

HDMI 2.1 Source Tester

VA-1849



VA-1849 is a source tester that supports HDMI 2.1 signal FRL (Up to 12Gbps/4Lane) and TMDS. Source DUT can be measured and analyzed by controlling via PC and setting each test item with commands. Automatic inspection can be implemented mainly in the production line and quality control department.

Features

Sink device function

Supports video/audio timing and InfoFrame measurement, HDCP1.4/2.3 authentication process, EDID, SCDC communication analysis.

Supports up to 8K/60p YC_BC_R 4:2:0 and 4K/120p YC_BC_R 4:4:4 video signals without compression. With DSC ON, supports video signals up to 8K/60p YC_BC_R 4:4:4. Supports eARC output.

Inspection function

By comparing the built-in patterns and the input pattern, VA-1849 supports measurement of protocol parts such as bit loss and color defects, and automatic inspection of FRL link training. (Comparative inspection supports up to 4K60p)

It is possible to check whether the packet data of the input signal matches the expected value set in advance in the unit.

It is possible to check whether the input audio signal is within the allowable value set in advance in the unit.

Source device function

Supports video signal output compliant with CTA-861-G, VESA Display Monitor Timing (DMT). InfoFrame can be executed by setting each parameter. Supports eARC/ARC input.

External control

By connecting this unit to a PC via LAN, USB-Type B, or RS-232C, you can send and receive commands such as measurement results and parameter settings.

Original control software can be developed by combining commands.

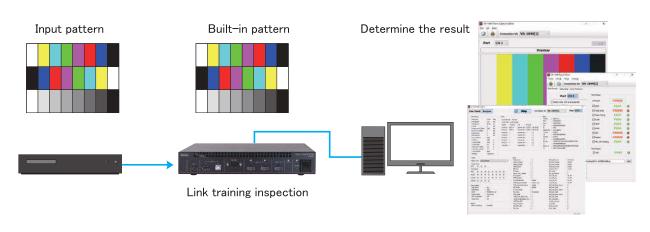
Save results/logs

It is possible to save analysis data and test logs in USB flash memory.

<About pass/fail judgment of comparative inspection>

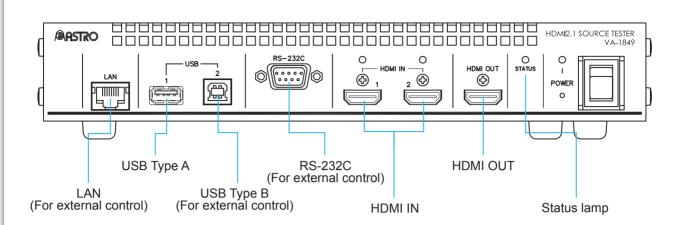
It can be inspected by creating an internal video pattern from the color palette and comparing it with the input video pattern, and by displaying the error pixel value and color together with the (X, Y) coordinates, the difference between A and B can be analyzed.

The color palette has 16 colors, and up to 3 lines of color information patterns to be compared can be registered.





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*
		*YCвCR 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 includued 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