

Now a multi-media format HDMI/DVI digital video/audio signal generator and HDMI analyzer in a portable instrument with a color touchpad screen.



MediaPro Handheld Generator & HDMI Analyzer

MP500 MediaPro Multimedia Generator Features

- HDMI 1.3 video and audio test generator to 165 MHz tests HDMI inputs on HDTVs, projectors, repeaters, A/V receivers, set-top-boxes, etc.
- DVI test generator to 165 MHz - includes all computer and television formats.
- Component YPrPb and RGB multi-format generator tests component inputs.
- Standard and exclusive video test patterns with simple touch pad variations in content, IRE level, or color.
- Moving Zone Plate pattern with horizontal and/or vertical movement to detect and evaluate video processing motion artifacts.
- Bitmap images may be stored to 100 MB of internal memory, providing custom video patterns for special demonstration and testing applications.
- HDMI Output Application Tests troubleshoot interface challenges with EDID, HDCP and CEC tests.
- An HDMI receiver/analyzer input provides video and audio format/timing information and a CEC test. The input includes an active EDID to test an HDMI source.
- S/PDIF coaxial and optical digital audio output for A/V receiver testing.
- User friendly on-board color touch screen interface designed to optimize workflow.
- Portable, with up to 4 hours of battery life, makes it ideal for lab bench, repair center, and field troubleshooting or calibration applications.

MP500 MediaPro Multimedia Generator Specifications

HDMI Output

Pixel rate: 165 MHz
Scan Types: Progressive, interlaced
HDMI Formats: CEA-861D/E SDTV/HDTV RGB
CEA-861D/E SDTV/HDTV YCbCr
Gray Levels: 256
Colorimetry: ITU-R BT.601-5; ITU-R BT.709-5
Sampling Modes: 4:4:4, 4:2:2
HDMI Color Depth: 24/30/36-bit RGB/YCbCr 4:4:4
(No images for 36 bit)
16/20/24-bit YCbCr 4:2:2
DVI Color Depth: 24-bit RGB 4:4:4
DVI support: HDMI to DVI adapter cable
DVI Formats: CEA-861D/E SDTV/HDTV RGB
up to 1080p60
VESA/Mac/Custom RGB
up to 165 MHz
Audio: LPCM (generated), Dolby Digital
(clips), DTS (clips)
Output Tests: HDCP, EDID, CEC

Analog Output

Connector type: VGA (HD15F)
Pixel rate: 80MHz (pixel replication for
higher resolutions)
Scan Types: Progressive, interlace, HDTV
YPbPr/RGB: CEA-861D/E SDTV/HDTV up to
1080p60
Signal Types: VESA/MAC/Custom
VESA/Mac/Custom: up to 165MHz
Sync types: Separate H/V, composite H/V
Gray Levels: 256
Colorimetry: ITU-R BT.601-5; ITU-R BT.709-5
Color Encoding: RGB, YPbPr
Color Depth: 24-bit RGB/YPbPr

Cable Test (optional)

Tests: HPD, CEC, DDC, TMDS Data

HDMI Input

Connector Type: HDMI Type A
HDMI Version: Supports HDMI 1.3
TMDS Protocols: Single-link HDMI, HDMI/DVI
Pixel rate: 150 MHz Timings: up to 1080p60
Color Encoding: RGB, YCbCr
Input Tests: Format Analyzer, Audio Analyzer, CEC Test

Audio Test Patterns (Signals)

Generated: LPCM
Waveforms: Sinewave with 20 Hz - 20 kHz frequency
Output Levels: -60 dBFs to 0 dBFs (Encoded Clip Playback)
-20 dBFS, -30 dBFS

Dolby Digital & DTS Waveforms:

500 Hz - 2 kHz Pink L, C, R, LS, RS, 40 Hz - 80 Hz Pink LFE
20 Hz - 20 kHz Pink L, C, R, LS, RS, LFE, Pulse, Cycle
Polarity L, C, R, LS, RS
Impulse L, C, R, LS, RS, All
Auto Time Delay Test Impulse Cycle
63.5 Hz, 125 Hz, 1 kHz, 4 kHz Sine Wave All
63.5 Hz, 12 5Hz, 1 kHz, 4 kHz Sine Cycle

Video Patterns

Pluge, Checkerboard (configurable), Decode Check, Decode Adjust,
ColorBars, Converge, Focus, Geometry/Resolution (Grid, Linearity,
Overscan), LG Color[bars], Multiburst, Needles, Pseudo Random
Noise (PRN), Ramp/Stair (full, split, ramp; vertical or horizontal; left-
right or right-left), Sharpness, UL 3 Bar, Split Gray, HiLo Trk, Window
Raster (variable level), Zone Plate (Variable horizontal and vertical
speed), User-loaded bmps thru USB port (fixed 24-bit resolution,
centers on display, 1920x1080 max)

Power

Battery: 6 internal AA NiMh rechargeable
Use time: 4 hours with NiMh
AC: 12V Regulated Charger/Adapter
Recharge: overnight

Weight & Size: 3.25 lbs, 6 x 9.75 x 2.7 in. (HWD)

MP500 Connections

Analog Output - 15pin VGA HD D-Sub
Connector: Provides output for the
analog video signals.

HDMI Output - Type A HDMI Connector:
Provides digital HDMI video and audio
output test signals and performs HDMI
Output Applications tests. Provides DVI
video output test signals and interface
via an HDMI to DVI adapter cable.

HDMI Input -Type A HDMI Connector: Provides
digital HDMI Input Application tests. Provides a
known EDID for source for interface testing.

S/PDIF Output – RCA phono jack: Provides digital
audio including 2 channel linear PCM, Dolby, and
DTS multi-channel formats with a variety of select-
able test signals.



S/PDIF Output - Optical (Toslink): Provides digital audio including 2
channel linear PCM, Dolby, and DTS multi-channel formats with a
variety of selectable test signals.

USB Connector: Provides a USB (Universal Serial Bus) connection.

Power Adapter Input/12VDC receptacle: Connects to the MP500's AC
Power Adapter to recharge the internal battery.

Power Switch: Turns power to the instrument on and off.