

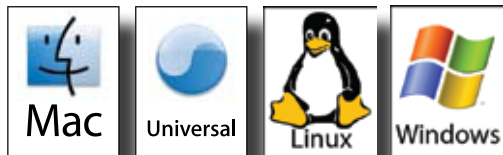
# Projector Connector HD/IP™ Installation

## Visual Broadcast System

The Projector Connector™ HD/IP™ allows you to simultaneously send out an HDMI® 1.3 Signal to one or more HDMI video projectors or LCD Panels and return an IR Control Signal\*\* to the source using CAT5/6/7 cable over a standard Ethernet infrastructure. Can be used to distribute HD digital content from multiple sources to up to 200 remote displays on a LAN by cascading Managed Ethernet switches up to 3 levels, allowing the farthest display to be located up to 1,000' away from the 1080p source devices while sustaining picture & sound quality. Each device is installed using 1 piece of twisted pair cable. AV signals are transmitted digitally over the CAT5/6/7 cable without any signal loss. Internal JPEG video compression adapts to available network bandwidth if needed. The integrated Scaler function allows different input and output resolutions up to 2048x2048 (different displays can be at different resolutions).

Contact us:

Just Add Power  
PO Box 1064  
Indian Rocks Beach, FL 33785-1064  
800-615-0206  
Fax: 727-517-4054  
www.justaddpower.com  
sales@justaddpower.com



**Just Add Power**

©Copyright 2010, Just Add Power Cardware Co., Inc. All Rights Reserved. All specifications subject to change without notice.

HDMI, the HDMI Logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

## Transmitter



**Projector Connector™ HD/IP™ Transmitter (VBS-HDMI-308A)**  
1 UTP/STP 100Mbps Ethernet Port  
Embedded HTTP Server  
Protocol: IP, UDP, TCP, ICMP, and IGMP  
1 HDMI™ In (19 pin Type A female)  
1 3.5mm IR Receiver Port (limited support)  
Size: 5" W x 4.5" D x 1" H; 1.1 pounds  
100-240V, 50/60 Hz, 5v DC Adapter - 1 Amp  
HDCP Compliant  
Plug-and-Play installation  
Supports DVI with HDMI-to-DVI adapter  
Video Bandwidth: 2.25Gbps (HDMI 1.3)  
Maximum LAN Bandwidth: 50 ~ 60 Mbps  
Input TMDS Signal: 1.2 volts (peak-to-peak)  
Input DDC Signal: 5 volts (peak-to-peak)  
Resolutions - practically any input from 16 x 16 to 2048 x 2048 pixels including the following:

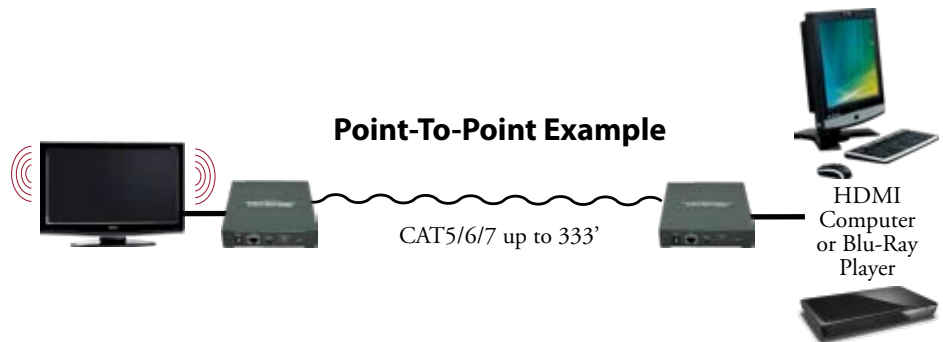
640x480 @ 85fps	800x600 @ 85fps
1024x768 @ 75fps	1280x1024 @ 30fps
1600x1200 @ 30fps	720x480 @ 60fps
720x576 @ 50fps	1280x720 @ 30fps
1920x1080 @ 24fps	1920x1080 @ 60fps

## Receiver



**Projector Connector™ HD/IP™ Receiver (VBS-HDMI-108A)**  
1 UTP/STP 100Mbps Ethernet Port  
1 HDMI™ Out (19 pin Type A female)  
1 3.5mm IR Transmitter Port (limited support)  
Size: 5" W x 4.5" D x 1" H; 1.1 pounds  
100-240V, 50/60 Hz, 5v DC Adapter - 1 Amp  
HDCP Compliant  
Plug-and-Play installation  
Supports DVI with HDMI-to-DVI adapter  
Scaler automatically adjusts for each display

## Point-To-Point Example



## Installation

**Transmitter** (One per standard LAN, multiple transmitter support requires a Managed Ethernet Switch with VLAN/IGMP protocol)

- **HDMI In:** Connect to an HDMI source device with an HDMI M-M cable. Use an HDMI>DVI adapter if the source is DVI.
- **RJ45:** Connect directly to a Receiver or to 100BT Ethernet LAN Switch using UTP CAT5/6/7 cable (EIA/TIA 568B).
- **Extend IR:** Connect the optional IR Blaster (not included) and place the IR sending eye in front of device to be controlled remotely. \*\*
- **DC5V:** Connect to the supplied AC Adapter and plug in to a compatible electrical outlet.

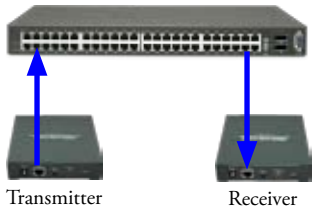
**Receiver** (Up to 200 per LAN)

- **HDMI Out:** Connect to an HDMI display device with an HDMI M-M cable. Use an HDMI>DVI adapter if the display is DVI.
- **RJ45:** Connect to the Transmitter or to 100BT Ethernet LAN Switch using UTP CAT5/6/7 cable (EIA/TIA 568B).
- **Extend IR:** Connect the optional IR Receiver and place the IR Receiver where it can be aimed at with the remote control. A built in IR eye is in front of case. \*\*
- **DC5V:** Connect to the supplied AC Adapter and plug in to a compatible electrical outlet.

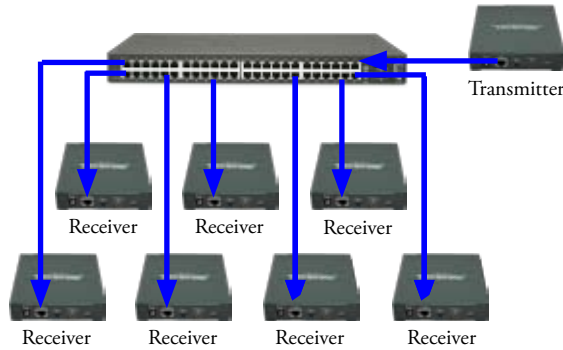
\*\* Return IR Control is limited to the first attached Receiver and is not suitable for use in a Many-To-Many installation.

# Projector Connector HD over IP™ Example Layouts

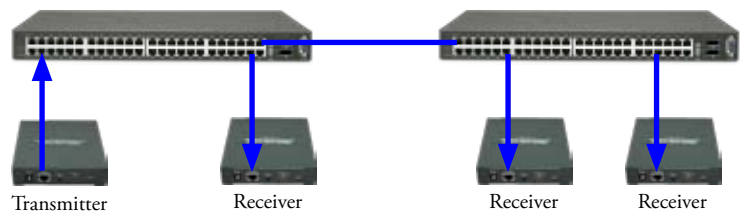
**Example 1** - Typical LAN with 1 switch - 1 Layer, 1 Transmitter and 1 Receiver



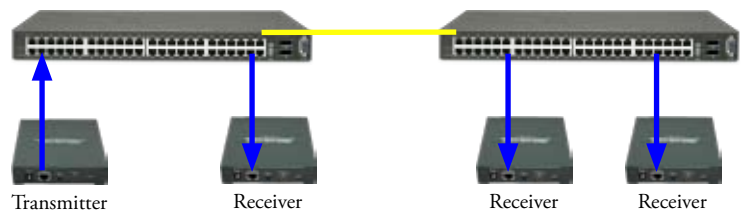
**Example 2** - Typical LAN with 1 switch - 1 Layer, 1 Transmitter and 7 Receivers



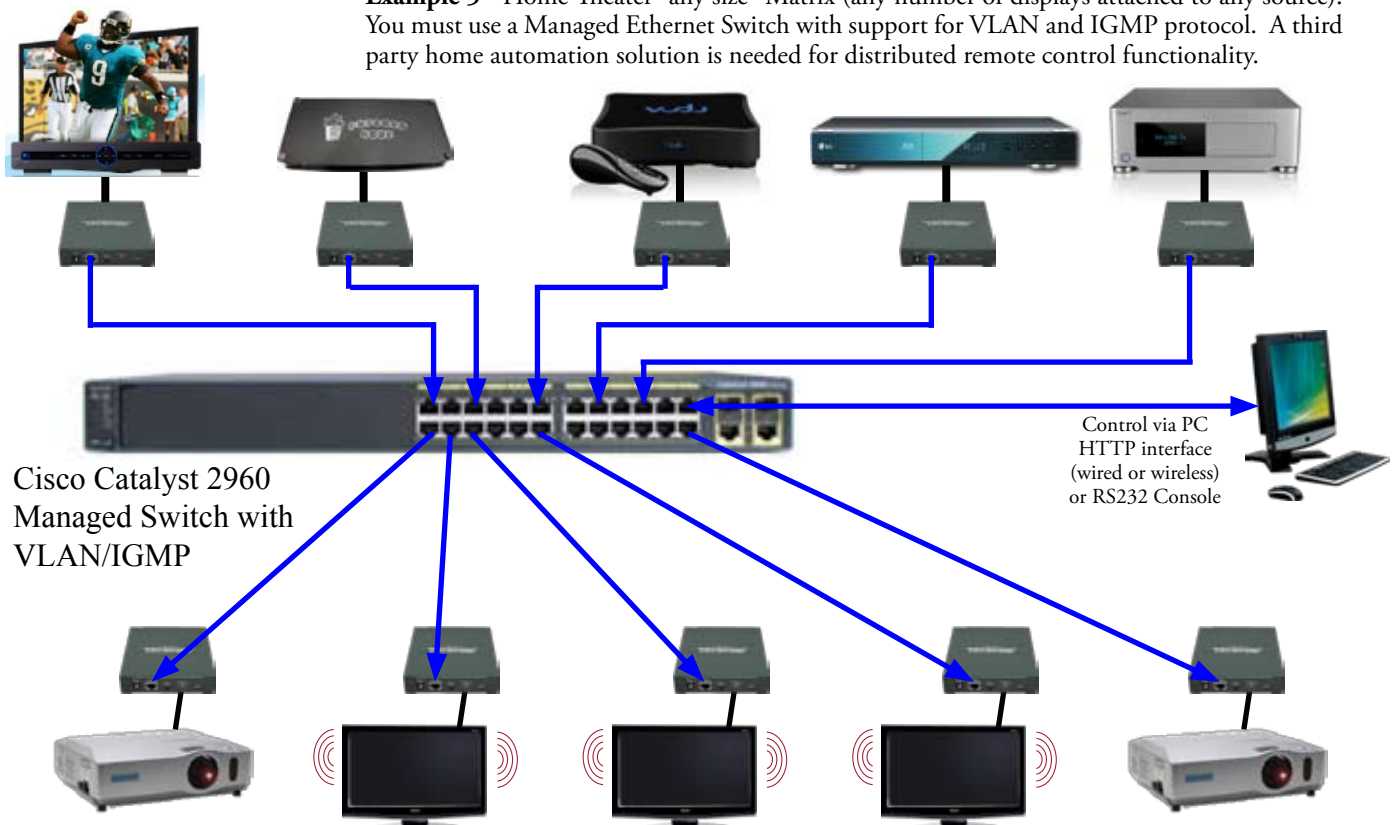
**Example 3** - Typical LAN with 2 switches using CAT5/6/7 for switch connection - 2 Layers, 1 Transmitter and 3 Receivers



**Example 4** - Typical LAN with 2 switches using Fiber Optic for switch connection - 2 Layers, 1 Transmitter and 3 Receivers



**Example 5** - Home Theater “any size” Matrix (any number of displays attached to any source). You must use a Managed Ethernet Switch with support for VLAN and IGMP protocol. A third party home automation solution is needed for distributed remote control functionality.



Cisco Catalyst 2960  
Managed Switch with  
VLAN/IGMP

Control via PC  
HTTP interface  
(wired or wireless)  
or RS232 Console