1T-TG-PCHD, 1T-TG-DVI

RGB/YPbPr Test Pattern Generators

Key Features 1T-TG-PCHD, 1T-TG-DVI

- Ultra Compact, High Performance Units
- Analog or DVI Versions
- PC up to 1280x1024 & HDTV Resolutions
- 25 Test Patterns

1T-TG-PCHD and **1T-TG-DVI** are ultra compact DVI and Analog RGB Test Pattern Generators designed for portable applications. The output resolution and refresh rate can be selected from a wide variety of presets. Model 1T-TG-PCHD provides an Analog output via an HD-15 Connector. Model 1T-TG-DVI provides a DVI-D output via a DVI-I Connector. The 25 test patterns provided were selected as the most useful for video reference and troubleshooting applications.

Both models are 5VDC powered and the Power Adapters are included. Locking DC Connectors are provided for security.

1T-TG-620

HDMI Test Generator

Key Features 1T-TG-620

- HDMI v1.2, HDCP 1.1 & DVI 1.0 Compliant
- 1.65Gbps Single Link HDMI Frequency Bandwidth
- VESA EDID v1.3 & EIA/CEA 861 Version 3
- Supports PC & HD (Up to WUXGA/60 and 1080p)
- Supports Embedded Audio – Internal and External
- Infrared Remote Control

1T-TG-620 HDMI Test Generator provides a means to verify the correct operation of HDMI equipment such as monitors and projectors. Any device using an HDMI type input (plus PC or DVI-D displays with appropriate cable adaptors) can be tested using several different types of signals. Provision has been made to embed either a 1Khz internally generated audio sinewave or an externally generated audio signal into the digital bitstream so that the integrity of the audio portion of the HDMI signal can be verified and, in addition, HDCP (High Definition Content Protection) functionality can also be tested thereby insuring that all video, audio and security components of an HDMI compliant display device are functioning properly.

Video Test Pattern Generators

1T-TG-PCHD, 1T-TG-DVI Specifications

Output Resolutions (Note 1)

VESA	Resolution	Format / Refresh Rates
VGA	640x480	RGBHV 50, 60, 72, 75, 85Hz
SVGA	800x600	RGBHV 50, 60, 72, 75, 85Hz
XGA	1024x768	RGBHV 50, 60, 70, 75, 85Hz
WXGA	1280x768	RGBHV 50, 60Hz
SXGA	1280x1024	RGBHV 50, 60Hz
480p	852x480	RGBHV 50, 60Hz
576p	852x576	RGBHV 50, 60Hz
720p	1280x720	RGBHV 50, 60Hz
1080i	1920x1080 (i)	RGBHV 50, 60Hz (Note 2)

Output Format

1T-TG-PCHD	Analog: RGBHV, YPbPr via HD15
1T-TG-DVI	DVI-I: RGBHV via DVI-I Connect

Test Patterns

Color Bars	Color Bars/Multi-Burst (2 types)
Grayscale-Light>Dark	Multi-Burst (Note 3)
Grayscale-Dark>Light	Checkerboard
Fade - Black to White	White, Yellow or Cyan Field
Cross Hatch - Standard	Green, Magenta or Red Field
Cross Hatch - Small	Blue or Black Field
Alt. 1 Pixel B/W Lines	H or E Pattern
Alt. 2 Pixel B/W Lines	Large Circle
Alt. 3 Pixel B/W Lines	Circles - Repeating
Alt. 4 Pixel B/W Lines	Chinese Characters (3x)

Mechanical

1T-TG-PCHD (H-W-D)	30x133x76mm (1.2"x5.25"x3")
1T-TG-DVI (H-W-D)	30x146x76mm (1.2"x5.75"x3")
Weight (Net)	280 g (0.63 lbs)

Environmental

Operating Temperature	0° to +50° C (+32° to +122° F)
Operating Humidity	10% to 90%, Non-condensing
Storage Temperature	-10° to +60° C (+14° to +140° F)
Storage Humidity	10% to 90%, Non-condensing

Power Requirement

External Power Supply	5VDC@2A - Locking DC

Regulatory Approvals

Amplifier Units	FCC, CE, RoHS
Power Supplies	UL, CUL, CE, PSE, GS, RoHS

Warranty

Limited Warranty	3 Years Parts and Labor

Accessories Included

1x Power Adapter	US, UK or Euro
1x Operations Manual	

Notes

(1) 1T-TG-PCHD also has YPbPr out for HDTV Resolutions.
(2) The 1080i is actually a doubled 540p signal, which is recognized as a 1080i by most HDTV Displays.
(3) Not a true Multi-Burst. Alternating B/W Vertical Lines.

1T-TG-620 Specifications

Audio Input

External Audio	1x S/PDIF Optical Connector

Video Output

HDMI (Note 1)	1x via Type A HDMI Connector

HDMI Transport

Frequency Bandwidth	1.65Gbps (Single Link)
Supported PC Resolution	Up to WUXGA/60
Supported HDTV Formats	480p trough 1080p (Note 2)
Audio (Embedded)	1Khz Sine wave Int. or Ext.
Compliance	HDMI v1.2, HDCP V1.1, DVI 1.0

Special Feature

HDCP Function Check	Via Internal Algorithm

Video Test Patterns

36 Video Patterns	In 8 Groups

Control Methods

Local Control	Front Panel via PB Switches
Remote Control	1x Infrared Remote Control

Warranty

Limited Warranty	3 Years Parts and Labor

Mechanical

Size (H-W-D)	1.2"x4.9"x4.9" (30x125x125mm)
Weight (Net)	0.72lbs (334g)

Environmental

Operating Temperature	0° to +48°C (+32° to +120°F)
Operating Humidity	10% to 90%, Non-condensing
Storage Temperature	-10° to +70°C (+32° to +120°F)
Storage Humidity	10% to 90%, Non-condensing

Power Requirement

External Power Supply	5VDC@2A

Regulatory Approvals

HDMI Test Generator	FCC, CE, RoHS
Power Supply	UL, CUL, CE, PSE, GS, RoHS

Accessories Included

1x AC Power Adapter	US, UK or Euro Type
1x Instruction Manual	
1x IR Remote Control	

Product Number

1T-TG-620	HDMI Test Generator

Notes

(1) PC & DVI Video Operation is possible using optional cable adapters.
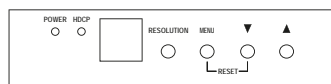(2) The timing of the 1080i output resolution is very critical and may not be compatible with all displays.

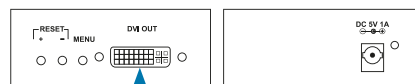Control Interface   Input   Output   Input/Output

1T-TG-PCHD

PC/HDTV OUT   MODE   PATTERN   OUTPUT – +   DC 5V 1A

RGBHV/YPbPr

1T-TG-DVI

RESET   MENU   DVI OUT   DC 5V 1A

DVI-I

1T-TG-620

POWER HDCP   RESOLUTION   MENU ▼ ▲   RESET

HDMI OUTPUT   TOSLINK INPUT   DC 5V
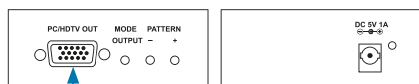
HDMI

Distributor / Vertrieb:

VIDELCO – Professionelle Audio- Video- Medien-Technik!
Tel.: +49 (0)2102 / 86 39-00 • Fax: +49 (0)2102 / 86 39-17 • info@videlco.eu • www.videlco.eu

VIDELCO
Europe Limited