±1°	
Differential Gain	±1%	

Model	5851V	5850V
Measurement Item		
Vector Measurement	Phase and amplitude of chrominance component in 75% or 100% saturation color bar signal	
Horizontal Synchronization		
Input	Synchronization by the horizontal sync signal of composite video signal from input A or B.	
Sync Polarity	Negative	
Sync Level Range	0.3 Vp-p ±6 dB	0.286 Vp-p ±6 dB
Subcarrier Signal Synchronization		
Synchronization by Burst Signal (of composite video signal)		
Sync Level Range	0.3 Vp-p ±6 dB	0.286 Vp-p ±6 dB
Synchronization by External Subcarrier Signal (which is applied to the EXT REF input)		
Subcarrier Signal Sync Level Range	2 Vp-p ±6 dB	
Synchronization by Black Burst Signal (which is applied to the EXT REF input)		
Black Burst Sync Level Range	0.45 Vp-p ±6 dB	0.43 Vp-p ±6 dB
Note: The external subcarrier signal is switched to and from the black burst signal internally. (set in black burst mode at shipment)		
Subcarrier Frequency	4.43361875 MHz	3.579545 MHz
Sync Capture Range	±50 Hz (0°C to 40°C)	
Phase Adjustment Range	360°, continuously variable	
Calibration		
Test Circle	Set the chrominance signal applied from the input connector in asynchronous mode.	
Power Requirements	100, 120, 200, 240 VAC, selectable by internal wiring 50/60 Hz, 40 VA	
Dimensions and Weight	215 (W) × 132 (H) × 429 (D) mm, 7.3 kg 8 1/2(W) × 5 1/4(H) × 16 3/4(D) in., 16.1 lbs.	
Supplied Accessories	Illumination lamp5 Cover/Inlet stopper1 Screw, rack mounting (inch size)2 Power cord.....1 Instruction manual1	