

# HDMI Over Gigabit IP Extender with Power over Ethernet (POE): Extend up to 333 Feet XTENDEX®

**Extend an HDMI display monitor up to 333 feet away from the source using gigabit Ethernet. Use with cascaded network switches to extend up to 1,000 feet.**

- Supports HDTV resolutions to 1080p.
- Ideal solution for digital signage applications.
- Power over Ethernet (PoE) - power supply not required at the local or remote unit.
- Broadcast real-time HDMI video and audio signals to multiple display locations with a managed or unmanaged (also known as non-managed) network switch.
- Transmits an HDMI signal over one CAT5e/6/7 cable.
- Supports video wall installations from 1x2 to 16x16 screens.
- Plug-and-Play installation allows receivers to find the transmitter automatically on the same network. (Network configuration may be required for Managed network switch.)
- Easily expandable. Add remote units as you add monitors.
- Built-in scaler - watch compatible sources at 1080p.
- Supports 2-way RS232 commands (control software on a PC, or other automated control system hardware such as Control4 or Crestron) to control any devices attached to the matrix using RS232.
- Integrated mounting brackets for easy surface/wall mounting.
- Inexpensive CAT5e/6/7 cable replaces bulky video cables.
- Support for multiple transmitters requires a Managed network switch with VLAN/IGMP support. Standard LAN switches can only support one transmitter.
  - Each VLAN acts as a separate HDMI Over IP Channel on the network.
  - One transmitter can connect up to 200 receivers using cascaded managed network switches.
- Cascade managed network switches up to 3 levels, allowing the farthest display to be located up to 1,000 feet away from the source device. Each receiver can be located up to 333 feet from the managed switch.
- For a point-to-many connection, a standalone network with an unmanaged network switch, hub, or router can be used instead of a managed network switch.
  - It is not recommended to use any other network devices on this standalone network as it may cause a degradation in performance.
- Use a PC to access the built-in HTTP Interface of the managed network switch to control what signal is being watched at each location.
- Use a Telnet client to access any receiver on the VLAN or network.
- Customizable EDID table on local unit.
- HDCP compliant.
- Local and remote units must be in the same LAN. The units do not support WAN connections.



**ST-IPHD-R-2GOPOE (Front & Back)**

- **Visually Lossless 1080p**
- **Use with cascaded network switches to extend to 1,000 feet**
- **Supports 2-way RS232 Commands**
- **No Duplicate IP Addresses on 1000BASE-T Network**
- **LAN Bandwidth: 180 to 500 Mbps**
- **Supports video wall installations from 1x2 to 16x16 screens.**

The XTENDEX® HDMI Over Gigabit IP Extender multicasts digital video and audio signals to one or more receivers up to 333 feet away over a 1000BASE-T Gigabit Network connected with CAT5e/6/7 cable.

Each HDMI Over Gigabit IP Extender consists of a local unit that connects to an HDMI source, and a remote unit that connects to an HDMI display. The local and remote units can be connected together for a Point-to-Point connection via CATx cable or a Point-to-Many connection via a network switch. Support for multiple transmitters requires a managed network switch.

## Specifications

- LAN Bandwidth: 180 to 500 Mbps
- Protocol: IP, UDP, TCP, ICMP, and IGMP
- Supports video wall installations from 1x2 to 16x16 screens. (See Control Methods for details.)

### Local Unit

- One female HDMI-A port for source connection.
- One female 1000Mbps RJ45 port for sending high definition video/audio signals and DDC signal.
- One female 3.5mm jack for RS232.
- Class 3 PoE compatible (10 watts maximum).

### Remote Unit

- One female HDMI-A port for HDTV or computer display.
- One female 1000Mbps RJ45 port for receiving high definition video/audio signals and DDC signal.
- Signal type: HDMI, HDCP compliant.
- Supports HDTV resolutions to 1080p and computer resolutions to 1920x1200.
- Supports multichannel compressed audio (Dolby Digital, DTS, THX) through HDMI compatible TVs or audio receivers.
- One female 3.5mm jack for RS232.
- Class 3 PoE compatible (10 watts maximum).

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## Specifications (continued)

### Power

- Power over Ethernet: With a switch that supports Power over Ethernet, a power supply is not required at the local or remote unit.
- Local and remote unit: 100 to 240 VAC at 50 or 60 Hz via AC adapter (not included).
  - Country-specific AC adapter sold separately (PWR-SPLY-IPHD2GO).

### Cables

- Use HD-xx-MM cable to connect an HDMI source or display (not included).
- Use DVI-HD-xx-MM cable to connect a DVI source or display (not included).
- Use CAT5e/6/7 UTP straight through cable for TIA/EIA-568B wiring terminated with standard RJ45 connectors (not included).

### Max Distance

- 330 feet (100 meters) over CAT5e/6/7 cable.

### Dimensions

- WxDxH (in): 4.76x4.92x1.18 (121x125x30 mm).

### Regulatory Approvals

- CE, RoHS

### Warranty

- Two years

## Control Methods

### Video Wall App

- Firmware provides video wall applications in sizes ranging from 1x2 to 16x16.
  - Any combination is possible within those limitations (e.g. 2x4, 1x8, 5x5, 6x2).
- The video wall set-up software is built into the units and can be programmed through any web browser by entering the IP address of the transmitter.
- With IP-based control systems, the screens can change modes dynamically from video wall modes to standard modes.
- Works best with progressive video signals such as 480p, 720p and 1080p.
- Dual mode capability enables higher display quality.
  - Use one transmitter for each row of the video wall to boost picture quality.
- Ideal digital signage solution for sports bars, emergency response centers, etc.

### Managed Ethernet Switch

- Compatible Managed Ethernet Switches (requires Gigabit for best results)
  - Cisco SG300 Gigabit Series (no stacking)
  - Cisco Catalyst 2960 Gigabit
  - Dell PowerConnect 5400 Series (5424, 5448)
  - Dell PowerConnect 5500 Series (5524, 5524P, 5548, 5548P)
  - Dell PowerConnect 6200 Series (6224, 6224P, 6248, 6248P)
  - Netgear 7000 Series V2 (GSM7224, GSM7228PS, GSM7248, GSM7252PS)
  - Pakedge SW24-GBM, S24P

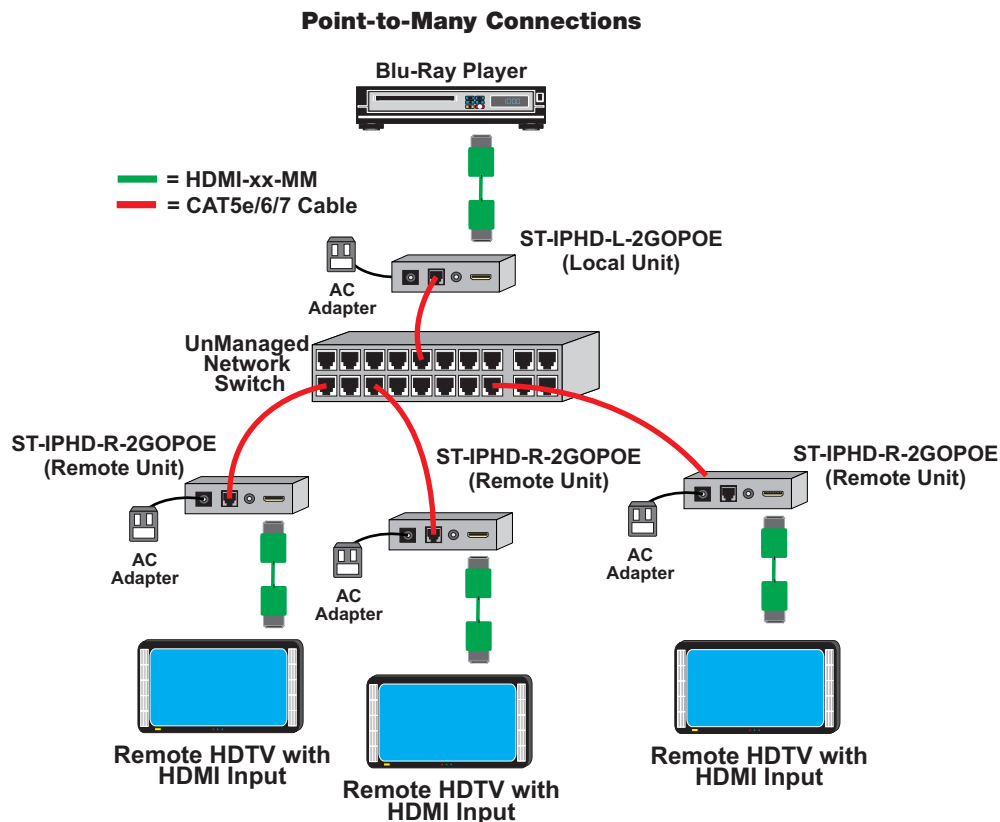
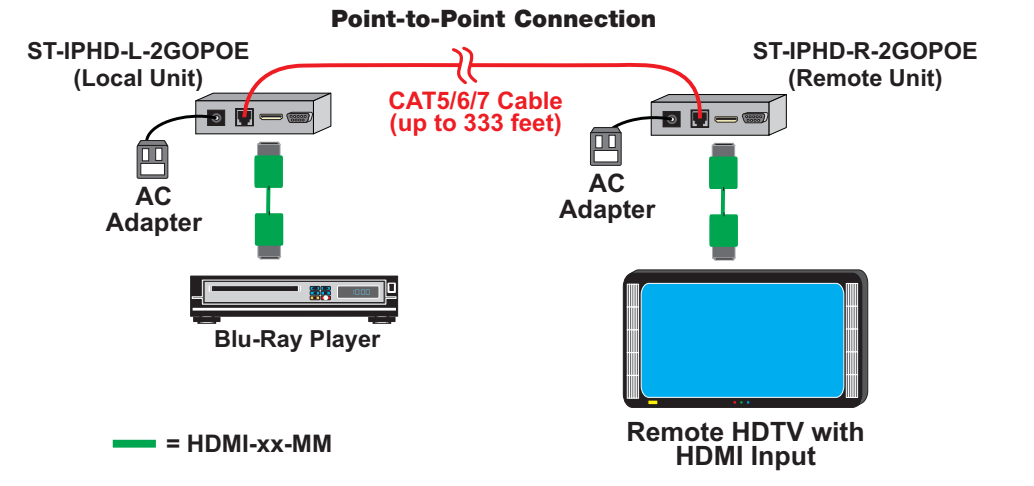
### HDMI Over Gigabit IP Extender with POE via CAT5e/6/7

NTI Part #	Description
ST-IPHD-L-2GOPOE	Local Unit with Power over Ethernet
ST-IPHD-R-2GOPOE	Remote Unit with Power over Ethernet

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## Configuration and Cable Illustrations



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