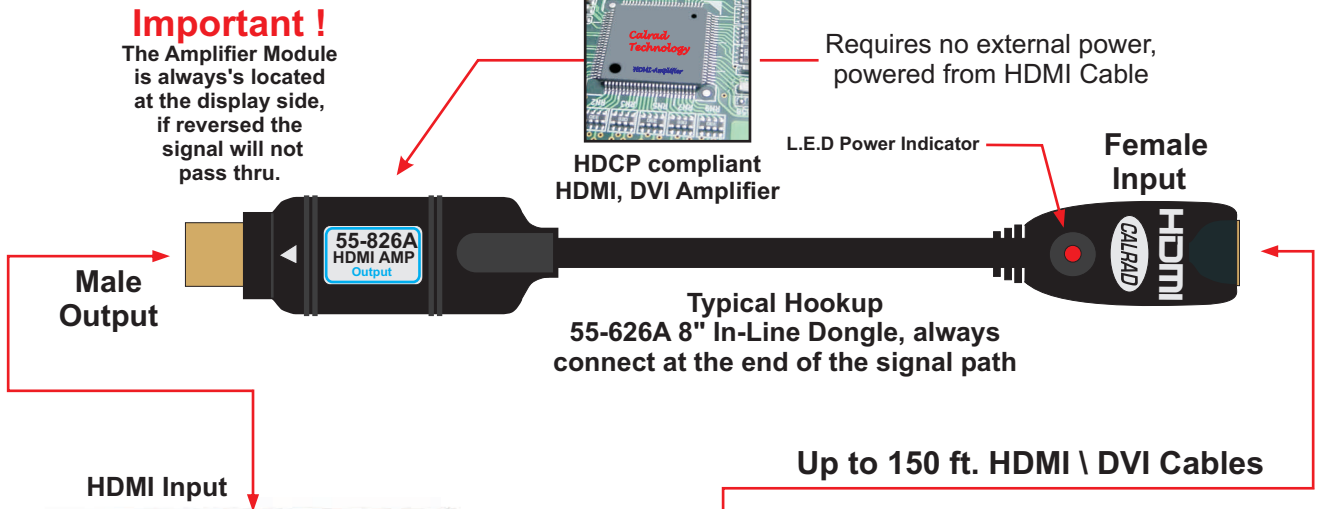




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Visit us on the web at www.calrad.com

55-626A Inline HDMI \ DVI Dongle Amplifier System 1.3 Compliant



Plasma, LCD, DLP Display's



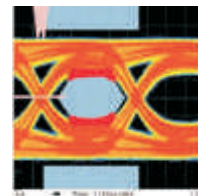
Main features

The first and only digital interface Amplifier for Consumer Electronics that can carry high-definition video, compressed or uncompressed multi-channel audio, and intelligent format CEC command data in one in-line adapter assembly. designed to be placed near the end of an HDMI cable run. The unit cleans out any noise or digital artifacts from the data, and retransmits the picture to the source display. The unit is entirely transparent to the source and the device, and is fully HDCP compliant.
No power supply needed. Power is provided from HDMI compatible devices
Provides HDTV signals beyond the limited DDWG Digital Display Working Group, HDMI specification of 15-feet.

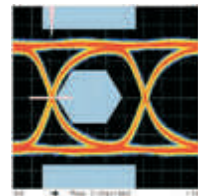
Supports HDTV Resolutions 480P, 720p, 1080i, 1080p

Specifications

Calrad's 55-626A can extend signals up to over 150 ft. of the TMDS and DDC channels of a HDMI link.
HDMI 1.3 compliant input and output signaling.
One device supports a complete signal link HDMI interface.
Operational at TMDS rates from 252Mb/s to 10.2 Gb/s.
Supports display resolutions up to HDTV (1920 x 1080) at 60Hz in up to 48-bits true color pixel format.
8" Inline HDMI Female to Male adapter, gold plated connector type 19 pin
Input DDC Signal: 5 Volts p-p (TTL)
Input Video Signal: 1.2 Volts p-p
Automatic identification of link inactivity with carrier detect output.
Operating Temperature : 0 ~ 50 °C.
Humidity : 5% ~ 85% RH
Warranty : 2 years



Digital Eye pattern
Before the 55-626A



Digital Eye pattern
After the 55-626A

Two main causes of HDMI transmission degradation over cable are attenuation and propagation speed variations of the cable. Cable will attenuate the HD signal levels which we can observe by the reduced height of the EYE. A second effect is timing jitter. Timing jitter is due to propagation speed differences of each frequency components of the HDMI signal. The speed of an electrical signal thru a medium is a function of the dielectric constant of the medium with the dielectric constant being a function of frequency of the signal. For example, the speed of light is 3x10⁸m/s in a vacuum (dielectric constant =1), but will travel slower in a fiber optic cable(dielectric constant >1)with each frequency component of the signal traveling at slightly different speeds since the dielectric constant itself is a function of frequency..The byproduct of timing jitter and attenuation leads to Inter-Symbol Interference or ISI. ISI describes the "spreading " of adjacent bits to the next data bit. Both attenuation and timing jitter will cause bit errors in a HD digital signal.