

# MSPG-7100

Video Signal Generator HDMI Ver 1.4 & 4K x 2K

## IMAGE



## DEFINITION

- Analog was a main item in display device industries at the past time, but from now on, the digital is getting developed with multi-function and large-sized resolution like 4K x 2K(4096x2160). Preparing for this change, this signal generator is an essential equipment of LCD, LED, PDP, D-TV, TV, CRT display device industries, which was made for generator analog signal, digital signal, TV signal and D-TV Signal, HDCP code simultaneously and sufficiently examining a large-sized display device.
- MSPG-7100 has 2(two) of HDMI 1.4a Ver supports to 300MHz Dot Clock (Max 4K x 2K, 4096x2160/30Hz) and 3(three) of HDMI 1.4a Ver supports to A.R.C.(Audio Return Channel).

## SPECIFICATION

Displayport	Pixel Clock	25~270MHz
	Display Size	2560 X 1600
	Link Rate	Max. 10.8Gbps (2.7GHz-1,2,4 Lanes / 1.6GHz-1,2,4 Lanes)
	Output Format	RGB444, YCbCr444 (8,10 Bit) / YCbCr422 (8,10,12 Bit)
	Compliant	Displayport 1.1a Version
	Audio	SPDIF, 192KHz, 2 Channels
H/V Frequency	Horizontal	10~300KHz / 1 Dot Resolution
	Vertical	10~300Hz / 1 Line Resolution
Analog Output	Display Size	4096 X 4096
	Pixel Clock	8~300MHz
	Video Level	R, G, B (Load 75 ohms, 0~1.0V Programmable)
	Output Connector	15P D-Sub
	EDID	Read
	Separate Sync	HS, VS (3.0V~5.5Vp-p Programmable / Inherited Sync Level is 4.8Vp-p)
DVI (TMDS) Output	Pixel Clock	* Dual Link : 25~300MHz
	Transfer Type	* Single TMDS 24 Bit Input Mode / * Dual TMDS 12 Bit Input Mode
	EDID	Read
	HDCP	Support Single & Dual
	Compliant	DVI 1.0 Support
	Video Signal Type	RGB
	Output Connector	DVI-D (DVI 1 Ports, Single/Dual)
	Data Bit	8~16 Bit

# MSPG-7100

Video Signal Generator HDMI Ver 1.4 & 4K x 2K

CVBS Output	Output Mode	* NTSC M,J (3.58MHz) * NTSC443 (4.4MHz) * PAL B,D,G,H,I (4.434MHz) * SECAM (For=4.406MHz / For=4.25MHz)	
	Subcarrier Stability	25ppm ( $\pm$ 25Hz / 1MHz)	
	Video Output	Composite(BNC), S-Video * Signal : CVBS (Connector : BNC) * Signal : Y/C (Connector : 4Pin-Mini Din)	
	Closed Caption (NTSC)	C1, C2, C3, C4 / T1, T2, T3,T4	
	V-Chip	* MPAA Rating : G, PG, PG-13, R, NC-17, X * FCC Rating : TV-Y, TV-Y7, TV-G, TV-PG, TV-14, TV-MA	
	Teletext (PAL)	Teletext System B Level 1, 1.5	
	Separate Sync	1~318mV Programmable	
	D-TV Output	Signal	Y, Pb, Pr
		Time	480i/p(59.94Hz), 576i/p(50Hz), 720p(50/59.94/60Hz), 1080i(50/59.94/60Hz), 1080P(24/25/30/50/59.94/60Hz) for ATSC and DVB Format
		Separate Sync	50~400mV Programmable
HDMI (TMDS) Video Output	Compliant	HDMI 1.4 Version (CEC Support)	
	Pixel Rate Range	25~165MHz (TMDS Clock : 25~225MHz) / 4k X 2k (297MHz)	
	Standard Spec	EIA/CEA-861E	
	Video Signal Type	RGB, YCbCr	
	Pixel Encoding	RGB444, YCbCr444, YCbCr422	
	Data bit of RGB & YCbCr	8, 10, 12 (RGB & YCbCr)	
	Color Space	RGB, BT-601, BT-709, xvYCC-601, xvYCC-709	
	HDCP	Support HDCP 1.2 Version	
	EDID	Read	
	Output Connector	Type A, HDMI 5 Port (ARC 3Port , 4k X 2k 2Port)	
	Note	Audio Return Channel (ARC) 3Port 3D Video Formats (Frame Packing, Side by Side, Top & Bottom, Field Alternative) 4K x 2K Video fomats 2Port	
	HDMI Audio Output	Sample Rate	32 / 44.1 / 48 / 88.2 / 96 / 176.4 / 192KHz
		Number of Channel	8 Channels
Bit per Sample		24	
Waveform		Sine Wave	
Frequency Range		20Hz to 24KHz / 5Hz step	
Level Range		0dB to -110dB / 0.5dB step	
External Audio Input		Optical, Coaxial	
Special Control Mode		Fix, Sweep, Swap, Optical, Mute	
Audio (Analog) Output	Frequency Range	20Hz to 24KHz / 5Hz step	
	Level Range	0mV rms to 900mV rms / 5mV rms	
	Waveform	Sine Wave	
	Number of Channel	2 Channels	
	Connector	RCA	
	Special Control Mode	Fix, Sweep, Swap, Mute	

# MSPG-7100

Video Signal Generator HDMI Ver 1.4 & 4K x 2K

Scan & Function Group	Scan Storage	99 Group (1 Group ; 24 Step)
	Function Storage	99 Group (1 Group ; 32 Step)
Data Storage Device	Timing	999 Timing (User:1~500, Default:501~999)
	Pattern	999 Pattern (User:1~500, Default:501~999)
General Specification	Power Consumption	AC 100~240VAC, 50/60Hz Auto Switch
	Operating Conditions	* Temperature : 0~40°C
		* 80% Humidity, Non-condensing
Dimension(WXDXH)	440 x 350 x145mm / 6Kg	
Others	Max Image	4096 X 4096 Bit Map Image Size
	User Interface	* Front Panel (6.4 inch / Graphic LCD) Key Pad
		* Possible to Timing Parameter Edit
		* USB, RS-232C, PC EDIT Tool

\* All specifications are subject to change without any notice.

Tel. 82-55-297-8880 / Fax. 82-55-256-7388

Address. #42-20, Palyong, Changwon, Gyeongnam, 641-847, Korea

Homepage. [www.Ltdmaster.com](http://www.Ltdmaster.com)

E-mail. [sales@Ltdmaster.com](mailto:sales@Ltdmaster.com) / [webmaster@Ltdmaster.com](mailto:webmaster@Ltdmaster.com)

Master Co., Ltd



Find Your Digital Solutions!