

PROGRAMMABLE VIDEO PATTERN GENERATOR

MSPG-3235

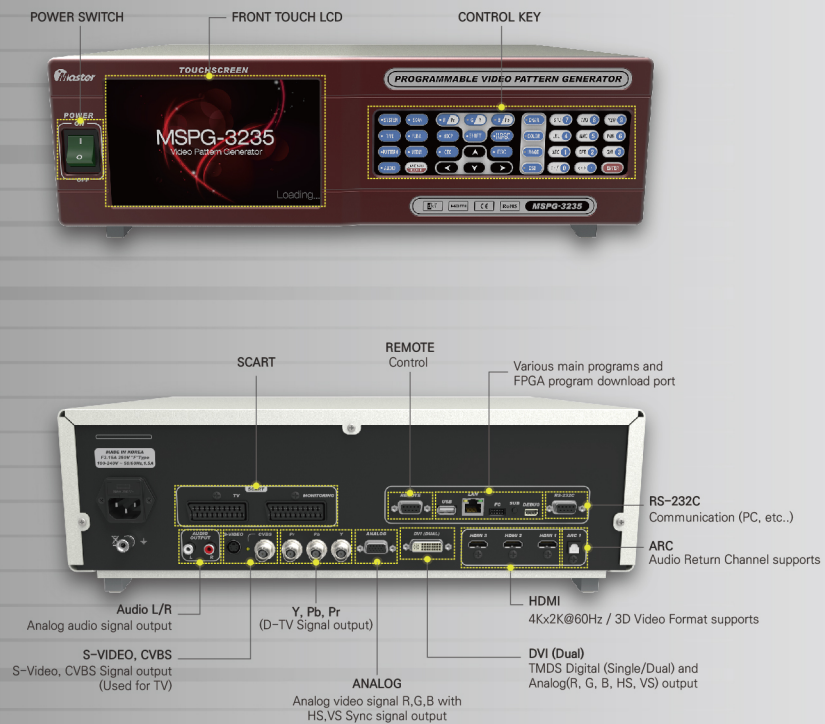
Analog was a main item in display device industries at the past time, but from now on, the digital is getting developed with multi-function and large-sized resolution. Preparing for this change, this signal generator is an essential equipment of LCD, LED, PDP, D-TV, TV-, CRT display device industries, which was made for generator analog signal, digital signal, TV signal and D-TV signal, HDCP, code simultaneous and sufficiently examining a large-size display device.

KEY FEATURES

- HDMI / HDCP Supports
- Mount front touch screen
- Easy upgrade / update to USB memory stick
- High resolution monitor inspection and adjustment
- Embed rich test pattern and apply special pattern
- Digital/D-TV Signal/ NTSC,PAL,SECAM/Inside Audio output



APPLICATION



SPECIFICATION

Analog Output

Display Size	4096 x 4096
Pixel Clock	8 ~ 250MHz
Video Level	R, G, B (Load 75 ohm, 0 ~ 1.0V Programmable)
Output Connector	15 D-Sub
Separate Sync	HS, VS (3.0V ~ 5.5Vp-p Programmable) / Inherited Sync Level is 4.8Vp-p

DVI Output

Pixel Clock	* Dual Link : 25 ~ 330MHz
HDCP	Support Single & Dual
Compliant	DVI 1.0 Support
Video Signal Type	RGB
Output Connector	DVI-D (DVI 1 Ports, Single / Dual)

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 ($\pm 25\text{Hz}$ / 1MHz)
Video Output	Composite (BNC), S-Video * Signal : CVBS (Connector : BNC) / * Signal : Y/C (Connector : 4Pin-Mini Din)

D-TV Output

Signal	Y, Pb, Pr
Connector	BNC
Time	480i/p, 576i/p, 720p, 1080i/p for ATSC and DVB Format

HDMI Video Output

Connector	HDMI 1.4 Version
Pixel Rate Range	25 ~ 165MHz (TMDS Clock : 25 ~ 225MHz) / 4Kx2K@30Hz (Dot Clock : 300MHz)
Standard Spec	EIA/CEA-861F
Video Signal Type	RGB, YCbCr
Pixel Encoding & Data bit of RGB & YCbCr	4Kx2K@30Hz_RGB444(8bit), YCbCr444(8bit), YCbCr422 (8, 10, 12bit)
Color Space	RGB, BT.601, BT.709, BT2020, xvYCC-601, xvYCC-709
Output Connector	Type A, HDMI 3 Port (ARC 1Port, 4Kx2K@30Hz 3Port)
Note	Audio Return Channel (ARC) 1Port, CEC Support 3D Video Formats (Frame Packing, Side by Side, Top&Bottom, Field Alternative)

SCART Output

Signal Mode	RF Input Mode, CVBS Mode, RGB Mode, Y/C Mode
Connector	SCART 21Pin

Audio (Digital) Output

Sample Rate	32 / 44.1 / 48 / 88.2 / 96 / 176.4 / 192 KHz
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	0mVrms to 900mVrms / 5mVrms, 0 ~ 18dB
Waveform	Sine Wave
Number of Channel	2 Channels
Connector	RCA
Special Control Mode	Fix, Sweep, Swap, Mute

Scan & Function Group

Scan Storage	99 Group (1 Group ; 24 Step)
Function Storage	99 Group (1Group ; 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 / 60% Humidity, Non-condensing
Dimension (WxDxH)	440 x 350 x 145mm, Weight : 6 Kg

Others

Max Image	2048 x 2048 (Max 165MHz), 50pcs
User Interface	* Front Panel (6.4 inch / Graphic LCD) Key Pad * Possible to Timing Parameter Edit * USB, RS-232C