

**LV 58SER07 3G-SDI EYE PATTERN (3G-SDI, HD-SDI, SD-SDI)**

Plug-In Unit

- 3G
- HD-SDI
- SD-SDI



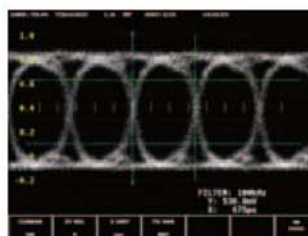
The LV 58SER07 is a display unit. When it is inserted into one of the input slots of the LV 5800 or LV 7800 along with the LV 58SER06 (3G-SDI INPUT), it enables the display and measurement of the eye patterns and jitter of serial digital signals. The LV 58SER07 enables the measurement and observation of the physical characteristics of not only 3G-SDI signals but also HD-SDI and SD-SDI signals.

**FEATURES**

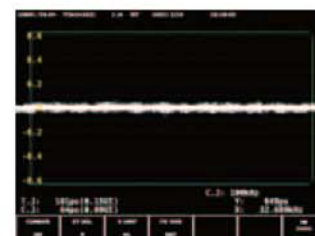
- Support for Three Types of SDI Signals**  
 When the LV 58SER07 is used with the LV 58SER06 (3G-SDI INPUT), it enables the display of eye patterns, the display of jitter, and the execution of automatic measurements not only for 3G-SDI signals (both levels A and B) but also for HD-SDI and SD-SDI signals.
- Two Switchable SDI Inputs**  
 The LV 58SER07 has two input connectors that each support three different SDI signal types. The controls on the LV 5800 or LV 7800 panel can be used to switch between the two inputs. (\*1)
- Eye Pattern Display**  
 Measurements of 3G-SDI signals have low noise and wide bandwidth characteristics thanks to the use of a new kind of circuit.
- Jitter Display**  
 Because a phase detection method is used, accurate jitter measurements can be performed even on degraded signals for which eye patterns would not be useful. Also, V rate and H rate sweep displays synchronized to the video signal are useful for analyzing jitter that originates in digital video data.
- Simultaneous Eye Pattern and Jitter Display**  
 When a serial digital signal is selected in the multi screen display of the LV 5800 or LV 7800, its eye pattern and jitter waveform can be displayed simultaneously. (\*2)
- Filter Settings**  
 The measurement of the timing jitter and alignment jitter of an SDI signal can be performed through the switching of filters in the eye pattern and jitter displays.
- Automatic Measurement**  
 The automatic measurement feature enables the automatic measurement of the amplitude, rise and fall times, and jitter level of serial digital signals. The level of timing jitter and alignment jitter can be measured.
- Alarm Monitoring**  
 The LV 58SER07 can display alarms and make log entries when the values that it monitors exceed their user-specified threshold values. The LV 58SER07 can monitor the rise time (Tr), the fall time (Tf), the difference between the rise and fall time (Tr-Tf), the timing jitter, and the alignment jitter of a serial digital signal. (\*3)

**LV 58SER07 SPECIFICATIONS**

<p><b>Supported Formats</b>  <b>Data Rates</b>                  3G-SDI                  HD-SDI                  SD-SDI</p>	<p>SMPTTE 424M 2.970 Gbps or 2.970/1.001 Gbps                  SMPTTE 292M 1.485 Gbps or 1.485/1.001 Gbps                  SMPTTE 259M 270 Mbps</p>
<p><b>Input Connectors</b>  <b>Eye-Pattern and Jitter Display Input Connectors</b>  <b>Function</b></p> <p><b>Input Connectors</b></p> <p><b>Input Impedance</b>  <b>Connection Method</b></p>	<p>Input of SDI signals for eye pattern and jitter display                  2 switchable BNC connectors with A and B channels                  75 Ω                  Connect to the rear panel of the LV 5800 or LV 7800 using a BNC cable.</p>
<p><b>Output Connectors</b>  <b>Dedicated Connectors for Output to the LV 58SER06</b>  <b>Function</b></p> <p><b>Output Connectors</b>  <b>Output Impedance</b></p>	<p>Dedicated output connectors for connecting to the LV 58SER06 INPUT connector                  2 BNC connectors                  75 Ω</p>
<p><b>Eye Pattern Display Method</b>  <b>Jitter Filters</b></p> <p><b>Cursor Measurement</b></p>	<p>Displays the input waveform before equalizing                  Equivalent time sampling                  10 Hz, 100 Hz, 1 kHz, 100 kHz, TIMING, and ALIGNMENT                  Amplitude measurement using Y cursors, time measurement using X cursors, and rise time and fall time measurement using the Tr and Tf cursors</p>
<p><b>Jitter Detection Display</b></p> <p><b>Method</b>  <b>Gain</b>  <b>Jitter Filters</b></p> <p><b>Cursor Measurement</b></p>	<p>Displays the jitter component of an SDI input signal                  Phase detection method                  x8, x2, or x1                  10 Hz, 100 Hz, 1 kHz, 100 kHz, TIMING, and ALIGNMENT                  Jitter value measurement through the use of cursors</p>
<p><b>Automatic Measurement</b></p>	<p>Timing jitter and current jitter (the number of seconds is indicated by sec, and the unit interval is indicated by UI(p-p)) through the use of a phase detection method, amplitude, and rise and fall times of eye pattern waveforms</p>
<p><b>Environmental Conditions</b></p>	<p>Same as the LV 5800/7800</p>
<p><b>Accessories</b></p>	<p>Instruction manual.....1                  Coaxial cable.....2</p>



Eye Pattern



Jitter

\*1 When the LV 58SER07 is inserted in a device, only one LV 58SER06 (3G-SDI INPUT) can be inserted in the device with it. Also, multiple LV 58SER07s cannot be inserted into the same device or inserted into a device with the LV 58SER02. The LV58SER07 cannot be used with the LV 58SER01A.

\*2 Simultaneous eye pattern and jitter display can only be performed for a single signal. The simultaneous display of different signals is not possible.

\*3 Alarm display and log recording are only valid in the eye pattern and jitter displays of the LV 58SER07. Alarm monitoring cannot be performed in the background.