MULTI SDI MONITOR

LV 5380

LEADER

HD-SDI

SD-SDI

8.4 Inches

4U size

CINELITE II option

New

CE Upon request

RoHS

The design is subject to change.

Compact Multi-SDI Monitor

The LV 5380 is a multi-SDI monitor equipped with a precision video signal waveform and vectorscope display via a high-fidelity TFT LCD that produces high-quality picture displays. It also offers an embedded audio signal display featuring Lissajous and level-meter configurations.*1 Additional features include simultaneous display of two SDI signals, screen capture to USB memory, and on-picture gamut error monitoring. All these features are integrated into a thin, light instrument that allows it to be used in any video production or monitoring application.

FEATURES

- **High-Quality TFT LCD**
  Employs an XGA TFT LCD (1,024x768) that produces high-quality picture displays.
- **Extensive Video Signal Displays**
  The waveform monitor display has gain adjustment, sweep, and cursor measurement features along with RGB and pseudo-composite information. The LV 5380 also provides vectorscope and embedded audio Lissajous and Level-meter displays.
- **Multi-Functional Picture Display**
  The picture display has various adjustment features such as color temperature selection, brightness, contrast, gain, and bias. Other features include monochrome, chroma up, on-image gamut error, and safety marker displays.
- **Multi-Screen Display and 2-Channel Simultaneous Display**
  1)You can switch to multi-screen which simultaneously shows video signal waveforms and pictures.
  2)You can switch to multi-screen which simultaneously shows video signal waveforms, picture, vectorscope, and audio levels.
  3)You can display two SDI signals simultaneously.*1
- **Dual link input *1**
- **Status Display**
  The LV 5380 can display SDI signal's data dump and error logs as well as the phase difference between the external sync signal and SDI signal.
- **Display Mode Switch Keys**
  For quick operation, the LV 5380 provides dedicated keys for switching between different display modes such as video waveform, vectorscope, and picture displays. In addition, all keys can be back-lit.
- **Stereo Headphone Output**
  Delivers SDI signal's embedded audio signals in stereo through the headphone output jacks.
- **External Sync Signal Input**
  Accepts tri-level sync signals or NTSC/PAL black burst signals.
- **Presets**
  Stores up to 30 front panel presets.
- **Last Memory**
  Equipped with a feature that stores panel settings to memory.
- **75-mm VESA Mounting**
  Provides 75-mm VESA mounting holes on the rear panel that allows the LV 5380 to be mounted on an arm or stand. Tripod mounting facilities also provided.
- **External Remote Connector (Factory Option)**
  An external remote connector can be installed as a factory option. In addition, one of the connectors can be modified so that a tally indicator can be displayed on the screen.

■ **Battery Mount (Factory Option)*2**
A battery adapter can be installed on the rear panel as a factory option.
- **OP73 : BATTERY MOUNT IDX (V-Mount)**
- **OP74 : BATTERY MOUNT ANTON (AntonBauer)**

■ **OP70: Cinelite II (Cinelite+Cinezone) (Option)**
Leader's CINELITE and CINEZONE features are added as a single option in this instrument. For details on CINELITE & CINEZONE, please see page #49.

*1 To be supported in the future

*2 If you install the battery mount, you cannot use the 75-mm VESA mounting holes.

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LV 5380 SPECIFICATIONS

LEADER

Video Formats and Corresponding Standards	

Format	Quantization	Scanning	Frame (Field) Frequency	Corresponding Standard
Y, C_B, C_R 4:2:2	10bit	1080i	60/59.94/50	SMPTE 274M
		1080p	30/29.97/25/24/23.98	SMPTE 292M
		1080PsF	30/29.97/25/24/23.98	SMPTE RP211 SMPTE 292M
		720p	60/59.94/50/ 30/29.97/25/24/23.98	SMPTE 296M SMPTE 292M
		525i	59.94	SMPTE 259M
		625i	50	

Audio Display	
Compliant Standard	SMPTE 299M (HD-SDI), SMPTE 272M (SD-SDI)
Quantization	20 bits
Synchronization	Must be synchronized to all video clocks
Channel Selection	Two groups (eight channels in the same SDI channel) selectable
Input/Output Connectors	
SDI Input	
Input Connectors	Two BNC connectors
Input Impedance	75 Ω
Input Return Loss	≥ 15 dB 5 MHz to the serial clock frequency
Maximum Input Voltage	±2 V (DC + ACpeak)
SDI Output	
Output Connector	One BNC connector Reclocks and transmits the selected SDI input signal
Output Impedance	75 Ω
Output Voltage	800 mVp-p ± 10 %
Maximum Return Loss	≥ 15 dB 5 MHz to the serial clock frequency
External Reference Input[*1]	
Input Signal	Tri-level sync or NTSC/PAL black burst
Input Connectors	One pair of BNC connectors
Input Impedance	15 kΩ passive loop-through
Headphone Output	
Output Signal	Extracts and transmits the embedded audio signal (when synchronized to the video signal)
Sampling Frequency	Supports 48 kHz
Output Connector	One stereo miniature jack
Impedance	16 Ω
LCD	
LCD Type	8.4-inch color XGA TFT. Effective area 1,024 x 768 dots
Backlight Brightness	32 adjustable levels
Auto Shutoff	Time to turn off the LCD can be set.
Screen Capture	
Capture	Captures the screen to an image file Only one screen image can be stored in the internal memory.
Data Output	Screen captures can be saved as bitmap files to USB memory or to a PC over the Ethernet.
Data Input	Data saved to USB memory can be loaded and displayed on the LV 5380.
Presets	
Display Mode Presets	Only stores settings specific to each display mode
Number of Presets	30 total. Display Mode Presets:Five presets for each display mode.
Waveform Display	
Waveform Operation	
Display Mode	
Overlay Display	Overlays component signals
Parade Display	Displays component signals side by side
Blanking Period	H and V blanking periods can be masked
RGB Conversion	Converts Y, C_B, C_R signals into RGB and displays the result
Pseudo-Composite Display	Digitally converts component signals into composite signals and displays the result
Channel Assignments	The G, B, R order or R, G, B order selectable for RGB conversion display
Line Select	Displays the selected line
Vertical Axis	
Gain	x1 or x5 selectable
Variable Gain	x0.2 to x2.0
Amplitude Accuracy	≤ ±0.5 %
Frequency Characteristics HDTV	
Y Signal	≤ ±0.5 % for 1 to 30 MHz
C_B, C_R Signals	≤ ±0.5 % for 0.5 to 15 MHz
Low-Pass Attenuation	≥ 20 dB (at 20 MHz)
Frequency Characteristics SDTV	
Y Signal	≤ ±0.5 % for 1 to 5.75 MHz
CB, CR Signals	≤ ±0.5 % for 0.5 to 2.75 MHz
Low-Pass Attenuation	≥ 20 dB (at 3.8 MHz)
Horizontal Axis	
Line Display	x1, x10, x20, ACTIVE, or BLANK selectable
Field Display	x1, x20, or x40 selectable
Cursor Measurement	
Types	Two horizontal cursors (REF and DELTA) Two vertical cursors (REF and DELTA)
Amplitude Measurement	Measures in % or V
Time Measurement	Measures in usec or msec
Frequency Display	Displays the frequency by assuming the interval between the cursors to be one period
Scale	
Type	% scale or V scale selectable
Color	Selectable from seven colors
Thumbnail Display	Can display thumbnails of picture displays and audio level meters
Vectorscope Display	
Gain	x1, x5, or IQ-MAG selectable
Variable Gain	x0.2 to x2.0
Amplitude Accuracy	≤ ±0.5 %
Scale	
Type	75 % or 100 % selectable
IQ Axis	Show or hide selectable
Color	Selectable from seven colors
Pseudo-Composite Display	Digitally converts component signals into composite signals and displays the result
Thumbnail Display	Can display thumbnails of picture displays and audio level meters
5 Bar Display	
Bar Display	Displays the peak levels of Y, R, G, B, and composite
Channel Assignments	RGB or GBR selectable
Scale	mV or % selectable
Error Level	Based on gamut error level and composite gamut error level settings, user settable.

Picture Display	
Color Temperature	6500K or 9300K selectable
Quality Adjustment	Brightness, contrast, gain, bias, aperture
Display Size	Fit, full frame, real, and 4:3 full screen
Color	R, G, or B can be turned off separately. Variable chroma gain and monochrome available.
Frame Rate	Displays by converting the frame rate using the internal sync signal
Aspect Marker Display	4:3, 13:9, 14:9, or 16:9 selectable
Aspect Marker Format	Line, shadow (three types), black
Safety Marker Size	ARIB TR-B4, SMPTE RP-218, or user-defined selectable
Line Select	Displays a mark on the selected line
Gamut Error Display	Displays gamut error locations over the picture
Thumbnail Display	Displays thumbnails of audio level meters
Embedded Audio Display	
Lissajous Display	
Display Channels	2ch (single) or 8ch (multi) selectable
Display Mode	X-Y or L-R selectable
Level Meter Display	
Display Channels	2ch or 8ch display selectable
Meter	60 dB peak level, 90 dB peak level, or average selectable. (Peak level meters include setable peak hold indication.)
Channels	
Group Selection	Select any two groups within the same SDI channel from groups 1, 2, 3, and 4
Audio Information Detection	Detects the presence of each audio channel
Sampling Frequency	48 kHz (must be synchronized with the video signal)
Status Display	
Event Log	Stores up to 1,000 events
Data Dump Display	Dumps data by serial data sequence or by channel
Data Output	Can be saved in text format to USB memory or to a PC
Phase Difference Display	
Display	Displays numerically and graphically the phase difference between an SDI signal and the external sync signal
Display Range	
Vertical	±1 field (for interlace) ±1/2 frame (for progressive)
Horizontal	±1 line
Error Count	
Error Count	Counts up to 999,999 video, audio, and gamut errors separately
Count Period	Counts all errors that occur in one field as one error
Video Errors	
CRC Error	Detects transmission errors of HD-SDI signals
EDH Error	Detects transmission errors of SD-SDI signals
Gamut Error	
Gamut Error	Detects gamut errors
Detection Range Upper Limit	90.0 to 109.4 %
Lower Limit	-7.2 to +6.1 % (0.1 % steps)
Composite Gamut Error	Monitors level errors when component signals are converted to composite signals
Detection Range Upper Limit	90.0 to 135.0 %
Lower Limit	-40 to -20 % (0.1 % steps)
Audio Errors	
CRC Error	Detects CRC errors in channel status bits
BCH Errors	Detects transmission errors of HD-SDI audio packets
Time Display	
Current Time Display	Time display based on the internal clock
Elapsed Time	Time elapsed since the error count was cleared
Time Code	LTC or VITC selectable (complies with SMPTE RP-188)
Other Display Features	
ID Display	ID can be assigned to each input channel.
Tally Indicator	One of the remote connectors can be modified so that tally indication can be shown on the screen (to be supported in the future).
Front Panel	
Key LEDs	All keys illuminate dimly. (The selected key illuminates brightly.)
Last Memory	Backs up panel settings to memory
Environmental Conditions	
Operating Temperature	0 to 40 °C
Operating Humidity Range	≤ 85 % RH (without condensation)
Operating Environment	Indoors
Overvoltage Category	I
Pollution Degree	2
Power Requirements	10 to 18 VDC, 30 W max.
Dimensions	215 (W) x176 (H) x 85 (D) mm (excluding projections) 8 1/2(W) x 6 15/16(H) x 3 3/8(D) in. (excluding projections)
Weight	2.0 kg, 4.5 lbs
Accessory	Instruction manual.....1 Ferrite Core 1
Option Sold Separately	AC adapter LP 1960 Rack mount LR 2751 I Blank Panel LC 2129

*1
- The video signal waveform display and vectorscope display may be delayed by up to 1 frame with respect to the picture display.
- V sweep cannot be displayed when the video signal waveform displays for two simultaneous inputs are shown.
- Phase difference accurary between external reference and internal signal is ±1 clock cycle.

■Cinelite II (Option)

Cinelite

Cinezone

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LV 5380 DISPLAY

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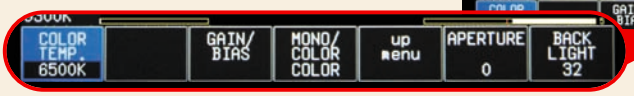
Picture Display

Versatile Picture Display

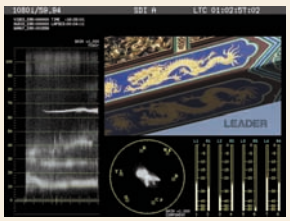
Picture adjustment options include color temperature (6500K/9300K), brightness, contrast, gain, bias, and aperture. You can switch the R, G, and B signals on and off.



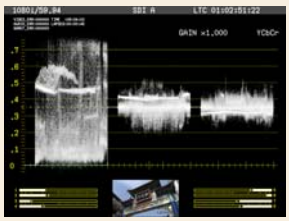
Picture adjustment menu

Picture and waveform time axis correspondence

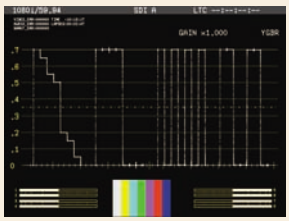
Multi-Screen Display



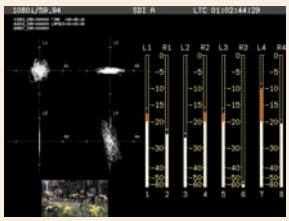
Waveforms



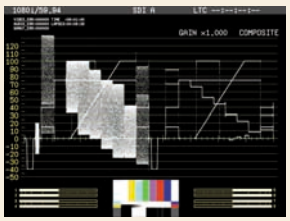
Y RGB Display



Audio Display



Composite Display

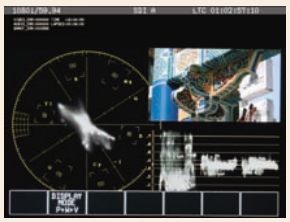


5 Bar/Picture/Gamut

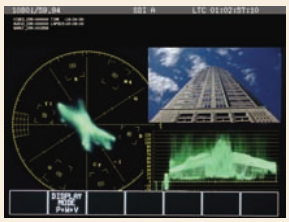
Gamut Error Display

Changes the color of gamut error areas in the picture display.

Video Waveform Color Selection



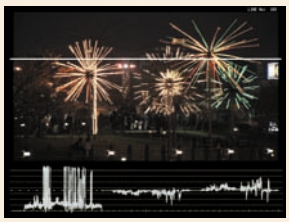
White display



Green display

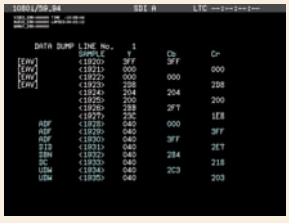
Various Markers

Line Selection



Phase Difference Display

Data Dump



Status

Aperture

ON OFF

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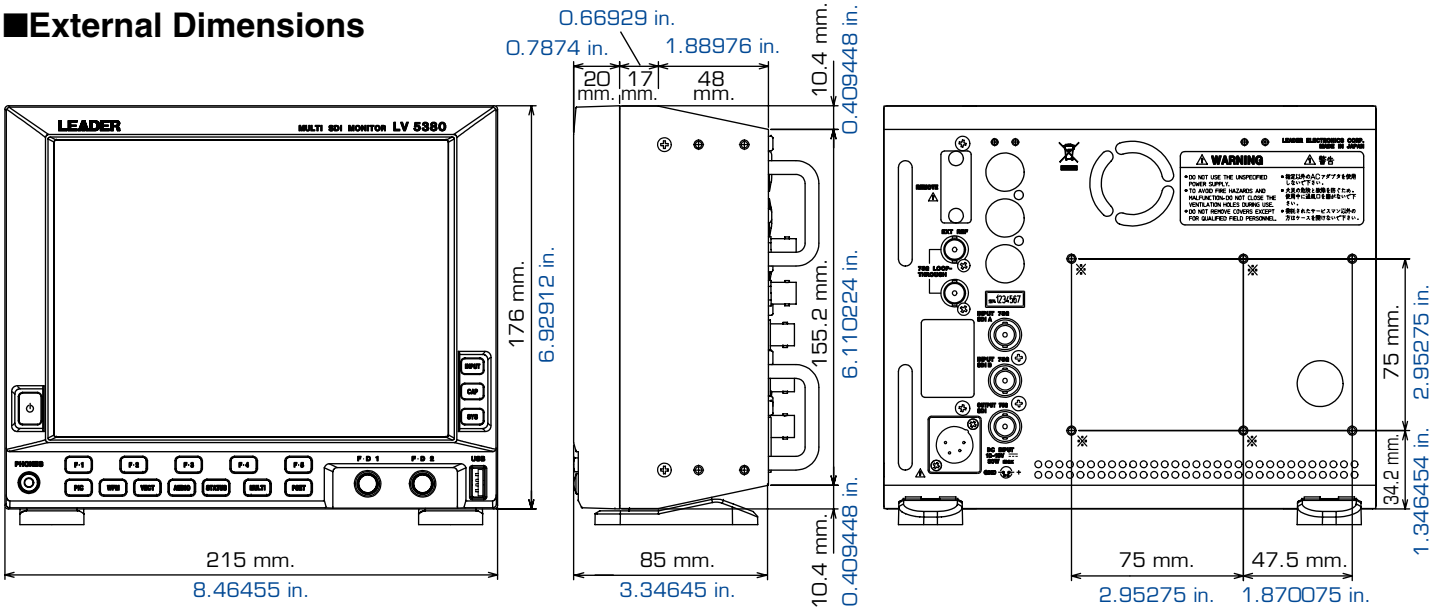
FIT Display Size (with audio levels)

REAL Display Size
(pixel to pixel correlation)

MONOCHROME Display

■External Dimensions



■LV 5380 REAR PANEL

■Rack Mounting

LV 5380 dual mount example

LR 2751 I Rack Mount (sold separately; tiltable)
LC 2129 Blank Panel (sold separately)

■AC Adapter LP 1960 (sold separately)

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