

SDI video signal formats and standard

SD video signal format and standard

Color System	Quantization	Image	Field Frequency /Scanning	Supported Standard
YCbCr 4:2:2	10bit	720 × 487	59.94 /I	SMPTE ST 259
		720 × 576	50 /I	

HD video signal format and standard

Color System	Quantization	Image	Frame (Field) Frequency /Scanning	Supported Standard
YCbCr 4:2:2	10bit	1280 × 720	60/59.94/50/30/29.97/25/24/23.98 /P	SMPTE ST 292-1
			60/59.94/50 /I	SMPTE ST 274
		1920 × 1080	30/29.97/25/24/23.98 /P	SMPTE ST 292-1
			30/29.97/25/24/23.98 /PsF	

3G-A video signal format and standard

Color System	Quantization	Image	Frame (Field) Frequency /Scanning	Supported Standard		
YCbCr 4:2:2	10bit	1920 × 1080	60/59.94/50 /P	SMPTE ST 274		
			48/47.95 /P	SMPTE ST 425-1		
		2048 × 1080	60/59.94/50/48/47.95 /P	SMPTE ST 425-1 SMPTE ST 2048-2		
	12bit	1920 × 1080	60/59.94/50 /I	SMPTE ST 274		
			30/29.97/25/24/23.98 /P	SMPTE ST 425-1		
		2048 × 1080	30/29.97/25/24/23.98 /PsF	SMPTE ST 425-1 SMPTE ST 2048-2		
YCbCr 4:4:4	10bit	1280 × 720	60/59.94/50/30/29.97/25/24/23.98 /P	SMPTE ST 296		
			60/59.94/50 /I	SMPTE ST 274		
		1920 × 1080	30/29.97/25/24/23.98 /P	SMPTE ST 425-1		
			30/29.97/25/24/23.98 /PsF	SMPTE ST 425-1		
		2048 × 1080	30/29.97/25/24/23.98 /P	SMPTE ST 425-1		
			30/29.97/25/24/23.98 /PsF	SMPTE ST 2048-2		
	12bit	1920 × 1080	60/59.94/50 /I	SMPTE ST 274		
			30/29.97/25/24/23.98 /P	SMPTE ST 425-1		
		2048 × 1080	30/29.97/25/24/23.98 /P	SMPTE ST 425-1		
			30/29.97/25/24/23.98 /PsF	SMPTE ST 2048-2		
		RGB 4:4:4	10bit	1280 × 720	60/59.94/50/30/29.97/25/24/23.98 /P	SMPTE ST 296
					60/59.94/50 /I	SMPTE ST 274
1920 × 1080	30/29.97/25/24/23.98 /P			SMPTE ST 425-1		
	30/29.97/25/24/23.98 /PsF		SMPTE ST 425-1			
12bit	1920 × 1080		60/59.94/50 /I	SMPTE ST 274		
			30/29.97/25/24/23.98 /P	SMPTE ST 425-1		
	2048 × 1080	30/29.97/25/24/23.98 /P	SMPTE ST 425-1			
XYZ 4:4:4	10bit	1280 × 720	60/59.94/50/30/29.97/25/24/23.98 /P	SMPTE ST 296		
			60/59.94/50 /I	SMPTE ST 274		
		1920 × 1080	30/29.97/25/24/23.98 /P	SMPTE ST 425-1		
	30/29.97/25/24/23.98 /PsF		SMPTE ST 425-1			
	12bit	1920 × 1080	60/59.94/50 /I	SMPTE ST 274		
			30/29.97/25/24/23.98 /P	SMPTE ST 425-1		
2048 × 1080		30/29.97/25/24/23.98 /P	SMPTE ST 425-1			

3G(DL)-4K Video Signal Formats and Standards

Square

Color System	Quantization	Image	Frame (Field) Frequency /Scanning	Supported Standard
YCbCr 4:2:2	10bit	3840 × 2160	30/29.97/25/24/23.98 /P	SMPTE ST 425-3
			30/29.97/25/24/23.98 /PsF	SMPTE ST 2036-1
		4096 × 2160	30/29.97/25/24/23.98 /P	SMPTE ST 425-3
			30/29.97/25/24/23.98 /PsF	SMPTE ST 2048-1

2 sample interleave

Color System	Quantization	Image	Frame (Field) Frequency /Scanning	Supported Standard
YCbCr 4:2:2	10bit	3840 × 2160	30/29.97/25/24/23.98 /P	SMPTE ST 425-3
			30/29.97/25/24/23.98 /PsF	SMPTE ST 2036-1
		4096 × 2160	30/29.97/25/24/23.98 /P	SMPTE ST 425-3
			30/29.97/25/24/23.98 /PsF	SMPTE ST 2048-1

* You also need the SER28.

* When these signals are displayed, phase differences of up to 100 clocks (approx. 0.67μs) between links are automatically corrected.

* 3G-B-DS links are supported.

3G-B-DL video signal formats and standard

Color System	Quantization	Image	Frame (Field) Frequency /Scanning	Supported Standard	
YCbCr 4:2:2	10bit	1920 × 1080	60/59.94/50 /P	SMPTE ST 274	
			48/47.95 /P	SMPTE ST 372	
	2048 × 1080	60/59.94/50/48/47.95 /P	SMPTE ST 372		
			SMPTE ST 425-1		
	12bit	1920 × 1080	60/59.94/50 /I	SMPTE ST 274	
			30/29.97/25/24/23.98 /P	SMPTE ST 372	
2048 × 1080		30/29.97/25/24/23.98 /PsF	SMPTE ST 425-1		
			SMPTE ST 292-1		
YCbCr 4:4:4	10bit	1920 × 1080	60/59.94/50 /I	SMPTE ST 274	
			30/29.97/25/24/23.98 /P	SMPTE ST 372	
		2048 × 1080	30/29.97/25/24/23.98 /PsF	SMPTE ST 425-1	
				SMPTE ST 2048-2	
	12bit	1920 × 1080	60/59.94/50 /I	SMPTE ST 274	
			30/29.97/25/24/23.98 /P	SMPTE ST 372	
		2048 × 1080	30/29.97/25/24/23.98 /PsF	SMPTE ST 425-1	
				SMPTE ST 2048-2	
	RGB 4:4:4	10bit	1920 × 1080	60/59.94/50 /I	SMPTE ST 274
				30/29.97/25/24/23.98 /P	SMPTE ST 372
			2048 × 1080	30/29.97/25/24/23.98 /PsF	SMPTE ST 425-1
				SMPTE ST 2048-2	
12bit		1920 × 1080	60/59.94/50 /I	SMPTE ST 274	
			30/29.97/25/24/23.98 /P	SMPTE ST 372	
	2048 × 1080	30/29.97/25/24/23.98 /PsF	SMPTE ST 425-1		
XYZ 4:4:4	12bit	2048 × 1080	30/25/24 /P	SMPTE ST 372	
			30/25/24 /PsF	SMPTE ST 425-1	

6G video signal formats and standards (2 sample interleave)

Color System	Quantization	Image	Frame Frequency /Scanning	Supported Standard
YCbCr 4:2:2	10bit	3840 × 2160	30/29.97/25/24/23.98 /P	SMPTE ST 2036-1
		4096 × 2160	30/29.97/25/24/23.98 /P	SMPTE ST 2081-10

* Type 1 of 12G-SDI is supported.

12G video signal formats and standards (2 sample interleave)

Color System	Quantization	Image	Frame Frequency /Scanning	Supported Standard
YCbCr 4:2:2	10bit	3840 × 2160	60/59.94/50 /P	SMPTE ST 2036-1
			48/47.95/P	SMPTE ST 2082-10
	12bit	4096 × 2160	60/59.94/50/48/47.95 /P	SMPTE ST 2036-1
				SMPTE ST 2082-10
YCbCr 4:4:4	10bit	3840 × 2160	30/29.97/25/24/23.98 /P	SMPTE ST 2036-1
				SMPTE ST 2082-10
	12bit	4096 × 2160	30/29.97/25/24/23.98 /P	SMPTE ST 2036-1
				SMPTE ST 2082-10
RGB 4:4:4	10bit	3840 × 2160	30/29.97/25/24/23.98 /P	SMPTE ST 2036-1
				SMPTE ST 2082-10
	12bit	4096 × 2160	30/29.97/25/24/23.98 /P	SMPTE ST 2036-1
				SMPTE ST 2082-10

* Type 1 of 12G-SDI is supported.

External synchronize input terminal

Input terminal	BNC terminal
Number of input terminals	1 line 2 terminals
Input impedance	15 kΩ Passive loop through
Input return loss	30 dB or more (50 kHz to 30 MHz, 75 Ω termination)
Maximum input voltage	± 5 V (DC + peak AC)
Input signal	Ternary synchronization signal or NTSC/PAL black burst signal 10 Field ID correspondence
Function	SDI reference signal input for video signal waveform display and phase difference display

Headphone output terminal

Output terminal	LV5300/LV5350 3.5 mm Mini jack 1 terminal (stereo) LV7300 Standard jack 1 terminal (stereo)
Output signal	On the screen of the displayed audio signal, arbitrary 2ch (Downmixed Lt, Rt is also acceptable)

Monitor output terminal (LV7300)

SDI output terminal	
Function	Output screen for SDI monitor
Output terminal	BNC terminal
Number of output terminals	1
Output signal	Output liquid crystal display screen is output with HD, 3G-A, 3G-B-DL. 1920 × 1080 60,59.94,50 I/P ,YCBCR 4:2:2(10bit)

(LV7300 outputs SDI monitor output terminal, LV5300, LV5350 switch output of SDI output 2 terminal)

TMDS output terminal	
Function	The displayed screen is output for HDMI monitor.
Output terminal	HDMI terminal
Number of output terminals	1
Signal format	Single Link T.M.D.S
DDC function	Not supported
HOT PLUG detection function	Not supported
Output signal	Output liquid crystal display screen is output. 1920x1080 60 P, 59.94 P, 50 P

Control terminal

USB terminal	
Terminal shape	Standard A
Number of terminals	2
Standard	USB 2.0
Compatible device	USB memory, USB mouse, touch panel type monitor
For Ethernet terminal control	
Approved standard	IEEE802.3
Supported protocols	TELNET, FTP, SNMP, HTTP, SNTP
Input/output terminals	RJ-45
Function	Remote operation with an external PC or remote controller, File transfer, get status information
Types	10Base-T, 100Base-TX, 1000Base-T
Remote terminal	
Terminal shape	D Sub 15 pins (female)
Number of terminals	1
Control signal	LV- TTL level (LOW active)
Function	Preset recall, input signal switching, alarm output, tally
Alarm output	When a format alarm, various errors, fan abnormality, or internal temperature occurs

Display (LV5300 / LV5350)

Liquid crystal display	7 type TFT color liquid crystal
Resolution	1920x1080
Refresh rate	60 Hz, 59.94 Hz, 50 Hz (Free run or frequency synchronization to external synchronization signal)
Touch panel	Electrostatic capacity type touch panel

General specifications

Environmental conditions	
Operating temperature range	0 to 40 °C
Operating humidity range	85% RH or less (no condensation)
Optimal Temperature	10 to 30 °C
Operating Environment	Indoors
Elevation	up to 2,000 m
Overvoltage category	1
Pollution degree	2

Power supply

Voltage	DC 10 to 18 V
Power consumption (DC Power supply)	
LV5300	80 W max.
LV5350	60 W max.
LV7300	80 W max

Dimensions

LV5300	215 (W)x132 (H)x132(D) mm (excluding protrusions)
LV5350	215 (W)x132 (H)x85(D) mm (excluding protrusions)
LV7300	213 (W)x44 (H)x300 (D) mm (excluding protrusions)

Weight

LV5300	2.95 kg max. (excluding accessories and battery option)
LV5350	2.5 kg max. (excluding accessories and battery option)
LV7300	2.25 kg max. (including options, excluding accessories)

Accessories

AC adapter(LV7300 only)	x1
D sub 15 pin connector	x1
D sub 15 pin connector cover	x1
Manual (CR-ROM)	x1

Options

Remote controller	LV7290 (Ethernet connection)
Rack mount adapter (for LV5350/LV5350)	LR2530
Rack mount adapter (for LV7300)	LR2731 / LR2732
AC adapter (LV7300 is included)	GST90A12