

Combo NTSC Waveform Monitor / Vectorscope

- Digital SCH Readout (5870 only)
- Simultaneous/Overlaid Displays
- Full Raster Line Select
- Line Select Presets
- Easy DG/DP Measurements
- Remote Control
- Universal Power Supply (90-250 V ac, 48-440 Hz)
- DC Operation Standard (11-20 V dc)
- PAL version of the 5872A is 5873



Model 5870, 5872A (5870 shown)



Upon request

Combining the standard features of a waveform monitor and vectorscope in a single half-rack package, Models 5870 and 5872A add the ability to overlay waveform and vector displays from two input signals for precise level, timing and phase matching. A X5 vertical gain multiplier, 200 ns/major division fastest time base and wide-range centering controls permit close waveform inspection. Decoded R-Y signal facilitates easy, high-resolution measurements of differential phase and gain. Chroma and IRE filters may be inserted on a fill-time or line-shared basis.

SCH - Model 5870 offers an on-screen digital readout of SCH in degrees of error referenced to the signal observed or an external reference for color framing checks.

LINE SELECT - Both units offer full raster line select with lines chosen from Fields 1/3, 2/4 or ALL. Memory storage of up to 9 resettable field/line numbers provides instant recall for routine tests. Provision is made for remote control including recall of line presets.

UNIVERSAL POWER - Both units employ a switching mode power supply that accepts 90-250 V ac, 48-440 Hz to operate in any locality where ac power is available. In addition, dc power is *standard* and vehicle or battery power at 11-20 V dc is accepted. A battery mounting bracket, LC-2222 is available for battery operation from a BP-90 type battery

key specifications

CRT

Accelerating Potential
16.5 kV / 2 kV

Area
80 x 100 mm (V x H)

Graticule
Internal with scale illumination

WAVEFORM MONITOR SECTION

VERTICAL SECTION

Deflection Accuracy

1 V full scale:
140 IRE units $\pm 1\%$ with 1 V input

MAG x5:
140 IRE units $\pm 3\%$ with 0.2 V input

Variable Range
1 V full scale:
0.7 V to 2 V for 140 IRE display

MAG x5:
0.14 V to 0.4 V for 140 IRE display

Maximum Input Voltage
 ± 2 V dc + ac peak

Frequency Response

Flat
25 Hz to 6 MHz $\pm 2\%$
6 MHz to 8 MHz + 2 to -5%

IRE
Conforms to IEEE standard 205, 1972

Chroma
3.58 MHz bandpass filter, $\pm 2\%$ flat

DC Restoration
Clamp time: back porch

VIDEO OUTPUT

Amplitude
1 V $\pm 5\%$ at 140 IRE deflection

Frequency Response
25 Hz to 6 MHz $\pm 5\%$

HORIZONTAL SECTION

Sweep
1H, 2H, 1V, 2V

Magnifier

Approximately 20 times 1 V and 2 V

Sweep Time Accuracy

1 μ s/div: $\pm 3\%$
0.2 μ s/div: $\pm 3\%$

Linearity

3% or less

RGB/YRGB

Internally selectable

Staircase Input

10 V $\pm 15\%$ for 9 div display

CALIBRATOR

Amplitude: 1 V $\pm 1\%$
Frequency: 100 kHz ± 0.1 kHz

VECTORSCOPE SECTION

Bandwidth
3.579545 MHz ± 500 kHz

Subcarrier Capture Range
3.579545 MHz ± 50 Hz

Accuracy

Phase: $\pm 2^\circ$
Amplitude: $\pm 3\%$

Differential Gain
 $\pm 1\%$

Differential Phase
 $\pm 1^\circ$

SCH SECTION (5870 only)

Absolute Accuracy
 $\pm 5\%$ at 25 $^\circ$ C

Relative Accuracy
 $\pm 2\%$ at 25 $^\circ$ C

Input Amplitude

Sync and burst of composite video or
black burst: 286 mV ± 3 dB

EXTERNAL SYNC

Sync Amplitude
Sync and burst of composite video or
black burst: 286 mV ± 6 dB

LINE SELECTION

Field 1 or 3: 1 - 263 lines
Field 2 or 4: 1 - 262 lines

Field Selection

FD 1, 3, FD 2, 4 and ALL

Preset

Memory storage/recall of nine
individual line numbers

POWER REQUIREMENTS

AC

90 V - 250 V, 48 - 440 Hz, 44 W

DC

11 V - 20 V

PHYSICAL

Size (W x H x D)
8 $\frac{1}{2}$ x 5 $\frac{1}{4}$ x 16 $\frac{3}{4}$ in.

215 x 132 x 429 mm

Weight

15.6 lbs., 7.1 kg

SUPPLIED ACCESSORIES

2 Rackmount Screws (8-30 UNC)

Protective Metal Cabinet with
Handle and Feet

1.25A Fuse

5A Time Lag DC Fuse

25 Pin Connector

9 Pin Connector

Canon Connector

5 Spare Illumination Lamps

AC Line Cord

AVAILABLE OPTIONS

Rackmount Adapter (LR-2400VD)

Protective Front Cover (LC-2077)

Viewing Hood (LH-2015)

White Phosphor CRT (NS-305)