

ZEN SERIES: SOFTWARE RELEASE NOTES

Please download the latest software from our website and install it on your system.

UPDATE Ver.	NOTES		
	LV5600 / LV7600	LV5300(A) / LV5350	LV7300
8.2	● [SER01/SER02/SER02A/SER05/SER06] Add a meter ON/OFF function to the Picture Cine Zone. ● [SER01/SER02/SER02A/SER05/SER06] Add USER-A LOG C3 and LOG C4 (ALEXA 265) modes to Picture False Color. ● [SER01/SER02/SER02A/SER05/SER06] Improved the system to allow selection of White Point coefficients when the colorimetry is DCI. ● [SER23] Changed the initial reference level values for HLG (50→75%) and PQ (51→58%). ● [SER24] Add a BLACK RASTER to patterns. ● [SER24] Add a mixed mode (Mix: Through & Test) of Through and Test Signal to SDI OUTPUT.	● [LV5300/LV5300A/LV5350/LV7300-SER01/LV7300-SER02] Add a meter ON/OFF function to the Picture Cine Zone. ● [LV5300/LV5300A/LV5350/LV7300-SER01/LV7300-SER02] Add USER-A LOG C3 and LOG C4 (ALEXA 265) modes to Picture False Color. ● [LV5300/LV5300A/LV5350/LV7300-SER01/LV7300-SER02] Improved the system to allow selection of White Point coefficients when the colorimetry is DCI. ● [SER23] Changed the initial reference level values for HLG (50→75%) and PQ (51→58%). ● [SER24] Add a BLACK RASTER to patterns.	
8.1	Improvement: ● [LV5600/LV7600] Added system backup function. ● [LV5600-SER04/LV7600-SER04/LV5600/LV7600-SER07] Supports ED2 detection only. ● [LV5600-SER23/LV7600-SER23] Added 3D-LUT ON/OFF function to SHORTCUT. ● [LV5600-SER27/LV7600-SER27] Supports TSL5.0. ● [LV5600-SER06/SER28/LV7600-SER06/SER28] Added a mode to output SDI-OUTPUT via 12G/6G-SDI Single Link (including audio) when the system is 4K 3G Quad/4K IP Single/4K IP Quad Stream. ● [LV5600-SER29/LV7600-SER29] Added legacy/serial mode to 6G-SDI phase difference measurement in status.	Improvement: ● [LV5300(A)/LV5350/LV7300] Added system backup function. ● [LV5300-SER23/LV5350-SER23/LV7300-SER23] Added 3D-LUT ON/OFF function to SHORTCUT. ● [LV5300-SER28/LV5350-SER28/LV7300-SER28] Added legacy/serial mode to 6G-SDI phase difference measurement in status.	

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UPDATE Ver.	NOTES		
	LV5600 / LV7600	LV5300(A) / LV5350	LV7300
8.0	Improvement: ● [LV5600/LV7600-SER06] Added a command to SNMP to obtain IP BUFFER/FPT measurement values. ● [LV5600/LV7600-SER07] DOLBY option is now supported.	Minor changes	
7.9	Improvement: ● [LV5600/LV7600-SER05/SER06] Improved to allow the DEVICE label of NMOS to be changed. ● [LV5600/LV7600-SER29] Added legacy/serial mode to 12G-SDI phase difference measurement in status.	Improvement: ● [LV5300(A)/LV5350/LV7300-SER28] Added legacy/serial mode to 12G-SDI phase difference measurement in status.	
7.8	Improvement: ● [LV5600/LV7600-SER05/SER06] Improved response speed to the NMOS controller.	Minor changes	
7.7	New features: ● [LV5600/LV7600] Added commands to SNMP and TELNET to obtain temperature information. ● [LV5600/LV7600-SER01/SER02(A)/SER05/SER06] Added MANUAL setting information to CIE colorimetry information display. Changes: ● [LV5600/LV7600-SER05/SER06] Changed the Type notation of IP SETUP1 from "ST2110 JXS" to "ST2110 & JXS".	New features: ● [LV5300(A)/LV5350/LV7300] Added commands to SNMP and TELNET to obtain temperature information. ● [LV5300(A)/LV5350/LV7300-SER22] Added MANUAL setting information to CIE colorimetry information display.	
7.6	Minor changes	Minor changes	

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UPDATE Ver.	NOTES		
	LV5600 / LV7600	LV5300(A) / LV5350	LV7300
7.5	New features: ●[LV56000/LV7600-SER01/SER02(A)/SER05/SER06] Added SDR full range. ●[LV56000/LV7600-SER01/SER02(A)/SER05/SER06] Added False Color to pictures. ●[LV56000/LV7600/LV5300(A)/LV5350/LV7300-SER23] Added 3D-LUT. Improvement ●[LV5600/LV7600] Added SNMP trap output settings for each SDI input. ●[LV56000/LV7600-SER01/SER02(A)/SER05/SER06] Added Korean to English subtitles (EIA-708) for pictures. ●[LV56000/LV7600-SER03] Added a mode to increase the level meter number displayed in Lissage/Surround.(Added the mode before Ver.7.1 change) ●[LV56000/LV7600-SER03] Added remote command to get audio status information. ●[LV56000/LV7600-SER05/SER06] Added error log and SNMP Trap when ST 2022-7 Path Delay threshold is exceeded. ●[LV56000/LV7600-SER05/SER06] Improved signal switching speed from NMOS.	New features: ●[LV5300(A)/LV5350/LV7300-SER01/SER02] Added SDR full range. ●[LV5300(A)/LV5350/LV7300-SER01/SER02] Added False Color to pictures. ●[LV5300(A)/LV5350/LV7300-SER23] Added 3D-LUT. Improvement ●[LV5300(A)/LV5350/LV7300] Added SNMP trap output settings for each SDI input. ●[LV5300(A)/LV5350/LV7300-SER21] Added Korean to English subtitles (EIA-708) for pictures. ●[LV5300(A)/LV5350/LV7300-SER20] Added a mode to increase the level meter number displayed in Lissage/Surround.(Added the mode before Ver.7.1 change) ●[LV5350/LV7300-SER20] Added remote command to get audio status information. Changes: ●[LV5300(A)/LV5350/LV7300] Changed the list of capture files saved on USB memory to be arranged in descending date order.	

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UPDATE Ver.	NOTES		
	LV5600 / LV7600	LV5300(A) / LV5350	LV7300
7.5	● [LV56000/LV7600-SER05/SER06] Added ability to assign the same multicast to separate inputs. ● [LV56000/LV7600-SER05/SER06] ST 2110 Clean Switch support for all Streams 1-4. Changes: ● [LV5600/LV7600] Changed the list of capture files saved on USB memory to be arranged in descending date order. ● [LV5600/LV7600-SER05/SER06] Fixed the issue where only 16 streams could be displayed for each of PORT1 and PORT2, and now 32 streams (64 streams in total) can be displayed. ● [LV5600/LV7600-SER05/SER06] Fixed so that the monitoring conditions are displayed on the Path Delay screen when ST2022-7's path delay warning is enabled. ● [LV5600/LV7600-SER05/SER06] Fixed an issue where the route delay warning settings for ST2022-7 could not be recalled as presets.		
7.4	Improvements: ● [LV5600/LV7600-SER06] Support for SMPTE ST 2110-30/31 audio channel mapping function. Changes: ● [LV5600/LV7600] Fixed IP address setting to loop between 0 and 255. ● [LV5600/LV7600-SER05/SER06] Corrected the display of time source in PTP INFO from GPS to GNSS. (Because the notation was changed in the IEEE1588-2019 standard).	Changes: ● [LV5300(A) /LV5350/LV7300] Fixed IP address setting to loop between 0 and 255.	

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UPDATE Ver.	NOTES		
	LV5600 / LV7600	LV5300(A) / LV5350	LV7300
7.3	New features: ●[LV5600/LV7600-SER05/SER06] Added seamless signal switching function using NMOS of SMPTE ST 2110-20. Improvements: ●[LV5600/LV7600] Support for common use of preset data for LV5600 and LV7600. ●[LV5600/LV7600-SER01/SER02(A)/SER05/SER06] Multilingual support for closed caption display of pictures. ●[LV5600/LV7600-SER01/SER02(A)/SER05/SER06] Added source ID display. ●[LV5600/LV7600-SER01/SER02(A)/SER05/SER06] Added timecode continuity monitoring and date and time display. Changes: ●[LV5600/LV7600-SER05/SER06] Fixed so that SMPTE ST 2110-40 Payload ID can be obtained from SNMP.	Improvements: ●[LV5300(A) /LV5350/LV7300] Support for common use of preset data for LV5300(A) and LV5350 and LV7300. ●[LV5300(A)/LV5350/LV7300-SER21] Multilingual support for closed caption display of pictures. ●[LV5300/LV5350/LV7300-SER01/SER02] Added source ID display. ●[LV5300/LV5350/LV7300-SER01/SER02] Added timecode continuity monitoring and date and time display.	
7.2	Minor changes	Not applicable	
7.1	Improvements: ●[LV5600/LV7600-SER05/ SER06] Added a mode that ignores the Source Address when receiving a request for signal switching from NMOS (IS-05). Changes: ●[LV5600/LV7600-SER03]Changed so that the channel order can be switched in Audio Status.	Minor changes	
7.0	New features: ●[LV5600-SER33/LV7600-SER33] Added JPEG-XS support option. Improvements: ●[LV5600/LV7600-SER05/06] Support for NMOS IS-04 (v.1.3).	Minor changes	
6.9	New features: ●[LV5600-SER32/LV7600-SER32] Added a function to superimpose arbitrary characters on the test pattern generator.	Minor changes	

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UPDATE Ver.	NOTES		
	LV5600 / LV7600	LV5300(A) / LV5350	LV7300
6.8	Minor changes	Not applicable	
6.7	Improvements: ● [LV5600-SER01/LV5600-SER02(A)/LV5600-SER05/LV5600-SER06/LV7600-SER05/LV7600-SER06] Added simultaneous display of CINELITE %DISPLAY and CINEZONE in picture. ● [LV5600-SER05/LV5600-SER06/LV7600-SER05/LV7600-SER06] Improved so that you can select whether to enable or disable the address setting (Src/Dest) of IP SETUP1 as the target of preset recall. ● [LV5600-SER23/LV7600-SER23] Improved so that you can select whether to enable or disable the address setting (Src/Dest) of IP TSG SETUP2 as the target of preset recall. Changes: ● [LV5600/LV7600] Changed Select item of REMOTE setting so that it is not initialized when updating. ● [LV5600-SER05/LV5600-SER06/LV7600-SER05/LV7600-SER06] Changed the notation to READY (yellow letters) when the PTP offset on the redundant side is 1 μs or more. ● [LV5600-SER05/LV5600-SER06/LV7600-SER05/LV7600-SER06] Changed to send notification of address change to RDS server of NMOS when IP Address is changed on NETWORK tab of SYSTEM SETUP.	Improvements: ● [LV5300/LV5300A/LV5350/LV7300-SER01/LV7300-SER02] Added simultaneous display of CINELITE %DISPLAY and CINEZONE in picture. Changes: ● [LV5300/LV5300A/LV5350/LV7300] Changed Select item of REMOTE setting so that it is not initialized when updating.	
6.6	Minor changes	Minor changes	Minor changes
6.5	Minor changes	Not applicable	Not applicable

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UPDATE Ver.	NOTES		
	LV5600 / LV7600	LV5300(A) / LV5350	LV7300
6.4	Improvements: ●[LV5600-SER01/LV5600-SER02(A)/LV5600-SER05/LV5600-SER06/LV7600-SER05/LV7600-SER06] Added color bar scale information display to the vector screen. ●[LV5600-SER01/LV5600-SER02(A)/LV5600-SER05/LV5600-SER06/LV7600-SER05/LV7600-SER06] SR Live Metadata Ver.1.10 in the analysis display of SR Live Metadata on the status screen is now supported. ●[LV5600-SER05/LV5600-SER06/LV7600-SER05/LV7600-SER06] Improved to get SDP file by FTP. ●[LV5600-SER23/LV7600-SER23] Added HDR information display to the vector screen.	Improvements: ●[LV5300(A)/LV5350] Added color bar scale information display to the vector screen. ●[LV5300(A)/LV5350] SR Live Metadata Ver.1.10 in the analysis display of SR Live Metadata on the status screen is now supported. ●[LV5300-SER23/LV5350-SER23] Added HDR information display to the vector screen.	Improvements: ●[LV7300-SER01/LV7300-SER02] Added color bar scale information display to the vector screen. ●[LV7300-SER01/LV7300-SER02] SR Live Metadata Ver.1.10 in the analysis display of SR Live Metadata on the status screen is now supported. ●[LV7300-SER23] Added HDR information display to the vector screen.
6.3	Minor changes	Minor changes	Minor changes
6.2	Improvements: ●[LV5600/LV7600]All time zones are available at NTP (SNTP) ●[LV5600-SER01/LV5600-SER02(A)/LV5600-SER05/LV5600-SER06/LV7600-SER05/LV7600-SER06] You can get maximum/minimum of Y/R/G/B/CMP by using remote command(TELNET/SNMP) in VECTOR 5BAR MODE ●[LV5600-SER05/LV5600-SER06/LV7600-SER05/LV7600-SER06] IP 1/2 INPUT PORT Which is synchronized by PTP is changeable by using PTP ●[LV5600-SER05/LV5600-SER06/LV7600-SER05/LV7600-SER06] The setting is added to control the time before lockign PTP (To reduce an err when PTP is unstable by slowing down the time to the lock) ●[LV5600-SER05/LV5600-SER06/LV7600-SER05/LV7600-SER06] PTP ClockClass is added to the "EVENT LOG" ●[LV5600-SER06/LV7600-SER06] PTP-FPT MODE is added when you use EXT REF PHASE MONITOR and the input is SMPTE ST 2110	Improvement: ●[LV5300(A)/LV5350]All time zones are available at NTP (SNTP) ●[LV5300(A)/LV5350] You can get maximum/minimum of Y/R/G/B/CMP by using remote command(TELNET/SNMP) in VECTOR 5BAR MODE	Improvement: ●[LV7300]All time zones are available at NTP (SNTP) ●[LV7300-SER01/LV7300-SER02] You can get maximum/minimum of Y/R/G/B/CMP by using remote command(TELNET/SNMP) in VECTOR 5BAR MODE

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UPDATE Ver.	NOTES		
	LV5600 / LV7600	LV5300(A) / LV5350	LV7300
6.1	Improvements: ●[LV5600-SER01/LV5600-SER02(A)/LV5600-SER05/LV5600-SER06//LV7600-SER05/LV7600-SER06] COLOR WHEEL DISPLAY has been added to the vector. ●[LV5600-SER05/LV5600-SER06//LV7600-SER05/LV7600-SER06] Improved so that the serial number can be added to each NMOS node. ●[LV5600-SER05/LV5600-SER06//LV7600-SER05/LV7600-SER06] The dialogue can be displayed while logging to the USB at the NMOS STATUS DISPLAY.	Improvement: COLOR WHEEL DISPLAY has been added to the vector.	Improvement: [LV7300-SER01/LV7300-SER02] COLOR WHEEL DISPLAY has been added to the vector.
6.0	New features: ●[LV5600-SER05/LV5600-SER06/LV7600-SER05/LV7600-SER06] RECEPTION FORMAT of 1920 x 1080/30PsF,29.97PsF, 25PsF, 24PsF, 23.98PsF in the SMPTE ST 2110-20/2022-6 is now supported ●[LV5600-SER06/LV7600-SER06] RECEPTION FORMAT of 3840 x 2160 /30P, 29.97P, 25P, 24P, 23.98P in the SMPTE ST 2110-20 is now supported ●[LV5600-SER32/LV7600-SER32] TRANSMISSION FORMAT of 1920 x 1080 / 30PsF, 29.97PsF, 25PsF,24PsF, 23.98PsF in the SMPTE ST 2110-20/2022-6 is now supported ●[LV5600-SER32/LV7600-SER32] TRANSMISSION FORMAT of 3840 x 2160 / 30P, 29.97P, 25P, 24P, 23.98P in the SMPTE ST 2110-20 is now supported Improvements: ●[LV5600-SER05/LV5600-SER06/LV7600-SER05/LV7600-SER06] Payload ID of SDI-OUT and Payload ID of SMPTE ST 2110-40 can be displayed simultaneously on the PAYLOAD ID of ANC PACKET monitor when Payload ID is received in SMPTE ST2110-40 ●[LV5600-SER23] Display unit "Nits" can be displayed	Improvement: [LV5300-SER23/ LV5350-SER23] Display unit "Nits" can be displayed	Improvement: [LV7300-SER23] Display unit "Nits" can be displayed

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UPDATE Ver.	NOTES		
	LV5600 / LV7600	LV5300(A) / LV5350	LV7300
5.9	New features: ●[LV5600-SER05/LV5600-SER06/LV7600-SER05/LV7600-SER06] Added support for PTP Mixed Communication Mode ●[LV5600-SER05/LV5600-SER06/LV7600-SER05/LV7600-SER06] RECEPTION FORMAT of 1080/30P,1080/29.97P,1080/25P,1080/24P,1080/23.98P,720/30P,720/29.97P,720/25P,720/24P,720/23.98P in the SMPTE ST 2110-20/2022-6 is now supported ●[LV5600-SER32/LV7600-SER32] TRANSMISSION FORMAT of 1080/30P,1080/29.97P,1080/25P,1080/24P,1080/23.98P,720/30P,720/29.97P,720/25P,720/24P,720/23.98P in the SMPTE ST 2110-20/2022-6 is now supported ●[LV5600-SER06/LV7600-SER06] Support for FPT (First Packet Time) of SMPTE ST 2110-20 measurement function is added	Improvements: ●LV5300A is now supported ●[LV5300-SER21/LV5350-SER21] The additional information "V,S,L,D" can now be displayed on the English Closed Caption(EIA-608/708) of picture	Improvements: ●[LV7300-SER21] The additional information "V,S,L,D" can now be displayed on the English Closed Caption(EIA-608/708) of picture

Leader

UPDATE Ver.	NOTES		
	LV5600 / LV7600	LV5300(A) / LV5350	LV7300
	Improvements: ● [LV5600-SER01/LV5600-SER02(A)/LV5600-SER05/LV5600-SER06/LV7600-SER05/LV7600-SER06] The additional information "V,S,L,D" can now be displayed on the English Closed Caption(EIA-608/708) of picture ● [LV5600-SER05/LV5600-SER06/LV7600-SER05/LV7600-SER06] You can decode even when there is a time-delay in the RTP time stamp of SMPTE ST 2110-20/30/40 ● [LV5600-SER05/LV5600-SER06/LV7600-SER05/LV7600-SER06] Improved <i>reporting</i> to the event log when over the threshold on the TIMING COMPARISON measurement of SMPTE ST 2110-20/30/40 ● [LV5600-SER05/LV5600-SER06/LV7600-SER05/LV7600-SER06] Improvements to searching the REGISTRATION SERVER in accordance with DNS-SD specification ● [LV5600-SER05/LV5600-SER06/LV7600-SER05/LV7600-SER06] You can change IP Address, Subnet Mask, Default Gateway of IP Port1/Port2 by using SNMP commands.		
5.9	● [LV5600-SER05/LV5600-SER06/LV7600-SER05/LV7600-SER06] You can change IP STREAM SELECT in PACKET JITTER/TIMING COMPARISON/PATH DELAY/BUFFER by using SNMP commands. ● [LV5600-SER06/LV7600-SER06] Improvements to add measurement items to BUFFER measurement function in accordance with SMPTE ST 2110-21		
5.8	Minor changes	Not applicable	Not applicable
5.7	● [SER26] Improved so that the NMOS display can be added from the LAYOUT. ● [SER32] Improved so that IP TSG function can be registered and controlled(IS-04/05) in the NMOS.	Not applicable	Not applicable

Leader

UPDATE Ver.	NOTES		
	LV5600 / LV7600	LV5300(A) / LV5350	LV7300
5.6	● [SER01/SER02/SER02A] Improved so that the splice_request_data of SCTE-104 can be analyzed and displayed and logged in the picture and status. ● [SER01/SER02/SER02A] Improved the color gamut error in the status so that the event log now shows whether the error is due to the upper threshold or the lower threshold for each of R, G, and B. ● [SER01/SER02/SER02A] Improved the level error in the status so that the event log now shows whether the error is due to the upper threshold or the lower threshold.	● Improved so that the splice_request_data of SCTE-104 can be analyzed and displayed and logged in the picture and status. ● Improved the color gamut error in the status so that the event log now shows whether the error is due to the upper threshold or the lower threshold for each of R, G, and B. ● Improved the level error in the status so that the event log now shows whether the error is due to the upper threshold or the lower threshold.	● [SER01/SER02] Improved so that the splice_request_data of SCTE-104 can be analyzed and displayed and logged in the picture and status. ● [SER01/SER02] Improved the color gamut error in the status so that the event log now shows whether the error is due to the upper threshold or the lower threshold for each of R, G, and B. ● [SER01/SER02] Improved the level error in the status so that the event log now shows whether the error is due to the upper threshold or the lower threshold.
5.5	New features: ● Interval Variation has been added to the Event Log function when using LV5600-SER05/ LV5600-SER06/LV7600-SER05/ LV7600-SER06 IP option. Improvements: ● The name of Loss Stream has been changed to Video RTP Sequence in the Event Log when using LV5600-SER05/ LV5600-SER06 IP option.	Not applicable	Not applicable
5.4	Improvements: ● NMOS Hostname is selectable(Valid or invalid) as PRE-SET RECALL when using LV5600-SER05/ LV5600-SER06/LV7600-SER05/LV7600-SER06 IP option.	Not applicable	Not applicable

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UPDATE Ver.	NOTES		
	LV5600 / LV7600	LV5300(A) / LV5350	LV7300
5.3	New features: ● NMOS DNS-SD is now supported when using the LV5600-SER05/ LV7600-SER05 or LV5600-SER06/ LV7600-SER06 IP option. Improvements: ● Closed captions (EIA-608/708) in the PICTURE mode now includes CONTENT ADVISORY information, when using the LV5600-SER01 or LV5600-SER02 SDI Input option. ● Input signal from NMOS is switchable to 2K or 4K when using the LV5600-SER05/LV7600-SER05 or LV5600-SER06/LV7600-SER06 IP options. ● PTP correction field is correctable when using the LV5600-SER05/LV7600-SER05 or LV5600-SER06/LV7600-SER06 IP option. ● SDI out PID Insert is selectable among from ST2110-40, NMOS (SDP) or Manual when using the LV5600-SER05/LV7600-SER05 or LV5600-SER06/LV7600-SER06 IP option. ● Port 1 or Port 2 can be selected in the PTP-RTP phase measurement when using the LV5600-SER05/ LV7600-SER05 or LV5600-SER06/ LV7600-SER06 IP option.	Improvements: ● Closed captions (EIA-608/708) in the PICTURE mode now includes CONTENT ADVISORY information, when using the LV5300-SER21/ LV5350-SER21 CLOSED CAPTION option.	Improvements: ● Closed captions (EIA-608/708) in the PICTURE mode now includes CONTENT ADVISORY information, when using the LV7300-SER21 CLOSED CAPTION option.
5.2	Minor changes	Not applicable	Not applicable

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UPDATE Ver.	NOTES		
	LV5600 / LV7600	LV5300(A) / LV5350	LV7300
5.1	New features: ● NMOS STATUS is indicated when using the LV5600-SER05 and LV5600-SER06 IP option. Improvements: ● Leave/Join response of IGMP has been quicker in the LV5600-SER05 /LV7600-SER05 or LV5600-SER06/ LV7600-SER06 IP option. ● AV PHASE value can be displayed by remote commands (Telnet/ SNMP) in the LV5600-SER03/LV7600-SER03 Audio option. ● Measured data and Tab menu setting can be controlled by SNMP command when using the LV5600-SER05/LV7600-SER05, LV5600-SER06/LV7600-SER06 or LV5600-SER32/LV7600-SER32 IP option.	Improvements: ● AV PHASE value can be displayed by the remote commands (Telnet/ SNMP) in the LV5350 or using the LV5300-SER20 Audio option in the LV5300.	Improvements: ● AV PHASE value can be displayed by the remote commands (Telnet/ SNMP) when using the LV7300-SER20 Audio option.
5.0	New features: ● Multiple audio IP Flows are possible as part of the SMPTE ST2110-30 standard, when using the LV5600-SER06 or LV7600-SER06 IP INPUT option. You can select 1, 2 or 4 IP Audio flows per input. Improvements: ● SR Live Metadata analysis, which is available from the STATUS menu, now supports SR Live Metadata Ver.1.00, when using the LV5600-SER01 or LV5600-SER02 SDI option.	Improvements: ● SR Live Metadata analysis, which is available from the STATUS menu, now supports SR Live Metadata Ver.1.00.	Improvements: ● SR Live Metadata analysis, which is available from the STATUS menu, now supports SR Live Metadata Ver.1.00, when using the LV7300-SER01 or LV7300-SER02 SDI options.

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UPDATE Ver.	NOTES		
	LV5600 / LV7600	LV5300(A) / LV5350	LV7300
4.9	New features: ● RS-FEC feature has been added to the LV5600-SER06 IP INPUT option. Improvements: ● A PACKET JITTER Graph has been created by looking at the actual measured Min (minimum) and Max (maximum) Packet Arrival Interval Time values, when using the LV5600-SER05/LV7600-SER05 or LV5600-SER06/LV7600-SER06 IP INPUT option.	Changes: ● The tab description "REMOTE LABEL INPUT" has been changed to "REMOTE LABEL" for the LV7290, in the SYSTEM SETUP.	Changes: ● The tab description "REMOTE LABEL INPUT" has been changed to "REMOTE LABEL" for the LV7290, in the SYSTEM SETUP.
4.8	New features: ● SCTE-104 packet information is displayed on the SCTE-104 Packet screen, the picture and in the Event Log with the LV5600-SER01 or LV5600-SER02 SDI input options.	New features: ● SCTE-104 packet information is displayed on the SCTE-104 Packet screen, the picture and in the Event Log of LV5300 and LV5350.	New features: ● SCTE-104 packet information is displayed on the SCTE-104 Packet screen, the picture and in the Event Log with the LV7300-SER01 or LV7300-SER02 SDI input options.
4.6	New features: ● Grand Master information has been added to the PTP display with the LV5600-SER05/LV7600-SER05 or LV5600-SER06/LV7600-SER06 IP INPUT options. ● SMPTE ST 2110-21 Buffer Measurement feature has been added to the LV5600-SER06 and LV7600-SER06 IP INPUT option. ● SMPTE ST 2110 Packet Error insertion feature has been added to the LV5600-SER32 and LV7600-SER32 TSG option. ● SMPTE ST 2110 Packet Jitter insertion feature has been added to the LV5600-SER32 and LV7600-SER32 TSG option. ● SMPTE ST 2022-6/ST 2110 Lip Sync pattern has been added to the LV5600-SER32 and LV7600-SER32 TSG option. ● LV5600-SER31 and LV7600-SER31 COLORIMETRY ZONE option is now supported.	Improvements: ● English, Spanish and Portuguese are now supported in the EIA-608/708 closed captions display with the LV5300-SER21 or LV5350-SER21 Closed Captions option ● Error logging is now available for MAX FALL/MAX CLL levels with the LV5300-SER23 or LV5350-SER23 HDR option.	Improvements: ● English, Spanish and Portuguese are now supported in the EIA-608/708 closed captions display with the LV5300-SER21 or LV5350-SER21 Closed Captions option ● Error logging is now available for MAX FALL/MAX CLL levels with the LV7300-SER23 HDR option.

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UPDATE Ver.	NOTES		
	LV5600 / LV7600	LV5300(A) / LV5350	LV7300
4.6	Improvements: ● English, Spanish and Portuguese are now supported in the EIA-608/708 closed captions display with the LV5600-SER01 or LV5600-SER02 SDI input options. ● Payload ID from a SMPTE ST 2110-20 source is added to the IP to SDI output even if it is not present in the SMPTE ST 2110-40 packet with the LV5600-SER05/LV7600-SER05 or LV5600-SER06/LV7600-SER06 IP INPUT options. ● SMPTE ST 2110 PACKET JITTER, PTP STATUS and TIMING COMPARISON measurements are displayed for both port 1 and port 2 with the LV5600-SER05/LV7600-SER05 or LV5600-SER06/LV7600-SER06 IP INPUT options. ● Event Log with PTP time is now available with the LV5600-SER05/LV7600-SER05 or LV5600-SER06/LV7600-SER06 IP INPUT options. ● SMPTE ST 2110 AUDIO and ANC measurements are now displayed as part of the packet jitter measurement feature with the LV5600-SER05/LV7600-SER05 or LV5600-SER06/LV7600-SER06 IP INPUT options. ● SMPTE ST 2110 IP STATUS, PACKET JITTER, PTP STATUS, TIMING COMPARISON, and PATH DELAY data graphs can be stored as a csv file on USB memory with the LV5600-SER05/LV7600-SER05 or LV5600-SER06/LV7600-SER06 IP INPUT options. ● Error logging is now available for MAX FALL/MAX CLL levels with the LV5600-SER23 and LV7600-SER23 HDR option.	Not applicable	Not applicable
4.5	Minor changes	Not applicable	Not applicable
4.4	Minor changes	Not applicable	Not applicable
4.3	Not applicable	Not applicable	Minor changes

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UPDATE Ver.	NOTES		
	LV5600 / LV7600	LV5300(A) / LV5350	LV7300
4.2	New features: ● Capturing data in the PCAP format is now supported with the LV5600-SER06 and LV7600-SER06 IP INPUT option. ● SMPTE ST 2022-6 is now supported with the LV5600-SER06 and LV7600-SER06 IP INPUT option. ● NMOS (IS-04/05) is now supported with the LV5600-SER06 and LV7600-SER06 IP INPUT option. ● Phase difference display of PTP-BB is now supported with the LV5600-SER05, LV7600-SER05, LV5600-SER06 and LV7600-SER06 IP INPUT option.	Minor changes	Minor changes
4.1	Minor changes	Minor changes	Minor changes
4.0	Minor changes	Minor changes	Minor changes
3.9	New features: ● SR Live Metadata analysis display has been added to the STATUS for LV5600-SER01 and LV5600-SER02 SDI Input options. Improvements: ● Marker display supporting the color bars in the color area BT.709 of ARIB STD-B66 and ARIB STD-B72 has been added to the LV5600-SER01 and LV5600-SER02 SDI Input options. ● English closed captions (EIA-608/708) are supported for the 4K-6G system for the LV5600-SER01 and LV5600-SER02 SDI options. ● IGBP version setting menu has been added to the LV5600-SER05/LV7600-SER05 and LV5600-SER06/LV7600-SER06 IP options. ● SFP reset menu has been added to the LV5600-SER05/ LV5600-SER06/ LV7600-SER05/ LV7600-SER06 IP options.	New features: ● SR Live Metadata analysis display has been added to the STATUS. Improvements: ● Marker display supporting the color bars in the color area BT.709 of ARIB STD-B66 and ARIB STD-B72 has been added. ● English closed captions (EIA-608/708) are supported for the 4K-6G system.	New features: ● SR Live Metadata analysis display has been added to the STATUS for the LV7300-SER01 and LV7300-SER02 SDI Input options. Improvements: ● Marker display supporting the color bars in the color area BT.709 of ARIB STD-B66 and ARIB STD-B72 has been added to the LV7300-SER01 and LV7300-SER02 SDI Input options. ● English closed captions (EIA-608/708) are supported for the 4K-6G system for the LV7300-SER21 Closed caption option.

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UPDATE Ver.	NOTES		
	LV5600 / LV7600	LV5300(A) / LV5350	LV7300
3.8	Improvements: ● LV5600-SER06/LV7600-SER06 supports 25G single mode and an SFP test signal output (LV5600-SER32/LV7600-SER32)	Minor changes	Minor changes
3.6	Improvements: ● Assigned address is indicated when DHCP is selected in the NETWORK section of the SYSTEM SETUP ● English closed captions (EIA-608) are supported for the following formats (HD DUAL/3G-A/3G-B-DL/4K Dual/4K Quad/4K 12G) for both the LV5600-SER01 and LV5600-SER02 SDI options ● Assigned address is indicated when DHCP is selected in the SYSTEM SETUP of the LV5600-SER05 /LV5600-SER06 /LV7600-SER05 /LV7600-SER06 IP options.	Improvements: ● Assigned address is indicated when DHCP is selected in the NETWORK section of the SYSTEM SETUP ● English closed captions (EIA-608) are supported for the following formats (3G-A/3G-B-DL/4K Dual/4K 12G) if the LV5300-SER21 or LV5350-SER21 license option is enabled.	Improvements: ● Assigned address is indicated when DHCP is selected in the NETWORK section of the SYSTEM SETUP ● English closed captions (EIA-608) are supported for the following formats (3G-A/3G-B-DL/4K Dual/4K 12G) if the LV7300-SER21 license option is enabled.
3.5	New features: ● LV5600-SER06/LV7600-SER06 now supports 25G IP INPUTS ● LV5600-SER32/LV7600-SER32 now supports 25G IP TSG	Not applicable	Not applicable
3.3	Changes: ● Auto measurement value, (when the LV5600-SER02 Eye Pattern eye is closed due to the extended distance of the cable transmission), has been corrected ● When using the LV5600-SER02 Eye Pattern option, if the Or/Of value is greater than 20%, it is indicated as ">20%". ● "LOUDNESS AUTO MEASURE" and "MARK AND GATING LAMP" for the LV5600-SER03 and LV7600-SER03 Audio options, has been added.	Changes: ● Auto measurement value, (when the LV5300 Eye Pattern eye is closed due to the extended distance of the cable transmission), has been corrected ● When the Or/Of value is greater than 20%, it is indicated as ">20%" on the LV5300	Changes: ● Auto measurement value, (when the LV7300-SER02 Eye Pattern eye is closed due to the extended distance of the cable transmission), has been corrected ● When using the LV7300-SER02 EYE pattern option, if the Or/Of value is greater than 20%, it is indicated as ">20%"

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UPDATE Ver.	NOTES		
	LV5600 / LV7600	LV5300(A) / LV5350	LV7300
3.2	Improvements: ● Upon external synchronization of the waveform display, the input signal format is indicated as same as the "EXT REF PHASE" indication for LV5600-SER01 and LV5600-SER02 SDI options. ● Not only the current value but also the PEAK HOLD value on the audio level meter can be displayed by making a selection in the menu of the LV5600-SER03 and LV7600-SER03 Audio options. ● Packet list is now automatically updated in the IP STATUS for LV5600-SER05 and LV7600-SER05 IP options. ● PATH DELAY and Timing Comparison are now supported in the user layout with the LV5600-SER05 and LV7600-SER05 IP options. ● LV5600-SER05 and LV7600-SER05 now supports Telnet and SNMP ● LV5600-SER05 and LV7600-SER05 now supports IGMPv3-SSM Changes: ● DDR3 and scaler initializing have been added in case the measuring display is not indicated after start up. ● TRS error and line number error have been fixed during SDI signal detection for the LV5600-SER01 and LV5600-SER02 SDI Input options. ● NMOS control response speed has been improved for the LV5600-SER05.	Improvements: ● Not only the current value but also the PEAK HOLD value on the audio level meter can be displayed by making a selection in the menu of the LV5300-SER20 and LV5350-SER20 Audio options. Changes: ● DDR3 and scaler initializing have been added in case the measuring display is not indicated after start up. ● TRS error and line number error have been fixed during SDI signal detection.	Improvements: ● Not only the current value but also the PEAK HOLD value on the audio level meter can be displayed by making a selection in the menu of the LV7300-SER20 Audio option. Changes: ● DDR3 and scaler initializing have been added in case the measuring display is not indicated after start up. ● TRS error and line number error have been fixed during SDI signal detection for the LV7300-SER01 and LV7300-SER02 SDI options.

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UPDATE Ver.	NOTES		
	LV5600 / LV7600	LV5300(A) / LV5350	LV7300
3.0	Improvements: ● 1080/48P(1080/47.95P) is now selectable in the MONITOR OUT. ● AV PHASE is now selectable at each layout in the STATUS with the LV5600-SER26 and LV7600-SER26 Layout option. Changes: ● F3:AV PHASE SETUP menu in the AV PHASE for LV5600-SER01 and LV5600-SER02 SDI options. ● F6:INPUT SELECT menu for LV5600-SER01 and LV5600-SER02 SDI Input options. ● When ST2110 signal is input, Freeze, Black, Gamut and Level Y/C error detection are now supported for the LV5600-SER05 and LV7600-SER05 IP Input. ● Receiving Buffer of ST2110 signal has been extended to support big packet interval of fluctuation for the LV5600-SER05 and LV7600-SER05 IP Input. ● PTP has been included in ST2110 signal redundancy for LV5600-SER05 and LV7600-SER05 IP Input.	Improvements: ● 1080/48P(1080/47.95P) is now selectable in the MONITOR OUT ● AV PHASE is now selectable at each layout in the STATUS with LV5300-SER26 and LV5350-SER26 Layout options Changes: ● F3:AV PHASE SETUP menu in the AV PHASE ● F6:INPUT SELECT menu	Improvements: ● 1080/48P(1080/47.95P) is now selectable in the MONITOR OUT ● AV PHASE is now selectable at each layout in the STATUS with the LV7300-SER26 Layout option. Changes: ● F3:AV PHASE SETUP menu in the AV PHASE for the LV7300-SER01 and LV7300-SER02 SDI Input options. ● F6:INPUT SELECT menu has been added to the LV7300-SER01 and LV7300-SER02 SDI Input options.
2.8	New features: ● Video noise meter is now supported with the LV5600-SER30 /LV7600-SER30 Video Noise Meter options.	Minor changes	Minor changes
2.7	Minor changes	Minor changes	Minor changes

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UPDATE Ver.	NOTES		
	LV5600 / LV7600	LV5300(A) / LV5350	LV7300
2.6	New features: ● Dolby is now supported for the LV5600-SER04 and LV7600-SER04 Dolby options. ● TSL protocol is now supported for the LV5600-SER27 and LV7600-SER27 Tally options. Improvements: ● DCI white dot marker has been added to the chromaticity diagram for the LV5600-SER01 and LV5600-SER02 SDI Input options. ● Visibility of the marker line in the picture marker display. The line is now thicker and broken into sections to be easier to see with the LV5600-SER01 and LV5600-SER02 SDI Input options ● NMOS (IS-05) for the LV5600-SER05 and LV7600-SER05 IP options now support the Evertz system. ● Saving an SDP file received by NMOS (IS-05) to USB has been added as a function of the LV5600-SER05 and LV7600-SER05 IP options. ● BULK mode of NMOS (IS-05) is now supported with the LV5600-SER05 and LV7600-SER05 IP options. ● Saving a received packet by ETHERNET (RJ45) to USB as a PCAP file has been added as a function of the LV5600-SER05 and LV7600-SER05 IP options. ● Data dump feature is now supported in the ST2110 setting for the LV5600-SER05 and LV7600-SER05 IP options. ● Filter function by using the VLAN ID has been added to the LV5600-SER05 and LV7600-SER05 IP options	New features: ● TSL protocol is now supported for the LV5300-SER27 and LV5350-SER27 Tally options. Improvements: ● Visibility of the marker line in the picture marker display. The line is now thicker and broken into sections to be easier to see. ● DCI white dot marker has been added to the chromaticity diagram for LV5300-SER22 and LV5350-SER22 CIE Chart display options.	New features: ● TSL protocol is now supported for the LV7300-SER27 Tally option. Improvements: ● Visibility of the marker line in the picture marker display. The line is now thicker and broken into sections to be easier to see with the LV7300-SER01 and LV7300-SER02 SDI Input options. ● DCI white dot marker has been added to the chromaticity diagram for the LV7300-SER22 CIE Chart display option.

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UPDATE Ver.	NOTES		
	LV5600 / LV7600	LV5300(A) / LV5350	LV7300
2.5	Improvements: ● Waveform color is now selectable when the capture function is in the Held mode. ● Waveform display of the external synchronization signal in 4K system is now available for the LV5600-SER01 and LV5600-SER02 SDI Input options. ● Composite variable scale in the vector and waveform displays is supported with the LV5600-SER01 and LV5600-SER02 SDI Inputs. ● Guide display can now be turned on/off when the LV5600-SER01 or LV5600-SER02 is used in the vector display mode. ● Eye Histogram has been added to the LV5600-SER02 SDI Input option. ● EYE/JITTER waveform display in the 4K-6G system is now supported for the LV5600-SER02 SDI Input option. ● ST2110-40 (ancillary data) is now supported with the LV5600-SER05 and LV7600-SER05 IP options. ● Phase graph indication of PTP with Video, Audio and Ancillary data has been added to the LV5600-SER05 and LV7600-SER05 IP options. ● PTP packet capture function has been added to the LV5600-SER05 and LV7600-SER05 IP options. ● Packet capture has been increased to 1M for the LV5600-SER05 and LV7600-SER05 IP options. ● Interlocking mode with payload ID for SDR, HLG and PQ has been added to the LV5600-SER23 and LV7600-SER23 HDR options.	Improvements: ● Waveform color is now selectable when the capture function is in the Held mode. ● Composite variable scale in the vector and waveform displays is supported. ● Guide display can now be turned on/off in the vector display mode. ● Eye Histogram has been added to the LV5300. ● EYE/JITTER waveform display in the 4K-6G system is now supported for LV5300 ● Interlocking mode with payload ID for SDR, HLG and PQ has been added to the LV5300-SER23 and LV5350-SER23 HDR options.	Improvements: ● Waveform color is now selectable when the capture function is in the Held mode. ● Composite variable scale in the vector and waveform displays is supported with the LV7300-SER01 and LV7300-SER02 SDI Inputs. ● Guide display can now be turned on/off when the LV7300-SER01 or LV7300-SER02 is used in the vector display mode. ● Eye Histogram has been added to the LV7300-SER02 SDI Input. ● EYE/JITTER waveform display in the 4K-6G system is now supported for the LV7300-SER02 SDI Input option. ● Interlocking mode with payload ID for SDR, HLG and PQ has been added to the LV7300-SER23 HDR option.
2.4	Minor changes	Minor changes	Minor changes

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UPDATE Ver.	NOTES		
	LV5600 / LV7600	LV5300(A) / LV5350	LV7300
2.3	New Functions: ● Vector variable scale function has been added to the LV5600-SER01 and LV5600-SER02 SDI Input options. ● NMOS IS-04 Registered Discovery is now supported with the LV5600-SER05 and LV7600-SER05 IP Options. ● Setting function in NMOS IS-05 by SDP file has been added to the LV5600-SER05 and LV7600-SER05 IP options. ● Packet capture function has been added to the LV5600-SER05 and LV7600-SER05 IP options. ● PATH DELAY graphic display of ST2022-6 has been added to LV5600-SER05 and LV7600-SER05 IP options. ● Wide signal provided in ST2110-21 is now supported for the LV5600-SER05 and LV7600-SER05 IP options. ● PTP and ST2110-20 Phase display function has been added to the LV5600-SER05 and LV7600-SER05 IP options. ● HDR (HLG) color bar has been added to the LV5600-SER24 and LV7600-SER24 Test Signal Generator option (works with SER23 HDR option). ● LV5600-SER29 /LV7600-SER29 now supports 6G-SDI system. Improvements: ● Web server access port (port no. 8080) indication has been added to the NETWORK setting tab. ● HEX indication on the payload ID detection display has been added to the STATUS of the LV5600-SER01 and LV5600-SER02 SDI options. ● 720p format is now supported with the LV5600-SER05 and LV7600-SER05 IP options. ● CLog/Log-C is now supported with the LV5600-SER23 and LV7600-SER23 HDR option.	New Functions: ● Vector variable scale function has been added. ● HDR (HLG) color bar has been added to the LV5300-SER24 and LV5350-SER24 Test Signal Generator option (works with SER23 HDR option) ● 6G-SDI system is now supported for the LV5300-SER28 and LV5350-SER28 4K/12G-SDI options. Improvements: ● Web server access port (port no. 8080) indication has been added to the NETWORK setting tab. ● HEX indication on the payload ID detection display has been added to the STATUS. ● CLog/Log-C is now supported with the LV5300-SER23 and LV5350-SER23 HDR options. ● 4K 3G dual link is now supported with the LV5300-SER28 and LV5350-SER28 4K/12G-SDI options.	New Functions: ● Vector variable scale function has been added to the LV7300-SER01 and LV7300-SER02 SDI Input options. ● HDR (HLG) color bar has been added to the LV7300-SER24 Test Signal Generator option (works with SER23 HDR option). ● 6G-SDI system is now supported for the LV7300-SER28 4K/12G-SDI options. Improvements: ● Web server access port (port no. 8080) indication has been added to the NETWORK setting tab. ● HEX indication on the payload ID detection display has been added to the STATUS of the LV7300-SER01 and LV7300-SER02 SDI options. ● CLog/Log-C is now supported with the LV7300-SER23 HDR option. ● 4K 3G dual link is now supported with LV7300-SER28 4k/12g-SDI option.
2.0			
1.9	Slight change		