

Combo NTSC Waveform Monitor / Vectorscope



LV5100D



Upon request

Capable of handling SDI as well as analog components, the LV5100D provides comprehensive waveform, vector, timing (for use with the bowtie), stereo-audio and picture monitoring facilities. Menu-driven control functions extend familiar observations into highly specialized areas that include overlay or parade displays of YPbPr or GBR; pass or remove EAV/SAV signals from the waveform and picture. Passing EAV/SAV also allows observation of signals normally blanked such as embedded audio and ANC signals like the EDH codes. Other adjustments found in the SYSTEM menu include line select setup, vector setup, DC restorer characteristics, calibration, time/calendar settings and much more. Ten available presets store front-panel settings for all observation setups and include positioning, and the use of line select and cursor measurements.

- 4:2:2 Serial Component Monitoring
- Auto Response to 525/60 and 625/50
- Two SDI Inputs (A&B)
- One Set 3-Wire Component/Composite Analog Inputs
- Active SDI Output from Selected A or B Input
- SDI Input Level in Terms of Equivalent Cable Length
- Digital Status Readout with EDH Error
- Hex Readout of all Pixels (Data Points)
- User Selected Local and Remote Error Alarms
- YPbPr or GBR Waveforms in Parade or Overlay
- 3-Wire Analog Picture Outputs (YPbPr or GBR)
- Ten Presets Store all Settings but INTEN, FOCUS, ILLUM and POWER ON-OFF
- Picture Display of Y or G (with Line-Select Strobe)
- Component Vector Display
- X-Y Stereo Display with Calibration for 0, +2, +4 dB

Presets may be recalled from the front panel or by remote control. A touch on the DIGITAL key opens an extensive presentation of digital conditions. These include status boards that report signal status, the condition of the data stream in terms of equivalent cable length from an ideal source, the presence of ANC data and EDH codes, embedded audio and the time that EDH error was detected. The cable length indicator provides a simple gauge as to the proximity of the "digital cliff". Hex data is presented for all 1716 data points on the raster line that is selected manually or captured as the result of a TRS error. In addition, local and remote alarms may be triggered by the operator's choice of monitoring parameters.

key specifications

CRT

Type
150 mm rectangular, P31 Phosphor
Accelerating Potential
16.5 kV
Scales
Internal, illuminated graticule (waveforms)
Electronically-generated (vector and audio)

SIGNAL HANDLING

Digital
Applicable standards: ITU-R601-3, ITU-R656-1, SMPTE 125M-1992, SMPTE 295M

Analog
3-wire analog component
GBR or YPbPr

SERIAL DIGITAL INPUTS

Number of Inputs
2 sets, passive loop-through
Return Loss
≥ 25 dB min, 1 to 270 MHz

ANALOG INPUTS

Number of Analog Inputs
1 set of 3 inputs, passive loop-through
REF Input
1 set, passive loop-through

OUTPUT

Serial Digital Active Output
Retransmission of selected serial input
Analog Picture Monitor Output
Format: GBR or YPbPr
Frequency Response
25 Hz to 6 MHz

VERTICAL SECTION

Deflection Accuracy
± 1% referenced to 1 V p-p full scale
± 2% x5
± 0.5% cursor measurements
Filter Characteristics
Flat
Within 2% 25Hz to 6 MHz
Lowpass
35 dBm min. at 3.58 MHz

Dif'd Step
400 kHz bandpass
HORIZONTAL SECTION

Operating Modes
Overlay, Parade, Timing, Waveform, Vector
Picture, Audio

EDH FUNCTION

Applicable Standard
SMPTE RP-165
Equivalent Line-Length Function
Reads out serial signal strength in terms of equivalent length of 5C-2V or Belden 8281 coaxial cable

DATA READOUT

Address 0000-1715 in hex line select or error trigger

CAL

Amplitude
1 V ± 0.5%

LINE SELECTOR

	525 lines	625 lines
FLD 1 & 2	Lines 1 to 262	Lines 1 to 312
FRAME	Lines 1 to 525	Lines 1 to 625

PRESET FUNCTION

Ten sets of front panel settings can be stored and recalled with exception of INTEN, READOUT INTEN, ROTATION, FOCUS, ILLUM and POWER (on-off)

CURSOR MEASUREMENTS

Available Cursors
2 horz, Δ and REF
2 vert, Δ and REF

Accuracy
0.5%

POWER REQUIREMENTS

90 V - 250 V ac, 48 to 440 Hz, 70 W

PHYSICAL

Size (W x H x D)
8³/₈ x 5¹/₄ x 16⁵/₈ in.
215 x 132 x 423 mm

Weight

11 lbs., 5 kg (not including cabinet)

SUPPLIED ACCESSORIES

5 Spare Illumination Lamps
2 8-32 Rackmount Screws
Spare Fuse

AVAILABLE OPTIONS

Carrying Case with Handle & Feet (LR-24271-U)
Rackmount Adapter (LR-2400VT)
White Phosphor CRT (NS-305)
RGB WFM Sequence (GBR normal) (NS-298)