

LVDS Signal Generator for FPDs

LIT-101

For super-high resolutions and a wide range of dot frequencies



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Features

◆ **For super high resolutions**

The LIT-101 meets high resolutions such as Full HD, QUXGA and 4K2K.
(up to 4096 x 4096 dots)

◆ **For a wide range of dot frequencies**

The LIT-101 meets dot frequencies up to 1080MHz. (8 links; 135MHz x 8)

◆ **Control of timing controllers**

The LIT-101 can control timing controllers with I2C or logic signals at the timing of "STEP-IN," "STEP- OUT," or pressing a button on the remote controller.

◆ **Power supplies for backlights and timing controllers**

Optional power supplies, being stacked under the LIT main body (See the photograph.), are available. Illuminating and evaluating FPDs can be completed only with the LIT-101 system.

◆ **Controlling 64 sets of LIT-101**

Only one PC can control 64 sets of LIT-101 using original remote control software. As different panels can be tested in different conditions, efficiency in aging tests or long-term inspections will be dramatically increased.

L IT-101 is a LVDS signal generator for Full HD, QUXGA or 4K2K panels and meets dot clock frequencies up to 8 links – 1080MHz (135MHz x 8). Logic output and I2C control to drive panels can be programmed at any timing. All works necessary to illuminate and evaluate panels can be done as power supplies for timing controllers and backlights can be optionally added.

General Specifications

Rating		
Ambience	Temperature	5 degree C to 40 degree C
	Humidity	30 to 80% (no condensation)
Line voltage		85VAC to 132VAC or 170VAC to 265VAC (single phase)
Line frequency		50Hz/60Hz
Signal Generator		
Specifications	Power consumption	70VA or less (at 24VDC input) (without PS, Octal panel)
	Dimensions	210mm(W) X 297mm(D) X 150mm(H)
	Weight	2.0Kg or less
Output signals	(Standard Specification) Digital 6/8/10 bit 3 channel (R,G,B) X 2 systems TA1+/- to TE1+/-, TCLK1+/-, TA2+/- to TE2+/-, TCLK2+/- Digital 12/14 bit 3channels (R,G,B) X 1system TA1+/- to TG1+/-, TCLK1+/- (Extended Specification when three optional SG boards are added.) Digital 6/8/10 bit 3 channels (R,G,B) X 8 systems TA1+/- to TE1+/-, TCLK1+/-, TA8+/- to TE8+/-, TCLK8+/- Digital 12/14 bit 3channels (R,G,B) X 4 systems TA1+/- to TG1+/-, TCLK1+/- TA4+/- to TG4+/-, TCLK4+/-	
Range of frequencies	Single-Link 25 to 135MHz to 8-Link 200 to 1050MHz (0.1MHz resolutions)	
Accuracy of oscillation frequencies	Programmed value +/-0.005% or less	
Resolutions	4096 x 4096	
Timing signal output	4channels (CLK(=MCK), Hsync, Vsync, DE)	
Electrical Characteristics	Output Voltage	350mVp-p
	Phase gap between channels	5ns or less (under the same loading condition)
	Rise and fall time	10ns or less (at 5pF/100 ohm and 350mVp-p amplitude)
	Overshoot	10% or less
Power supply to drive panels		
Specifications	Power consumption	200VA or less (at 100VAC input)
	Dimensions	210mm(W) × 297mm(D) × 120mm(H)
	Weight	8.0Kg or less
Output range	Ch.1: 0 to 12V 10A Ch.2: 0 to 12V 5A Ch.3: 0 to 5V 1A Ch.4/5 (analog output terminals): 1.5 to 5V 20mA Ch.6/7(PWM output terminals): 1.5 to 5V 100 to 300Hz 0 to100% Duty	
Functions	Voltage control, programming current limit , voltage monitor ,current monitor, detection of overcurrent, detection of overvoltage, On/Off sequence control	
Remarks	The power supply can be independently operated and can be remote-controlled.	