

MULTI SDI MONITOR

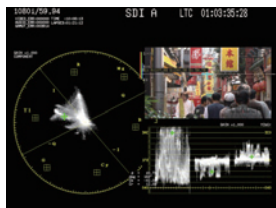
LV 5381

LEADER



Upon request

CINELITE NEW Advanced Display



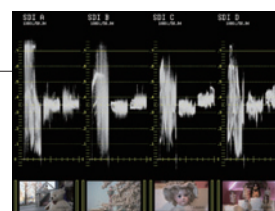
HD-SDI

SD-SDI

3D
Anaglyph

4U size
(half Rack)

CINELITE II
INSIDE



(4 Inputs Display)

Multi SDI Monitor (4 Inputs)

The LV 5381 is a waveform monitor that can monitor up to four SDI signals simultaneously. It is optimized for the level adjustment of the outputs of multiple installed cameras. In the video signal waveform display, vector display, and picture display, multiple input signals can be displayed on top of each other or lined up next to each other. It is also full of useful features such as a level meter display for embedded audio, an error display that indicates transmission errors, and a 5-bar display that shows video signal peak levels using five bars. Furthermore, the LV 5381 can show different combinations of these displays in its multi-screen display.

FEATURES

• Simultaneous Monitoring of Four Inputs

The LV 5381 is a waveform monitor with a built-in 8.4-inch TFT-LCD. It can display up to four SDI input signals of the same format simultaneously. The LCD is an XGA display (1024 x 768 pixels) that boasts high color reproducibility. This makes the LV 5381 useful for picture monitoring as well.

• Wide Variety of Display Formats

In the video signal waveform display, vector display, and picture display, the LV 5381 can display up to four input SDI signals on top of each other or side by side. This makes it suitable for adjusting the gain and black balance values of multiple cameras. In the video signal waveform and vector displays, the LV 5381 can make different waveforms easier to see by using a different waveform color for each input channel.

• Extremely Flexible Display Layouts

Each of the different displays can be shown on a single screen, or the multiscreen display feature can be used to divide the screen into four areas with a different display shown in each area. The video signal waveform display, picture display, and audio level meter display can be shown as a thumbnail display on the one-screen display.

• Video Signal Waveform Display

The input Y C_B C_R signal can be converted to an RGB or pseudocomposite signal and shown on the video signal waveform display. The video signal waveform display has a rich assortment of features such as waveform magnification and line selection.

• Picture Display

The picture display has a wide variety of picture monitoring features, such as color temperature specification; brightness, contrast, and aperture adjustment; and the display of gamut error locations.

• CINELITE II / CINELITE Advanced

The LV 5381 comes standard-equipped with CINELITE II (CINELITE and CINEZONE), which is a video signal luminance information analysis tool. With CINELITE, you can use the cursor to select any 3 points and display their f-Stop numbers, percentage values, and level values. You can choose to analyze a single pixel or a small area by setting the size of the

measured area to 1 pixel or to the average value for 9 or 81 pixels. With CINEZONE, you can display the luminance levels in the picture using different colors. This allows you to quickly determine the overall luminance distribution in the picture, and it makes it easy to spot overexposure, underexposure, and different luminance levels in dark areas.

• Screen Capture Feature

The display can be captured and stored as image data. The captured data can be displayed on the LV 5381. Additionally, it can be saved as bitmap files to USB memory, which makes it possible to view the data on a PC.

• External Sync Signal Input

The LV 5381 can receive a tri-level sync signal or an NTSC or PAL black burst signal as its external sync signal and then display video signal waveforms with this sync signal as its reference.

• Presets

Stores up to 30 front panel presets.

• Last Memory

• ID Display

IDs can be assigned to input channels. IDs are entered from the LV 5381 panel.

• Stereo Headphone Output (1 stereo miniature jack)

• Dimensions and Weight

425 (W) x 352 (H) x 95.0 (D) mm, 5.2 kg
16 3/4(W) x 13 7/8(H) x 3 3/4(D) inch. (excluding projections), 11.46 lbs

Remote and Tally Option (OP70, factory option)

The addition of the external remote option enables the LV 5381 to load presets and display tallies according to the signals that it receives through the rear-panel remote control connector. This makes it possible to link the LV 5381 to a switcher or other device.

Dual Link Option (LV 5381SER01)

The addition of the dual link option enables the LV 5381 to monitor a pair of dual link signals simultaneously.

Audio Lissajous Option (LV 5381SER02)

The addition of the audio lissajous option enables the LV 5381 to display the lissajous curves and the numeric values of levels of the audio that is embedded in an SDI signal.

Status Option (LV 5381SER03)

The addition of the status option enables the LV 5381 to show analysis displays such as the data dump, phase difference, and event log displays.

3D Assist Option (LV 5381SER04)

3D video signals can be evaluated by applying the video signal for the left eye to channel A and the video signal for the right eye to channel B. The available picture display formats are anaglyph, convergence, overlay, and wipe.

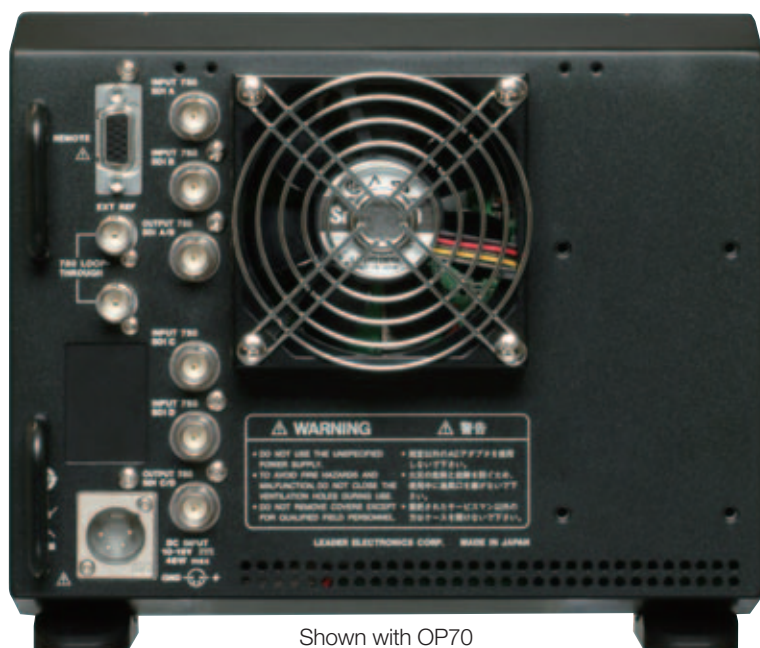
LV 5381 SPECIFICATIONS



| Video Signal Formats and Standards Single Link System Video | | | | |
|--|--------------|---|--------------------------------------|----------------------------|
| Format | Quantization | Scanning | Frame (Field) Rates | Compliant Standard |
| Y,C _u ,C _r 4:2:2 | 10 bit | 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 RP 211 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 Playback Compliant Standards | | SMPTE-299M (HD-SDI) SMPTE-272M (SD-SDI) | | |
| Quantization | | 24 bits | | |
| Clock Generation | | Generated from the video clock | | |
| Synchronization | | All audio channels must be synchronized to the video clock. | | |
| Input/Output Connectors | | | | |
| SDI Input | | 4 BNC connectors (channels A, B, C, and D) | | |
| Input Connectors | | | | |
| SDI Output | | 2 BNC connectors | | |
| Output Connectors | | SDI signal selected from channel A or B is reclocked and generated | | |
| Output Signal | | SDI signal selected from channel C or D is reclocked and generated | | |
| Output Impedance | | 75 Ω | | |
| Output Voltage | | 800 mVp-p ± 10 % | | |
| Output Return Loss | | ≥ 15 dB for 5 MHz to the serial clock frequency | | |
| External Sync Input(*1) | | | | |
| Input Signal | | Tri-level sync or NTSC/PAL black burst signal | | |
| Input Connectors | | 2 BNC connectors | | |
| Input Impedance | | 15 kΩ passive loop-through | | |
| Input Return Loss | | ≥ 30 dB for 50 kHz to 30 MHz into 75 Ω | | |
| Maximum Input Voltage | | ±5 V (DC + peak AC) | | |
| Headphone Output | | | | |
| Output Signal | | Extracts and transmits the audio signal embedded in an SDI signal. | | |
| Output Channel | | Specified AES/EBU pair | | |
| Sampling Frequency | | Only 48 kHz is supported. | | |
| Output Connector | | 1 stereo miniature jack | | |
| Volume Adjustment | | Configured from the menu | | |
| Power Output | | 50 mW max. (with 16 Ω load resistance) | | |
| | | *1If the video signal waveform is displayed using an external sync signal as the reference, inserting or removing an SDI signal or restarting the device may cause the waveform phase to be off by one clock. This feature does not function when the video format is 1080p/60, 59.94, or 50. | | |
| Control Connectors | | | | |
| USB Port | | USB 2.0 | | |
| Specification | | Only supports USB memory devices. | | |
| Media | | | | |
| LCD | | | | |
| LCD Type | | 8.4-inch color TFT | | |
| Display Format | | XGA. The effective resolution is 1024 x 768. | | |
| Backlight Brightness | | 32 levels | | |
| Auto Shutoff | | Time to turn off the LCD can be set. | | |
| Screen Capture | | | | |
| Screen Capture | | Captures the screen to an image file (only one screen capture is stored in internal memory) | | |
| Media | | Internal memory (RAM) and USB memory | | |
| Data Output | | Screen captures can be saved as bitmap files to USB memory. | | |
| Data Input | | Data saved to USB memory can be loaded and displayed on the LV 5381. | | |
| Preset Settings | | | | |
| Preset Mode | | Comprehensive preset, display mode preset | | |
| Waveform Display | | | | |
| Simultaneous Input Mode Display Format | | Mixed, tiled, aligned | | |
| Waveform Operation | | | | |
| Display Mode | | Overlay, parade | | |
| Overlay | | Overlays component signals | | |
| Parade | | Displays component signals side by side | | |
| Blanking Period | | H and V blanking periods can be displayed or hidden. | | |
| RGB Conversion | | Converts a Y,C _u ,C _r signal into an RGB signal and displays the result | | |
| Pseudo-Composite Display | | Artificially converts a component signal into a composite signal | | |
| Channel Assignment | | Displayed in GBR or RGB order (selectable when RGB conversion is enabled) | | |
| Line Select | | Displays the selected line | | |
| Gain | | x1, x5 | | |
| Variable Gain | | x0.2 to x2.0 | | |
| Filter | | Flat, low pass | | |
| Waveform Display Accuracy | | | | |
| Amplitude Accuracy | | ±0.5 % | | |

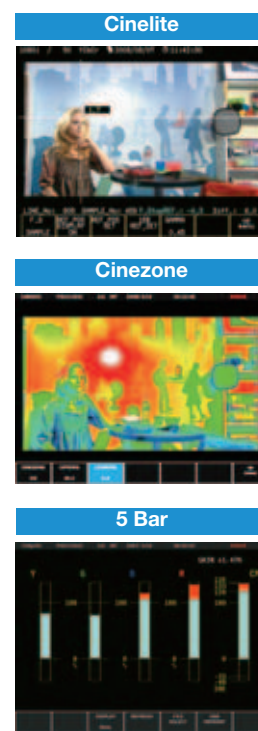
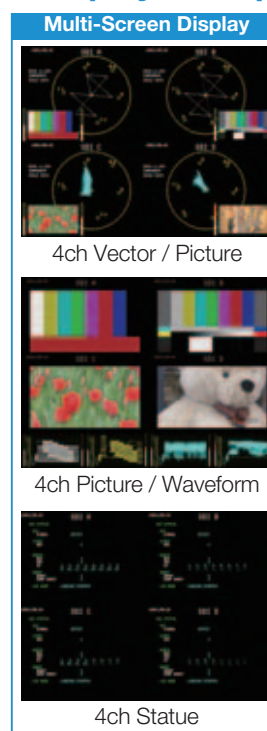
| HD-SDI | | |
|---|--|---|
| Y Signal C_uC_v Signal Low-Pass Attenuation | | ±0.5 % for 1 to 30 MHz ±0.5 % for 0.5 to 15 MHz ≥ 20 dB (at 20 MHz) |
| SD-SDI | | |
| Y Signal C_uC_v Signal Low-Pass Attenuation | | ±0.5 % for 1 to 5.75 MHz ±0.5 % for 0.5 to 2.75 MHz ≥ 20 dB (at 3.8 MHz) |
| Scale Type Display Color | | % scale, V scale, decimal scale, hexadecimal scale 7 colors |
| Thumbnail Display | | Picture, audio level meter |
| Vectorscope Display | | |
| Simultaneous Input Mode Display Format Blanking Interval Pseudo-Composite Display | | Mixed, tiled Masked Artificially converts a component signal into a composite signal |
| Line Select Gain Variable Gain Amplitude Accuracy Scal Type Setting the Color Bar Saturation IQ Axis Display Color Thumbnail Display | | Displays the selected line x1, x5, IQ-MAG x0.2 to x2.0 ±0.5 % ITU-R BT.601, ITU-R BT.709, AUTO 75 %, 100 % Show, hide 7 colors Picture, audio level meter |
| 5 Bar Display | | |
| Simultaneous Input Mode Display Format Bar Display Channel Assignment Scale Error Level | | Tiled only Displays the peak levels of Y, R, G, B and composite RGB, GBR mV, % Based on the gamut error, composite gamut error, and luminance error thresholds |
| Picture Display | | |
| Simultaneous Input Mode Display Format Quantization Color Temperature Image Quality Adjustment | | Mixed, tiled 8 bits 6500 K, 9300 K Brightness, contrast, chroma gain, RGB gain, RGB bias, aperture |
| Display Sizes Color Frame Rate | | Fit, full frame, real, 4:3 full screen R, G, B can be turned off separately. Chroma off The frame rate is converted and displayed using the internal sync signal. |
| Aspect Display Marker HD-SDI SD-SDI Line Select Gamut Error Display Thumbnail Display | | 4:3, 13:9, 14:9, 2.39:1 13:9, 14:9, 16:9 Marks the selected line Displays gamut error locations over the picture Video signal waveform, audio level meter |
| Error Count Display | | |
| Function Video Error Display Audio Error Display | | Used to count the video, audio, and gamut errors Counts CRC (HD-SDI) and EDH (SD-SDI) errors Counts embedded audio BCH (HD-SDI) and channel status bit CRC errors |
| Gamut Error Display Upper Limit Lower Limit Composite Gamut Error Upper Limit Lower Limit Error Count | | Counts gamut, composite gamut, and luminance errors 90.8 to 109.4 % -7.2 to 6.1 % 90.0 to 135.0 % -40.0 to 20.0 % Up to 999,999 errors can be counted separately for video, audio, and gamut. One count per field The time based on the internal clock The elapsed time since the error count was cleared |
| Other Display Settings | | |
| Input Information Display Time Code Format Display | | Input channel, ID, OFF LTC, VTC, OFF The format can be displayed when an SDI signal is detected. |
| Front Panel | | |
| Key LEDs | | All the keys are dimly back-lit, and the selected key is lit more brightly |
| Environmental Conditions | | |
| Operating Temperature Range Operating Humidity Range | | 0 to 40 °C ≤ 85 %RH (without condensation) |
| Power Requirements | | |
| | | 10 to 18 VDC, 46 W max. |
| Dimensions | | |
| | | 215 (W) x 176 (H) x 111 (D) mm (excluding projections) 8 1/2(w) x 6 7/8(H) x 3 3/8(D) inch |
| Weight | | |
| | | 2.2 kg 4.85 lbs |
| Accessories | | |
| | | AC adapter (SPU63-105).....1 Instruction manual1 |
| Optional Accessories | | |
| | | Rack mount adapter, Handle |

Rear Panel



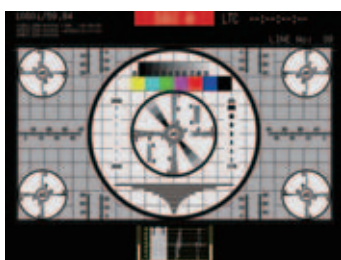
Shown with OP70

Display Examples



Option

Remote and Tally Option (OP70, factory option)

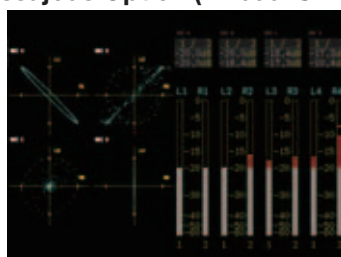


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Audio Lissajous Option (LV 5381SER02)

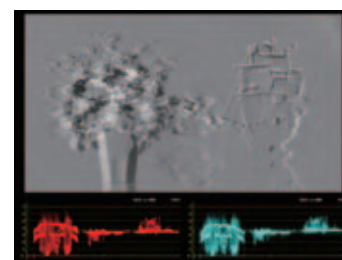


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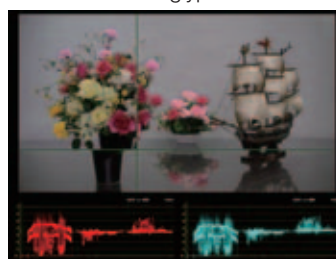
3D Assist (LV 5381SER04)



Anaglyph



Convergence



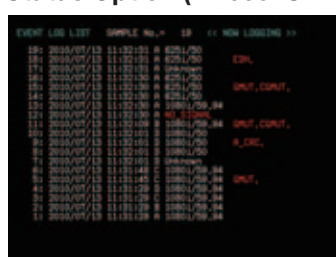
Wipe



Overlay & Histogram

3D video signals can be evaluated by applying the video signal for the left eye to channel A and the video signal for the right eye to channel B. The available picture display formats are anaglyph, convergence, overlay, and wipe.

Status Option (LV 5381SER03)



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