

HDMI Lip-Sync Measurement system

We offer a measurement system of Lip-Sync function. This function can be used for automatic correcting the time gap between image signal and audio signal of HDMI1.3 standard. This measurement system consists of a combination of our video signal generator, an illuminate meter and a digital oscilloscope. You can check a SINK device like a TV set with this system. We also offer of a combination of our HDMI protocol analyzer and a digital oscilloscope. You can check a SOURCE device like a Set Top Box or a DVD recorder with this system. In addition, you can check a REPEATER device like a AV amplifier with a system which consists of a combination of both our HDMI protocol analyzer and our video signal generator.

1. SINK device measurement system

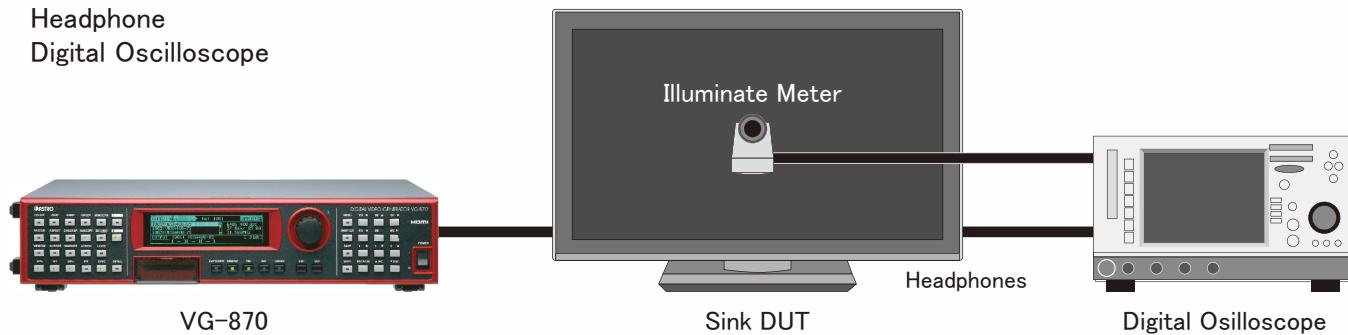
System configuration

HDMI video signal generator(VG-870/VG-871 VG-849C(-A)/VG-859C)

Illuminate meter

Headphone

Digital Oscilloscope



Video and audio data is captured from illuminate meter and headphones output of SINK device. The data is measured by digital oscilloscope.

You can input number of the gap between image signal and audio signal ($0 \pm 500\text{msec}$) from our video signal generator. It allows you to confirm if the SINK device operates within proper phase gap setting ($\pm 500\text{msec}$). This gap setting is defined by HDMI 1.3 standard.

2. SOURCE device measurement system

System configuration

HDMI protocol analyzer (VA-1809A)

Digital Oscilloscope



With using our HDMI protocol analyzer (VA-1809A), you can measure and also can display the amount of delay of image output signal and audio output signal from a SOURCE device. By connecting a digital oscilloscope, you can also measure the data by using video and audio trigger output from I²S output (TTL 3.3V) of VA-1809A.

HDMI Lip-Sync Measurement system

3. REPEATER device measurement system

System configuration

HDMI video signal generator(VG-870/VG-871 VG-849C(-A)/VG-859C)

HDMI protocol analyzer (VA-1809A)



You can validate a REPEATER device performance with using above measurement system "1" and system "2".
HDMI Protocol Analyzer (VA-1809A) can edit EDID data. Its function is useful for evaluating the operation of SOURCE and REPEATER device.

VA-1809A Lip-Sync Analysis menu



※) Specifications and external view are subjected to change without notice

ASTRODESIGN, Inc.

Contact to:
Business Unit 2

1-5-2 Minami-yukigaya, Ota-ku, Tokyo 145-0066 Japan

TEL.+81-(0)3-5734-6302 FAX.+81-(0)3-5734-6104

LIPSync-AS3304E-100-1