NTSC Waveform Monitor

- *Two Channels Plus EXT REF*
- *1H, 2H, 2V Sweeps*
- *1 µs/div Plus 2V MAG*
- *RGB Standard, YRGB Option*
- *FLAT, IRE, CHROMA and DIF'D STEP Filters (The Latter for Y Linearity Checks)*
- *Picture Monitor Output*
- *Fits Half-Rack Adapter*

Model 5860V

CE
Upon request

The standard workhorse or studio monitoring, the 5860V is ready to handle routine monitoring operations and offers extended operating options such as 1H and 1V sweeps for closer waveform inspection and a differential-step filter to facilitate luminance linearity checks using staircase signals. A DIF FAIN filter also sets up differential gain measurements. The unit syncs to the selected A or B feed or accepts black burst of composite sync as an external reference. An output jack drives a picture monitor with the selected A or B video feed.

key specifications

CRT
Accelerating Potential
12 kV / 2 kV
Area
80 x 100 mm
Graticule
Internal with scale illumination

VERTICAL SECTIONS
Flat
25 Hz to 3.6 MHz ± 2%
3.6 MHz to 5 MHz + 2 to -5% of response at 50 kHz
IRE
Based on response per IEEE std. 23 S-1
Chroma
Response at 3.58 MHz bandpass filter ± 2% flat
Differential Gain
Increased to 5.5 times versus chroma
Differential Step
450 kHz bandpass
Full Scale
150 IRE (sync 40 IRE plus vide 100 IRE)
Transient Response
± 2 IRE at 1V full scale, Flat (using $\sin^2$ pulse and bar signal)
Tilt (Vertical Window)
2%
Deflection Accuracy
1 V full scale, 140 IRE units ± 2%
4 V full scale, 140 IRE units ± 4%
Variable Range
For 140 IRE-unit display
1 V full scale, 0.25 V or less to 1 V
4 V full scale 1 V or less to 4 V
Maximum Input Voltage
± 5 V dc (1 V, 4 V full scale)
Input
2 sets of loop-through jacks (A or B switchable) on rear panel
Input Impedance
1 V full scale, 15 kΩ across 50 pF
4 V full scale, 60 kΩ across 50 pF

VIDEO OUTPUT
Amplitude
1 V p-p rear panel 140 IRE waveform display
Frequency Response
25 Hz to 5 MHz ± 5%
Impedance
75 Ω ± 10%

HORIZONTAL SECTION
1H Sweep
Displays 1 line of video signal
2H Sweep
Displays 2 lines of video signal
1µs/div Sweep
Expands 2-line display 10 times
1V Sweep
Displays 1 field of video signal
2V Sweep
Displays 2 fields of video signal
2V MAG Sweep
Expands 2 fields 20 times
Linearity
3% or less
RGB/YRGB
RGB input is connected for standard; YRGB input is optional
Staircase Input
10 V ± 15% for 9 div display
Maximum Staircase Input
12 V p-p (ac plus dc)
Time Base
RGB (3 steps)/YRGB (4 steps)
Sweep Length
RGB
About 30% normal sweep
YRGB
About 22% normal sweep
Control Signal
12 V to 15 V between pins 4 (pos) and 5 (neg)
RGB/YRGB
9 pin socket on rear panel

DC RESTORATION
Clamp time: back porch

CALIBRATOR
Frequency: 32 kHz
Amplitude: 1 V ± 1%

EXTERNAL SYNC
Input
1 set of loop-through jacks on rear panel
Input Impedance
15 kΩ
Input Sensitivity
143 mV to 5 V
(Black burst - composite sync)
Maximum Input Voltage
± 8 V

POWER REQUIREMENTS
100, 120, 220, 240 V ac ± 10%
50/60 Hz, 45 VA

PHYSICAL
Size (W x H x D)
$8^1/_2$ x $5^1/_4$ x $16^7/_8$ in.
215 x 132 x 429 mm
Weight
16.3 lbs., 7.4 kg
Operating Temperature
0 to 40° C

SUPPLIED ACCESSORIES
Protective Metal Cabinet with Handle and Feet
9 Pin Plug
5 Spare Illumination Lamps
2 Rackmount Screws (8-30 UNC)
Spare Fuse

AVAILABLE OPTIONS
YRGB Capability
Rackmount Adapter (LR-2400VI)
Protective Front Cover (LC-2077)
Viewing Hood (LH-2015)
PAL Version (5861V)