



New

HD-SDI

SD-SDI

PATENTED: Equivalent cable length measurement

Please use exclusive cabinet for Model LV5800 (photograph shows LR2427B). The Panel design is subject to change. The cabinet is sold separately.

Your Desired Combination Of Units Allows For A Flexible Waveform Monitor

The LV5800 is a new type of multi monitor that allows you freely configure various input and output units according to your application.

You can construct a versatile system by combining dedicated input and output units. In particular, simultaneous display and error monitoring of multiple SDI inputs are possible, and four-waveform parade display on the waveform monitor is also supported.

FEATURES

- Four Input Slots**
Up to four input units can be inserted. Each input unit operates independently.
- Two Output Slots**
Up to two output units can be inserted. Each output unit operates independently.
- Display Function**
Employs a color TFT LCD monitor with XGA resolution (1,024 x 768). The display function of each unit can be displayed on a full screen or 4 screen multi display. The 4 screen display allows arbitrary combination of signals of different input units to be displayed.
- USB Connector**
Screen captures, records of data, and presets can be stored by connecting a USB memory device into the connector on the front panel.
- Ethernet Connector**
Remote control through TELNET or FTP, error monitoring, and file transfer are possible by connecting a PC to the Ethernet connector on the rear panel.
- Remote Connector**
The remote connector on the rear panel allows recalling of presets, detection of errors, and switching of inputs.

- Low Noise Cooling System**

Equipped with a low noise fan. Fan speed controlled using a temperature sensor. If the fan stops due to a malfunction, an alarm can be displayed on the screen through the revolution sensor.

- Headphone Socket**

Sound can be monitored when the LV58SER40 is installed.

- LV5800 REAR PANEL**



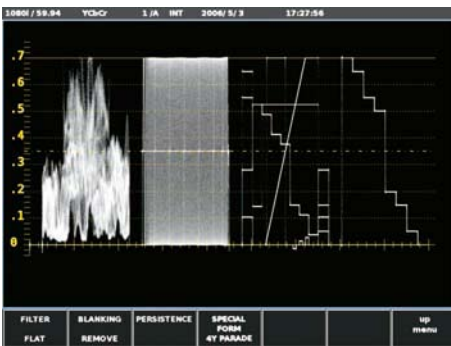
Unit List

- LV58SER01A** SDI INPUT
- LV58SER02** EYE PATTERN UNIT
- LV58SER20** DVI-I OUTPUT UNIT
- LV58SER40** DIGITAL AUDIO UNIT

LV5800 SPECIFICATIONS

Slot Number of Slots for Input Number of Slots for Output	4 2
LCD Display LCD Screen Type Display Format Clock Frequency Frame Frequency Backlight Brightness Auto Shutoff Display Screen	6.3-inch TFT color XGA Effective area 1024 x 768 pixels 64.93 MHz (The input signal and the display clock signal have not been synchronized.) 59.94 MHz Selects HIGH or LOW Sets the time for the backlight to shutoff automatically. 1-screen display, 2-screen display, 4-screen display
Screen Capture Capture Media	Image capture by the still picture of the display screen Records 1 screen in the internal memory. Internal memory (RAM) or a USB memory
Data Output Presets Number of Presets Media Recall Method Copy	Save data in BMP format and export to a PC via USB memory or Ethernet network. (When the unit equipped with video signal frame capture functions, such as LV58SER01A is inserted.) Switches the frame capture and the image capture of the display screen. 60 Internal memory (RAM) or USB memory Through the front panel, remote connector, and Ethernet network (Switches 8 points and 60 points for recalling through the remote connector.) Copies presets collectively to the USB memory or from the USB memory to the LV5800.
External Reference Input Input Signal Input Connector Input Impedance Input Return Loss Maximum Input Voltage	Tri-level sync signal or NTSC/PAL black burst BNC connector 1 system 2 connectors 15 kΩ Passive Loop-through ≥30 dB ±5 V (DC + peak AC)

External Control Connector USB Connector Specifications Function Ethernet Connector (Future) Corresponding Standard Input/Output Connector Function Type Remote Connector Function Control Signal Control Connector Headphone Output PHONES connector Function	USB2.0 Only a large capacity memory device is supported. IEEE802.3 RJ-45 Remote control from an external computer and monitoring of errors, etc. 10BASE-T/100BASE-TX Recalling of presets, monitoring of errors LV-TTL level (LOW active) 25-pin D-sub (female) Miniature jack (stereo) Like LV58SER40 (DIGITAL AUDIO Unit), it is effective when the unit that has audio decoding function is inserted.
Environmental Conditions Operating Temperature Operating Humidity Operating Environment Operating Altitude Overvoltage Category Pollution Degree Power Requirements	0 to 40 °C ≤ 85 % RH(without condensation) Indoor use Up to 2,000 m II 2 90 to 250 VAC 50 Hz/60 Hz, 150 Wmax.
Dimensions	215(W) x 133(H) x 449(D) mm, 8 1/2(W) x 5 1/4(H) x 17 11/16(D) in.
Accessories	Power cord1 Cover/Inlet stopper1 Screws for rack mounting (inch specification)2 Instruction manual1 25-pin D-sub connector1 25-pin D-sub connector cover1



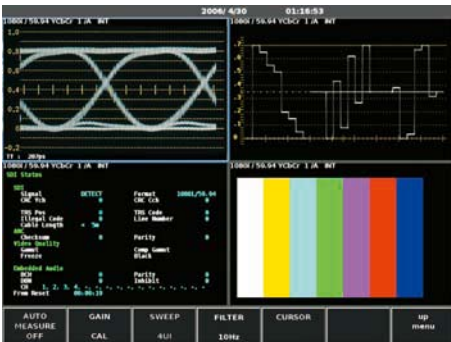
4 input Waveform Parade Display
(Ex, LV58SER01A 2 sets are installed)



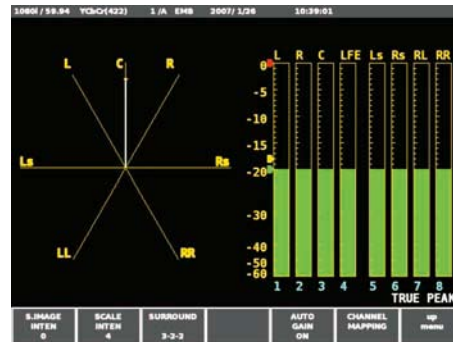
4 input Picture Display
(Ex, LV58SER01A 2 sets are installed)



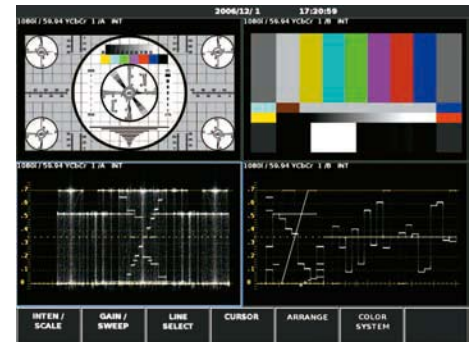
Multi Display Of 5 Bar, Waveform, Status, Picture
(Ex, LV58SER01A 1 set is installed)



Eye Pattern Display
Multi Display Of Eye Pattern, Waveform, Status, Picture
(Ex, LV58SER01A/LV58SER02 1 set each are installed)



Audio Display
(Ex, LV58SER40 1 set is installed)



Multi Display
(Ex, LV58SER01A 1 set is installed)

LV58SER01A SDI INPUT

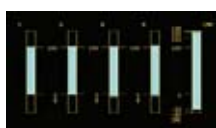
LEADER



This unit is an SDI input unit that is installed in a LV5800 input slot. The unit allows waveform display, picture display, and error detection of the SDI signal on the LV5800. Combination with other optional units allows various displays such as the eye pattern display of the SDI signal (LV58SER02) and the Lissajous and level displays of the embedded audio (LV58SER40). The SDI signal that is input into the ACH or the BCH can be output respectively from the ACH/BCH Reclockout output connector by interlocking with the input key of the front panel.

FEATURES

- Two-Channel Serial Digital I/O**
 An SDI input unit contains two channels of SDI input connectors. The two connectors can also function as a dual link input of a single channel. SDI output that is reclocked using a serial signal is provided for each input. In addition, the SDI signal that is input into the ACH or the BCH can be output respectively from the ACH/BCH Reclockout output connector by interlocking with the input key of the front panel.
- Video Signal Display Function**
 In addition to displaying the video waveforms, vectors, and pictures of the SDI signal on a full screen, 2- and 4-screen multi display can be shown. The multi display allows arbitrary combination of a single or multiple input signals to be displayed. (Multi display in which link A and link B are separated during dual link operation is not allowed.)
- Error Detection Function**
 Detects various errors related to the SDI, embedded audio, and ancillary data including CRC errors and EDH errors.
- Ancillary Data Analysis**
 Supports various types of ancillary data for analysis display. In particular, closed caption data can be displayed overlapped on the picture (future support).
- 5 BAR DISPLAY**
 Peak levels of video signals can be displayed in place of the vectors.
- SDI-EXT REF Phase Difference Display Function**
 The SDI-EXT REF phase difference display function shows the phase difference between the SDI signal and the external sync signal (EXT REF).
- Simultaneous Monitoring of Component and Composite Gamut Using the Five Bar Displays**
- Closed Caption Display Function**
- Embedded Audio Demultiplex Function**
 The unit is equipped with a function for demultiplexing the embedded audio signal. Level meter and Lissajous displays can be achieved when used in combination with the digital audio unit (LV58SER40). The signal can also be output as AES/EBU.
- Dual link input**
- CINELITE Option (Software Upgrade)**



5 bar



Phase



CINELITE Option

LV58SER01A SDI INPUT SPECIFICATIONS

Video Formats and Corresponding Standards Single Link System Video Signal Corresponding Formats and Corresponding Standards					
Format	Quantization	Scanning	Frame(Field) Frequency	Standard Supported	
Y,C _b ,C _r 4:2:2	10bit	1080i	60/59.94/50	SMPTE 274M SMPTE 292M	
		1080p	30/29.97/25/ 24/23.98		
		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	
		525	59.94	SMPTE 259M	
		625	50		
Dual Link System Video Signal Corresponding Formats and Corresponding Standards					
Format	Quantization	Scanning	Frame(Field) Frequency	Standard Supported	
GBR 4:4:4	10 bit	1080p	30/29.97/25/ 24/23.98	SMPTE 372M (1920x1080)	
		1080PsF	30/29.97/25/ 24/23.98		
		1080i	60/59.94/50		
		1080p	30/29.97/25/ 24/23.98		
Y,C _b ,C _r 4:2:2	12 bit	1080PsF	30/29.97/25/ 24/23.98	SMPTE 372M (1920x1080)	
		1080i	60/59.94/50		
		10 bit	1080p		60/59.94/50
		1080p	30/29.97/25/ 24/23.98		
Y,C _b ,C _r 4:2:2	12 bit	1080PsF	30/29.97/25/ 24/23.98	SMPTE 372M (1920x1080)	
		1080i	60/59.94/50		

The phase difference between link A and B is automatically corrected up to 100 clocks (approximately 1.4 μs) and displayed.
SMPTE 291M
HD-SDI: SMPTE 299M SD-SDI: SMPTE 272M
Automatic setting (In a dual link mode, only frame / field frequency is set automatically.)

Ancillary data standard Embedded audio standard Format Setting	
Input/Output Connector	BNC connector 2 connectors
SDI Input	For single link A ch / B ch 2 systems
Input Connector	For dual link link A / link B 1 system
Input Impedance	75 Ω
Input Return Loss	15 dB or more 5 MHz to serial clock frequency
Maximum Input Voltage	±2 V (DC + peak AC)
External Sync Signal Input	Tri-level sync signal or NTSC/PAL black burst signal
Input Signal	BNC connector 1 system 2 connectors
Input Connector	BNC connector 2 connectors
SDI Output	Reclocks serially and outputs the input signal.
Output Connector	For single link A ch / B ch 2 systems
	For dual link link A / link B 1 system
Output Impedance	75 Ω
Output Voltage	800 mVp-p ± 10 %
Output Return Loss	15 dB or more 5 MHz to serial clock frequency

Waveform Display Function Waveform Operation Display Mode	
Overlay display	Displays component signals overlaid
Parade display	Displays component signals side by side
Gain Adjustment	x1 / x5 / variable
Blanking Period	Show / hide selectable
Y,C_b,C_r→GBR conversion	Converts Y,C _b ,C _r signals into GBR and displays the result.
Pseudo-Composite Display	Artificially converts component signals into composite signals and displays the result.
Timing Display	Displays by calculating Y-C _b and Y-C _r
Channel Assignment	Uses bowtie signals (authorised by Tektronix, inc.)
Line Select	Selects GBR order or RGB order during GBR conversion display
Image Quality Adjustment	Displays the selected line
Vertical axis	Brightness adjustment
Sensitivity	V scale 0 V to 0.7 V, -0.3 V to 0.7 V
	% scale 0 % to 100 %, -50 % to 100 %
Gain	x1, x5, and variable
Variable Gain	x0.2 to x10
Amplitude Accuracy	±0.5 %
Frequency Response HDTV	
Y Signal	±0.5 % 1 MHz to 30 MHz
C_b, C_r Signal	±0.5 % 0.5 MHz to 15 MHz
Low-pass Attenuation	20 dB or more at 20 MHz
Frequency Response SDTV	
Y Signal	±0.5 % 1 MHz to 5.75 MHz
C_b, C_r Signal	±0.5 % 0.5 MHz to 2.75 MHz
Low-pass Attenuation	20 dB or more at 3.8 MHz
Horizontal Axis	

Line Display Display Format	Overlay: 1H, 2H Parade: 1H, 2H, 3H Timing: Y-C _n , Y-C _n 4Y Parade*2: 4H
Magnification	Selects x1, x10, x20, ACTIVE, or BLANK * As for 4Y parade mode, two LV58SER01A (SDI INPUT unit) should be inserted, and four inputs need to synchronize in the same format each other together.
Field Display Display Format	Overlay: 1V, 2V (2V display not allowed for progressive) Parade: 1V, 2V, 3V Magnification: x1, x20, x40 ±0.5 %
Time Base Accuracy Cursor Measurement Configuration	Horizontal cursors: 2 cursors (REF and DELTA) Vertical cursors: 2 cursors (REF and DELTA)
Amplitude Measurement Time Measurement Frequency Display	Measured in [%] and [V] Displayed in [usec] or [msec] Displays the frequency in which the time between cursors is considered a cycle.
Vectorscope Display Scale Gain Variable gain Amplitude Accuracy IQ Axis Pseudo-Composite Display	Selects 75 % or 100 % (Using a color bar) Selects x1, x5, IQ-MAG or variable x0.2 to x10 ±0.5 % Selects show or hide Artificially converts component signals into composite signals which added BURST and displays the result. (the color matrix for HDTV signal is converted into SDTV)
Image Quality Adjustment	Brightness adjustment
Phase Difference Display Display	Displays the phase difference between the SDI signal and external sync signal numerically and graphically Holds and displays eight phase difference values being measured
Display Range	V direction ±1 Field (for interlace) ±1/2 Frame (for progressive) H direction ±1/2 Line *The phase difference display in the H direction may fluctuate in the range of ±1 clock when the signal is switched. HD tri-level sync signal or black burst signal
Sync Signal Phase Difference Measurement of Dual Link(future support)	Displays phase difference between Link A and B with the number of the parallel relock. (including ±1 clock error)
Picture Display HDTV Display	Displayed by sampling the pixels (R, G, and B are both same 8 bits)
SDTV Display	Displayed by interpolating pixels (R, G, and B are both same 8 bits)
Marker Display	Center marker 4:3 or 16:9 marker display Safe action marker display Safe title marker display
Gamut Error Display	Marks sections containing gamut errors within the picture
Line Select Image Quality Adjustment	Displays the selected line as a marker GBR gain adjustment, Contrast adjustment, Brightness adjustment
Status Display Status Display of SDI Signal Signal Detection Format Equivalent Cable Length Measurement	Detects the presence or absence of SDI signals. Detection from correspondence video signal format Converts the SDI signal attenuation into a coaxial cable length and displays the result. Displays the embedded audio channel number.
Embedded Audio Channel Error Detection of SDI signals CRC Error EDH Error TRS Error Line Number Error	Detects transmission error of HD-SDI signals. Detects transmission error of SD-SDI signals. Detects errors in the TRS position and protection bit. Line number errors in the HD-SDI signals are being detected.
Illegal Code Error	Detects data in the range of 000h to 003h and 3FC to 3FF outside the TRS or ADF header.
Embedded Prohibition Error	Detects the presence or absence of embedded audio at the embedded prohibition line.
Cable Length Meter Error Error Detection of Embedded Audio BCH Error	Detects the signal attenuation and displays the result. Detects transmission errors of embedded audio packets in the HD-SDI signal. Detects sequential errors in audio packets.
DBN Error Parity Error	Detects parity errors in audio packets embedded in HD-SDI signals
Error Detection of Ancillary Data Checksum Error Parity Error	Detects transmission errors in the ancillary data. Detects parity errors in the ancillary data header.
Image Evaluation Gamut Error	Detects the Gamut Errors by specifying time. Upper limit: 90.8 % to 109.4 % (0.1 % steps) Lower limit: -7.2 % to +6.1 % (0.1 % steps)
Composite Gamut Error	Monitors the level error when the component signal is converted into composite signal Upper limit: 90.0 % to 135.0 % (0.1 % steps) Lower limit: -40.0 % to 20.0 % (0.1 % steps)

Level Error	Detects Y C _n C _n level errors Y upper limit: -51 mV to 766 mV (1-mV resolution) Y lower limit: -51 mV to 766 mV (1-mV resolution) C _n upper limit: -400 mV to 399 mV (1-mV resolution) C _n lower limit: -400 mV to 399 mV (1-mV resolution) Detects video freeze Detects blackouts in the video
Freeze Detection Black Detection	
Event Log Number of Logs	Error items, time stamps, etc.
5 Bar Display Bar Display	Displays the Y GBR component Gamut or composite Gamut
Analysis Function Data Dump Display Display Format	Displayed by serial data sequence or channel separation. Displays the selected line Displays the selected sample Move to EAV or SAV by one-key operation Save data in text format to a PC via Ethernet network or USB memory.
Line Select Sample Select Jump Function Data Output	
Audio Control Packets Display Content Group Selection EDH Display Standard Supported Display Content	Analyzes and displays the audio control packets One group is selected from four groups. SMPTE RP-165 Analyzes and displays the EDH packets. Displays the received CRC errors.
Format ID Display Standard Supported Display Content Closed Caption Data Display Standard Supported Display Content Inter-Stationary Control Data (NET-Q) Display Standard Supported Display Content Log Function V-ANC User Data Display Standard Supported Arbitrary ANC Packet Display Method of Specifying ANC Time Code Display Corresponding Time Code Display Method	SMPTE 352M ARIB STD-B39 Analyzes and displays the Format ID. ARIB STD-B37,EIA/CEA-608,EIA-708 Analyzes and displays the closed caption data. ARIB STD-B39 Analyzes and displays the Inter-Stationary Control Data. Logs Q signals ARIB TR-B23 Selects DID or SDID Selects LTC or VITC SMPTE RP-188 Switches the display of internal clock, and the time code.
Embedded Audio Processing Clock Generation System	SD-SDI: Generated from the video clock HD-SDI: Generated from the video clock Dual link (future support): Generated from the video clock
Closed Caption Processing (future support) SMPTE System	The closed caption data that is multiplexed in the SDI signal can be overlaid on the picture display. CEA/EIA-608-B embedded in the CDP packets as defined in CEA/EIA-708-B. CEA/EIA-608-B VBI(CEA/EIA-608-B Line21)
Cable Length Measurement Detection method Supported Cables Display Range Accuracy Resolution	Converts the SDI signal attenuation into a coaxial cable length and displays the result. HD-SDI: Selects L-7CHD, LS-5CFB, or 1694A SD-SDI: Selects LS-5C2V, 8281, or 1505A HD-SDI: From under 5 m to 130 m or more (For L-7CHD: From under 10 m to 200 m or more) *Less than 10 m to greater than or equal to 200 m for L-7CHD SD-SDI: From under 50 m to 300 m or more ±20 m 5 m (For L-7CHD: 10 m)
Frame Capture Function Media Internal Memory Capacity Data Output Recalling Capture Data	Internal memory (RAM) or USB memory Video data 1 Frame 2 Systems For Dual Link mode: 1 Frame 1 system Save capture data to a PC via Ethernet network (future support) or a USB memory. Recalls and displays the Picture/Waveform/Vector of 1 frame capture data. The capture data saved in the USB memory can be read back. (Reading back operation is possible only if an SDI input of the same format as the captured data is available)
Power Consumption	Supplied from LV5800 70 Wmax. (If one unit is installed to the LV5800) 18 Wmax. (additional power consumption for each additional unit installed to the LV5800)
Weight	0.28 kg / 0.6 lbs
Accessory	Instruction manual

Precautions Concerning Dual Link Operation
Aliasing occurs in the V sweep display of 1080p/60, 59.94, and 50, because the unit decimates the sampling data. The picture display is processed using 8 bits even if the quantization is set to 12 bits.
In addition, waveform display in external synchronization mode is not allowed if 1080p/60 (59.94) or 1080p/50 signal is applied.

LV58SER02 EYE PATTERN UNIT

LEADER



This unit displays eye patterns. It is installed in a LV5800 input slot. By combining with the LV5800 input unit, eye pattern waveforms of SDI signals can be monitored. Automatic measurement of parameters such as amplitude, rise time, and fall time is also possible.

FEATURES

- **HD-SDI, SD-SDI Format Support**
- **Six Systems of Eye Pattern Displays and Jitter Measurement**
Displays the SDI signal eye pattern or measures the jitter of one system among up to six systems by combining three SDI input units and selecting A or B among the three modules. (Two EYE units cannot be installed simultaneously.)
- **Eye Pattern Display**
Displays the eye pattern of the timing jitter or alignment jitter by switching the filter.
- **Jitter Measurement**
The jitter measurement by the phase detection method allows accurate jitter measurement even if the eye is barely open. In addition, timing jitter and alignment jitter can be measured.
- **Automatic Measurement**
The eye pattern display allows automatic measurement of the eye pattern amplitude, rise time, and fall time. The jitter display allows automatic measurement of the timing jitter and alignment jitter values.

- **Jitter Display Using Video Sweep**
Allows V sweep and H sweep displays.
- **Simultaneous Display on the Multi Display**
The multi display allows the eye pattern waveform and jitter waveform to be displayed simultaneously. In addition, the eye pattern display screen automatically measures the eye pattern amplitude, rise time, and fall time, while the jitter display screen automatically measures the timing jitter and alignment jitter.
- **Alarm Monitoring**
The alarm monitor mode allows the eye pattern amplitude, rise time, and fall time to be monitored with respect to the threshold level specified in advance. It also monitors the timing jitter and alignment jitter using the phase detection method. An alarm is displayed when the threshold level is exceeded. The alarm can also be logged.

LV58SER02 EYE PATTERN UNIT SPECIFICATIONS

Supported Formats	
Data Rate	SMPT292M 1.485 Gbps, or 1.485/1.001 Gbps
HD-SDI	SMPT259M 270 Mbps
SD-SDI	
Eye Pattern Method	Equivalent time sampling method
Amplitude Accuracy	800 mV $\pm 5\%$ for 800 mV input
Time Axis	2 / 4 / 16 Eye pattern Display
Time Axis Accuracy	$\pm 3\%$
Jitter Filter	10 Hz HPF 100 Hz HPF 1 kHz HPF 100 kHz HPF
Jitter Detection Method	Phase detection method
Time Axis	H rate or V rate
Time Axis Accuracy	$\pm 3\%$
Jitter Filter	10 Hz HPF 100 Hz HPF 1 kHz HPF 100 kHz HPF (* Don't support JITTA measurement of a DVB-ASI standard.)
Power Consumption	Supplied from LV5800 20 Wmax.
Weight	0.4 kg / 0.9 lbs.
Accessories	Coaxial cable 1 Instruction Manual 1

LV58SER20 DVI-I OUTPUT UNIT

LEADER



This unit is a DVI-I OUTPUT unit that outputs the contents displayed on the front LCD panel from the DVI-I connector to an external monitor. The unit is installed in a LV5800 output slot.

FEATURES

- **DVI-I Connector**
The connector allows the screen displayed on the LV5800 to be shown on an external monitor. The DVI output provides both digital and analog output allowing the signal to be used on a wide variety of XGA-compatible monitors.

LV58SER20 DVI-I OUTPUT UNIT SPECIFICATIONS

DVI-I Connector	
Signal Format	Single Link T.M.D.S Analog RGB
Display Format	XGA (Effective area 1,024x768 pixels)
DDC Function	Not supported
HOT PLUG Detection Function	Not supported
Output Connector	DVI-I 1 system
Power Consumption	Supplied from LV5800 5 Wmax.
Weight	0.2 kg / 0.4 lbs.
Accessory	Instruction manual 1

LV58SER40 DIGITAL AUDIO UNIT

LEADER



The unit operates as a digital audio I/O unit when installed in a LV5800 input slot. For the 16-channel (*1) data of AES/EBU 8 system, Lissajous, sound image, level meter, signal status displays can be shown (*2). If the LV58SER01A (SDI input unit) is installed in the LV5800, this unit can process the AES/EBU signal that is embedded in the SDI signal.

*1 The standard external I/O connector is 8 channels of 4 AES/EBU systems. By installing an optional external I/O connector board, the connector can be expanded to 16 channels of 8 AES/EBU systems.

*2 All of the AES/EBU input signals must be synchronized. In addition, the 48 kHz is the only supported sampling frequency.

FEATURES

- **8-System 16-Channel AES/EBU I/O**
The LV58SER40 can monitor 16 channels of embedded audio. By installing an optional external I/O connector board, the connector can be expanded to monitor/output 16 external channels of 8 AES/EBU systems. The unit operates as a digital audio I/O unit when installed in LV5800 input slot.
- **Various Display Functions**
 - Displays the following items on the input AES/EBU signal. Single Lissajous display between two arbitrary channels, multi Lissajous display that shows 4 or 8 single Lissajous displays between two arbitrary channels, sound image display, and level meter display.
 - Displays the following AES/EBU status bits. Channel status, user, validity, and parity bits. The various display and detection functions of this unit cannot be assigned simultaneously to the LV5800 multi screen.
- **Dolby-E Decoding**
Dolby-E Decoding is available with option LV58SER40D. This feature is an upgrade to unit LV58SER40 and can be installed at later time.
- **Only one LV58SER40 may be installed in the LV5800**

Additional Units Not Shown Here May Be Available. Please Visit Our Website (www.LeaderUSA.com) For More Information.

LV58SER40 DIGITAL AUDIO UNIT SPECIFICATIONS

Rear BNC Connector Input/Output Connector Input/Output Impedance Selection of Input/Output Function	BNC connector (4 systems, 8 channels) 75 Ω Selects from menu.
Input/Output Signal Supported Format Sampling Frequency Maximum Input Voltage Output Voltage	IEC-60958 48 kHz ±5 V (DC + peak AC) 1.0 Vp-p ±10 % (into 75 Ω)
Input Signal Selection	Selects the signal that inputs from a rear BNC connector, or the embedded signal in the SDI signal by the menu.
Waveform Display Function Lissajous Display Sound Image Display	Selects either the single-Lissajous display between arbitrary channels, or the multi-Lissajous display that displays with 8 channels or 16 channels. Arbitrary channels are assigned to L/R/C/LFE/Ls(S)/Rs/LL/RR, and selects from 3-1 system, 3-2 system, or 3-2-2 system.
Level Meter Display Level Meter Display	Displays the level of 8 channels or 16 channels by the bar graph. (Only when the single-Lissajous is displayed, the selected level of two channels is displayed by the bar graph.)
Response Mode Selection Reference Level Setting Warning Level Setting Over Level Setting: Dynamic Range Selection Peak Hold	Selects True Peak/ Peak Program Meter (PPM)/ VU. -40.0 to 0.0 dBFS -40.0 to 0.0 dBFS -40.0 to 0.0 dBFS Selects 60 dBFS/ 90 dBFS. When the response mode of the level meter is VU, True Peak or Peak Program Meter (PPM) can be selected.
Peak Hold Time Correlation Meter	0.5 sec to 5sec (0.5 sec steps)/HOLD The correlation of two channels is displayed by the numerical value from -1 to 1.
Status Display Channel Status Bit Display User Data Bit Display	Displays the dump or text of a channel status bit. Displays the dump of user data bit.
Audio Signal Analysis Function Mute Detection Detection Setting Clip Detection Detection Setting Level Over Detection Detection Setting	Detects on each channel. Displays the occurrence frequency of the mute signal. 1 to 5,000 msec Detects on each channel. Displays the occurrence frequency of the 0 dBFS signal. 1 to 100 samples Detects on each channel. Displays the occurrence frequency of the signal that exceeds the setting value. 0 to -40 dBFS
Power Consumption	Supplied from LV5800 9 Wmax.
Weight	0.27 kg / 0.6 lbs.
Accessory	Instruction manual 1