Gefentv®

Advanced Signal Generator for HDMI with 3D Testing Feature

Small, Powerful Signal Generator for HDMI with 3DTV and KSV Testing

Gefen's next-generation Mini Pattern Signal Generator for HDMI and 3DTV is designed for easy mobility when installing, designing, or troubleshooting audio/video systems in the field. Real-time testing capability for multiple displays and projectors, support for 3DTV, advanced features, and the small light-weight package, make this Signal Generator a valuable tool for integrators.

The GefenTV HD Mini Pattern Signal Generator supplies 25 timings, 6 patterns, and an additional 3D testing pattern, for calibrating and testing video performance. The 3DTV test pattern supports side-by-side, top-and-bottom, and frame-packing 3D formats up to 1080p@24Hz. It supports HD resolutions up to 1080p Full HD and VESA resolutions up to 1920 x 1200. The built-in audio signal generator provides up to seven channels of LPCM audio.

The Audio Return Channel (ARC) can be tested via the TOSLINK™ digital audio output. Other features include: 12-bit Deep Color, HDCP and EDID analysis, making this device very useful for installers and integrators. This new Signal Generator can also analyze the audio/video signal on the input and display the exact video timing and audio specifications on-screen.

Advanced features include a KSV count for the connected source - the HD Mini Pattern Signal Generator for HDMI and 3DTV will identify the maximum number of KSV keys the source can handle. This is extremely valuable when distributing an HDCP-compliant source to multiple displays.

This model also allows you to store a display's EDID information and take it to the field. If you experience issues with signal loss when testing displays in the field, you can use either display's EDID or the previously installed EDID to overcome the issue.

The easy-to-read OLED display, along with an external On-Screen Display (OSD) menu, accessed through capacitive-touch navigation buttons on top of the unit, guides users through all settings for easy operation. Its ease of use enables a professional on-site evaluation and calibration of HDTV systems, immediately locating where problems lie so they may be quickly solved.

How It Works

Connect an HDMI cable from the HD Mini Pattern Signal Generator to the output device (e.g. display). If testing ARC (Audio Return Channel), connect an optical cable from the output of the signal generator to the optical input of an audio amplifier. For pass-through signal analysis, from the source to the output device, connect an HDMI cable from the source to the HDMI input on the Analyzer. Connect the 5V DC power supply to the Analyzer.

GTV-HD-MPSG

Features*

- Supports resolutions up to 1080p Full HD and 1920 x 1200
- 3D pattern support for top-bottom, side-by-side, and frame packing 3D formats
- Provides 25 timings, 6 patterns and 1 pattern for 3D timing
- Up to 12-bit Deep Color support at 1080p Full HD
- Built-in "EDID Detective" stores EDID information for later use
- Supports LPCM 7.1CH 48/96Khz, LPCM 5.1CH 48/96Khz, and LPCM 2CH 48/96/192Khz
- Analyzes input source InfoFrame and output (sink) EDID
- KSV (Key Selection Vector) Counter shows how many displays can be connected to an HDCP source
- OLED display shows Input and Output timing information
- Allows ARC (Audio Return Channel) testing by routing ARC audio to a TOSLINK (Optical) output
- Touch-button control functions
- Internal / External switch changes between HDMI input signal and internal Audio/Video generator
- Firmware upgradeable via 3.5mm RS-232 jack (requires DB-9 to 3.5mm adapter)

Specifications*

- Maximum Pixel Clock: 225 MHz
- HDMI Input: (1) Type-A, 19-pin, female
- HDMI Output: (1) Type-A, 19-pin, female
- Digital Audio Output: (1) TOSLINK
- Service Port: (1) 3.5 mm mini-stereo (for firmware upgrade)
- Display: OLED (Organic Light Emitting Diode)
- Power Supply: 5V DC
- Power Consumption: 3W (max.)
- Operating Temperature: 0° - 40° C
- Dimensions(W x H x D): 4.7" x 1.0" x 2.7" (120mm x 25mm x 70mm)
- Shipping Weight: 1.0 lb. (0.45 kg.)

*Features and specifications subject to change without notice.
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