

HDMI 2.1 Source Tester



VA-1849



VA-1849 is a source tester that supports HDMI 2.1 signal FRL (up to 12 Gbps/4 lanes) and TMDS. It supports the measurement and analysis of the source DUT by setting the control and each test item with commands via PC. It enables automated inspection on the production line and in the QC department.

Features

● Sink function

Video/audio timing, InfoFrame measurement, HDCP 1.4/2.3 authentication, and EDID/SCDC communication analysis.

It supports up to 8K/60p YCbCr 4:2:0 and 4K/120p YCbCr 4:4:4 video signals in uncompressed mode.

It supports up to 8K/60p YCbCr 4:4:4 video signals in compression (DSC) mode.

It supports eARC output.

● Testing function

By comparing the internal pattern with the input pattern, it is capable of measuring the protocol details such as bit drop and color defects, as well as automatic inspection for FRL link training (comparison inspection is supported up to 4K/120p).

It is possible to confirm whether the packet data of the input signal matches the expected value.

It is possible to confirm whether the input audio signal is within the allowable value.

● Source function

Compatible with CTA-861-G and VESA Display Monitor Timing (DMT) compliant video signal output.

Each parameter of the InfoFrame can be set.

It supports eARC/ARC input.

● External control

Supports sending and receiving commands such as measurement results and parameter settings via LAN, USB-TypeB and RS-232C.

Original control software can be developed by the combination of commands.

● Save results/logs

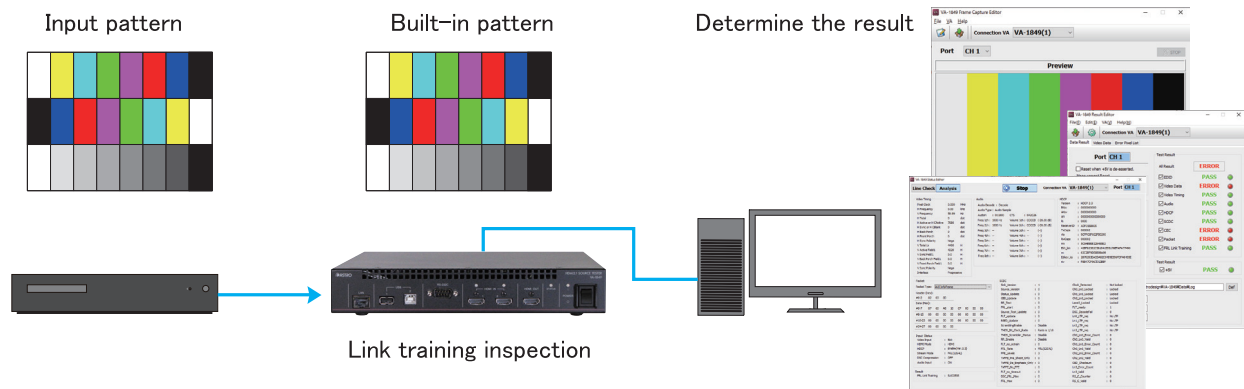
Analysis data and test logs can be saved in a USB flash drive.

<Pass/Fail Judgment of Comparative Test>

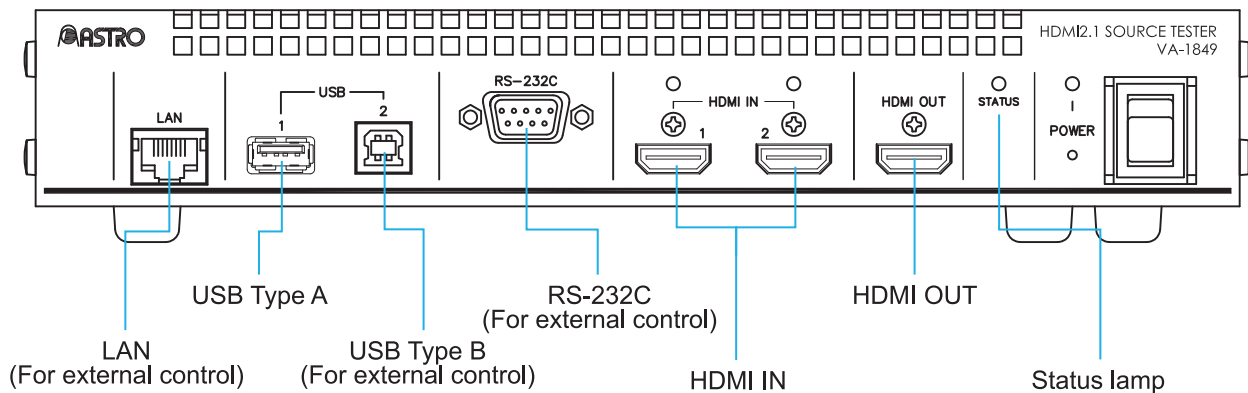
Internal video patterns are created from the color palette, and inspection is performed by comparing them with the input video patterns.

Error pixel values and colors with (X,Y) coordinates are displayed and the difference between A and B is analyzed.

The color palette is 16 colors, and up to 3 lines of color information patterns can be registered for comparison.



Appearance



Specifications

HDMI Input/Output

Video	Dot Clock	TMDS 25MHz to 2376 MHz, FRL 3G3L/6G3L/6G4L/8G4L/10G4L/12G4L
	Color Format	RGB/YCbCr 4:4:4/4:2:2/4:2:0* *YCbCr 4:2:0 can measure timing, but does not support comparative inspection of video data.
	Video Data No. of Bit	8, 10, 12-bit
Audio	Sampling Frequency	32kHz to 192kHz (L-PCM 2 to 8ch)
	Format	IEC 60958, 61937
	Data Resolution	16, 20, 24-bit
EDID	Compatible with Ver.1.4 (DDC2B)	
HDCP	Compatible with Ver.1.4/2.3	
eARC	Input, output (Only ch2)	
ARC	Input	
No. of Ports	2 input 1 output* *Select either 1 input when 2 inputs are performed at the same time. Unable to use input/output feature simultaneously with one unit.	

External Control

USB	Type A	Use for connection with USB flash memory.* *Only use the included USB flash memory with this device.
	Type B	Connect to a computer and control by terminal commands.
LAN	Connect to a computer and control by terminal commands.	
RS-232C	Connect to a computer and control by terminal commands.	

General Specifications

Power Requirements	AC 100-240V
Power Consumption	48W MAX
Operating Temperature Range	0 to 40°C
Operating Humidity Range	20 to 80%RH (No condensation)
Dimensions	280 (W) × 44 (H) × 270 (D) mm (Excluding Protrusions)
Weight	Approx. 2.0 kg