# MULTI SDI/HDMI MONITOR

Upon request

## LV 5382

## LEADER





## **Multi SDI/HDMI Monitor**

The LV 5382 is a portable waveform monitor that supports SDI and HDMI signals.\*1 The LV 5382 has simultaneous HD-SDI dual input display features and supports HDMI frame-packing, side-by-side, and top-and-bottom formats. A battery option is also available. Thanks to these features, the LV 5382 is incredibly useful at 3D filming locations.

\*1 HDCP is not supported.

#### **FEATURES**

#### • Features Tailored to 3D Filming

The LV 5382 can handle 3D content with its support for HD-SDI 2-channel simultaneous display and HDMI frame-packing, sideby-side, and top-and-bottom formats. The LV 5382 has a number of features that are useful for evaluating 3D content. The anaglyph display enables easy expression of stereoscopic vision. The variable grid display is for horizon and parallax checking. The vertical and horizontal reversal feature is necessary when using a mirror rig.

#### • SDI and HDMI I/O Connectors and the SDI to HDMI Conversion Feature

The LV 5382 has two SDI input connectors, two reclocked SDI signal output connectors, an HDMI input connector, and an HDMI output connector. The HDMI output connector can actively transmit an HDMI input signal or output an HDMI signal that has been converted from an SDI signal.

#### • High-Quality TFT LCD

Employs an XGA TFT LCD (1,024 x 768) that produces high-quality picture displays.

#### Versatile Picture Display

The LV 5382 uses fully digital picture display processing to achieve high precision and versatility. The display has a number of adjustment features such as color temperature selection, brightness adjustment, contrast adjustment, gain adjustment, and bias adjustment. It also has monochrome, chroma up, gamut error, and safety marker display features.

#### • Standard-Equipped CINELITE II\*2 / CINELITE Advanced

The CINELITE feature makes it easy to manage the levels of specific points on the picture display. This is useful for adjusting the gain of multiple cameras through the use of the same reference point. The CINEZONE feature makes it possible to check the luminance distribution of the whole picture display at a glance \*2 This feature is not available for HDMI signals.

#### Screen Capture Feature

The display can be captured and stored as still-image data. The captured data can be displayed on the LV 5382. Additionally, it can be saved as bitmap files to USB memory, which makes it possible to view the data on a PC.

#### External Sync Input\*3

The LV 5382 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. \*3 This feature is not available for HDMI signals.

#### Preset Feature

Stores up to 30 front preset panel.

#### Last Memory Feature

The LV 5382 always keeps a backup of the current settings. When the LV 5382 is restarted, it can be used with the same settings that were in use before it was turned off.

#### ID Display

IDs can be assigned to input signals. IDs are entered from the LV 5382 panel.

#### Stereo Headphone Output

The LV 5382 can deliver the embedded audio of an SDI signal or HDMI signal in stereo through the headphone output jacks.

#### **OP72 : Remote and Tally factory option**

The addition of the remote and tally option enables the LV 5382 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 5382 to a switcher or other device.

#### **OP73 or OP74 : Battery Mount factory option**

The addition of the battery mount option enables the LV 5382 to use IDX (OP73) or Anton/Bauer (OP74) batteries.

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### LV 5382 SPECIFICATIONS



Color	0			Format			Corresponding	
System	Quantization	Sca	Scanning		rame (Fie	eld) Rates	Standard	
		1080	n	60/59	9.94/50		SMPTE ST 274	
Ү,Св,Ся 4:2:2		1080	1080PsF *1		-30/29.97/25/24/23.98		SMPTE ST 292	
	10 bit	720p *2		60/59.94/50/		01/03.08	SMPTE ST 296	
		525i		59.94		24/20.00	OMPTE OT 252	
		625i		50	50		SMPTE ST 259	
) Mode	(Dual-link	svste	em)					
Color	Quantination			Forr	nat		Corresponding	
System	Quantization	Scanning		Frame (Fie		eld) Rates	Standard	
	10 bit	1080p 1080PsF *1		-30/29.97/25/24/23.98		4/23.98		
		1080i		60/59.94/50				
4:4:4	101.1	1080p		30/29.97/25/24/23.98		4/23.98		
	12 bit	1080P	'SF ^1	60/59.94/50			(1920x1080)	
	10 bit	1080p	60/59.94/50		.94/50			
Y,CB,CR	10 64	1080p		30/29	-30/29.97/25/24/23.98		1	
4.2:2	זומ ביו	1080PsF *1		60/59	.94/50		-	
RGB	12 hit	1080p	1080p *2		.98	SI	SMPTE ST 372	
1:4:4 (2K)		1080Ps	sF *2	24/23	.98		(2048x1080)	
Assist	t Mode				1			
olor Syste	em Quantiza	ation	n Scann 1080i		60/59.9	⊢rame (F 94/50	eld) Rates	
Y,CB,CR		. t	1080p		30/29 97/25/24/23		.98	
4:2:2	10 b	11	1080Ps	⊢*1	60/59 94/50/			
			720p *2		30/29.97/25/24/23.98			
			1 The	e HDN	11 outpu	ut is interla	iced. s with frame rates	
			of 2	24 Hz	or 23.9	98 Hz as H	IDMI signals.	
			2 You	u canr 24 Hz	not outp or 23.9	out format )8 Hz as H	s with frame rates IDMI signals.	
OMI Inpu	ut Signal V	ideo F	ormat	S				
D Mode			ļ					
Color Syste	em Quanti:	zation	5	Scannin	g	Fram	ne (Field) Rates	
			1920x1080p			30/29.97/	25/24/23.98	
				1920x1080i 1280x720p*4		60/59.94/	60/59.94/50 60/59.94/50/30/29.97/25	
RGB 4:4:4 /,Св.Ср	121	oit bit	640x480p*5			60/59.94		
1:2:2 *3	8 b	oit	720x4	80p(52 76p(62	5p)*5 5p)*5	50		
			720x4	180i(525i)*4		60/59.94		
			720x5	76i(625	i)*4	50		
D Assist	t Mode							
						1		
Color System Quan		zation S		Scanning		Fram	ne (Field) Rates	
RGB 4:4:4	*4 12bi	t *4 bit	1920x	1920x1080p 1920x1080i 1280x720p		30/29.97/2	25/24/23.98 50	
,Св,Ся 4:2	::2 8 b	bit	1280x			60/59.94/	50/30/29.97/25	
			*3 The	e LV 5	382 ca	Innot distir	nguish between 8-	
			bit	, 10-b	it, and	12-bit qua	antization.	
			bit	signa	l throu	gh internal	processing.	
			*5 The	e pseu SB co	Ido-cor oversio	nposite di n displav	splay, YCBCR to	
			an	d 5-b	ar displ	ay are not	available.	
HDMI	I/O Featur	res						
Input System Options SDI Input Features SDI Input Display Modes SDI Output Features Output Signal HDMI Input Features HDMI Input Identification HDMI Output Features Output Signal								
			2D / 3D assist					
			Serial reclocked input SDI signal (for monitoring)					
			AUTO, 2D, and 3D assist					
			Output of HDMI or SDI video and audio input signals (1080PsF/24, 23,98 and 720p/24					
			23.98	cann	ot be o	utput)		
I Signal	Audio For	rmat	0.457		000 0		070	
ormats	aaras		L-PCN	E ST 1	299, SI	WPIESI	212	
ampling	Frequenc	зy	48 kH	Z				

Quantization	24 bit * When the link format is set to SDI dual, the LV 5382 only supports the audio signal received through link A.
HDMI Signal Audio Format Formats Sampling Frequency Quantization Number of Channels	L-PCM 48 kHz 16 bit,20 bit,24 bit 8 channels
Input/Output Connectors SDI Input Input Connectors SDI Output Output Connectors HDMI Input Input Connector HDMI Output Output Connector External Sync Input *6 Feature Input Signal Input Connectors Headphone Output Output Signal	<ul> <li>2 BNC connectors</li> <li>2 BNC connectors</li> <li>1 type A connector</li> <li>1 type A connector</li> <li>A video signal waveform is displayed that is based on the phase of the external sync signal. (Only available for SDI signals.) Tri-level sync or NTSC/PAL black burst signal 2 BNC connectors</li> <li>Extracts and transmits the audio signa embedded in an SDI signal or HDMI signal.</li> <li>*6 If 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. Also, this feature does not function with 1080p/60, 59.94, 50 SDI signals or HDMI signals</li> </ul>
Control Connectors USB Port Specification Remote Control Connect Features	USB 2.0 <b>for (When an OP72 is installed)</b> Comprehensive preset recall,*7 tally display, and input signal selection (either the tally dis- play feature [green] or the HDMI selection fea- ture can be selected) *7 Display mode presets cannot be recalled.
LCD LCD Panel Type	8.4-inch color TFT
Screen Capture Screen Capture	Captures the screen to an image file (only one screen capture is stored in internal memory)
Preset	Stores up to 30 front panel presets.
10300	otores up to oo front parler presets.
Main Display Features SDI Input Modes Single Input Mode Dual Input Mode 3D Assist Mode HDMI Input Modes 2D Mode 3D Assist Mode	Single input mode, simultaneous input mode, 3D assist mode Displays a single input signal Displays up to two input signals of the same format simultaneously Displays two input signals of the same format simultaneously 2D mode and 3D assist mode Displays the HDMI input signal as a single video signal Divides the HDMI input signal into two video signals and displays the signals in a variety of formats so that the signals can be compared as components of a 3D video signal
Simultaneous Input Mode	e Display Format
Waveform Operations Display Modes Overlay Parade RGB Conversion	Mixed *8, tiled, aligned Overlay, parade Displays component signals side by side Converts a YC₀C₀ signal into an RGB signal and displays the result
Pseudo-Composite Display Channel Assignment Line Select Sweep Modes	Artificially converts a component signa into a composite signal Displayed in GBR or RGB order (selectable when RGB conversion is enabled) Displays the selected line H (line), V (field/frame) (V cannot be selected in simultaneous input mode)
Cursor Measurement Composition Amplitude Measurement	Two horizontal cursors (REF and DELTA) Two vertical cursors (REF and DELTA) %, V, or R%

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Turne		
туре	<ul> <li>% scale, v scale, decimal scale, hexadecimal scale</li> <li>*8 In dual input mode and 3D assist mode, the waveform display will flicker when the input video signal has a field or frame rate of 50, 25, 24, or 23.98 Hz.</li> </ul>	
Vectorscope Display		
Dual Input Mode Display Pseudo-Composite Display	Formats Mixed *9, tiled Artificially converts a component signal into a composite signal	
Scale Setting the Color Bar Saturation IQ Axis	<ul> <li>75 %, 100 %</li> <li>Show, hide</li> <li>*9 In dual input mode and 3D assist mode, the waveform display will flicker when the input video signal has a field or frame rate of 50, 25, 24, or 23.98 Hz.</li> </ul>	
5Bar Display Function Channel Assignment Scale	Displays the peak levels of Y, R, G, B and com- posite RGB, GBR mV, %	
Picture Display Dual Input Input Mode Di	splay Format	
Color Temperature Image Quality Adjustment	Mixed, tiled 6500 K, 9300 K Brightness, contrast, chroma gain, RGB gain, RGB bias, aperture	
Display Sizes Color Selection Aspect Marker	Fit, full frame, real, 4:3 full screen R, G, B can be turned off separately. Chroma off 4:3, 13:9, 14:9, 2, 39:1, 13:9, 14:9, 16:9	
Aspect Marker Format Safety Marker Size	Line, shadow (99 levels), mask ARIB TR-B4, SMPTE ST RP-218, user-defined	
3D Assist Display Supported Format SDI input	L/R dual, side by side, and top and bottom (only supported with a single link)	
	bottom	
Left Eye Video Right Eye Video Picture Display	Channel A Channel A Anaglyph Display(Color), Anaglyph Display (Monochrome), Convergence Display, Overlay Display, Checker Display, Wipe Display, Flicker Display, Inverted Display, Grid Display	
CINELITE Display CINELITE Display		
Features	f Stop display, percentage display, and gradi- ent display	
% Display	Luminance or RGB components are displayed as percentages.	
Gradient Display	RGB components are displayed using an 8-bit, 256-step gradient.	
Feature	Colors are added to the display in accordance	
CINELITE Advanced Display Feature	Synchronized marker display, vector	
Synchronized Marker Display	Synchronizes the markers on the vector display Synchronizes the markers on the vector display or waveform display to the measurement points of the CINELITE display's f Stop display	
Vector Marker Display	or % display Displays numerically the specified position on the vector display * The CINELITE feature is not available for HDMI signals.	
Embedded Audio Display Display Type	Level meter, Level values, Lissajous	
Level Meter Display Displayed Channels Meter	2ch or 8ch 60 dB peak level, 90 dB peak level, average(The peak level meter has a hold fea- ture.)	
SDI single Input Mode SDI Dual Input Mode HDMI Input	Any two groups from groups 1, 2, 3, and 4 One group and four channels per input channel Up to 8 channels	
SDI Error Counting Feature	Counts the video, audio, and gamut errors in an SDI signal (not available for HDMI input)	
SDI Status Display Error Detection		

Monitoring Feature	Regardless of the input mode, you can monitor two inputs simultaneously (not available for HDMI input)		
SDI Video Audio Gamut Gamut Error	Detects the presence of an SDI signal CRC Error, EDH Error, Phase Error CRC Error, BCH Error, BCH Erro Gamut Error, Gamut Error, Detects gamut errors, Composite Gamut Error, Luminance Error		
Recording Capacity Data Dump	Up to 1000 events		
Operation Mode Phase Difference Display	Run, hold		
Function	Displays the phase difference between the external sync signal and the SDI signal (does not function when the video format is 1080p/60, 59.94, or 50)		
Other Display Settings Input Information Display Input Channel Display ID Display Time Code Compliant Standard Format Display	Input channel, ID Displays the selected channel (A, B, or HDMI) Up to 10 characters for each input channel LTC, VITC, OFF SMPTE 12M-2 (decoded from ANC-TC)(When the link format is set to dual, only link A is decoded.) The format can be displayed when an SDI or		
	HDMI signal is detected.		
Environmental Conditions Operating Temperature Operating Humidity	0 to 40 °C 85 %RH or less (no condensation)		
Power Requirements Voltage Power Consumption	10 to 18 VDC 40 W max.		
Dimensions and weight	215 (W) x 176 (H) x 85 (D) mm 2.1 kg 8 1/2(W)x6 7/8(H)x3 3/8(D) inch. (excluding projections)		
Accessories	Instruction manual       1         VESA spacer       1         15-pin D-sub connector(OP72)       1         15-pin D-sub connector cover(OP72)       1		
Option Sold Separately AC adapter Rack Mounting Adapter Handle Tilt stand	SPU63-105 LR 2751 LH 2140 LC 2150 Refer also to the accessory page.		

#### ■ CINELITE Advanced Display

