

# Low-Cost HDMI Over Gigabit IP Network Range Extender (Next-Generation Model)

XTENDEX®

**Extend an HDMI display up to 394 feet away from the source using gigabit Ethernet. Use with cascaded network switches to extend the length long distances.**

- Supports HDTV resolutions to 1080p.
  - Extend up to 394 feet (120 meters) with CAT6/6a/7 cable.
  - Extend up to 328 feet (100 meters) with CAT5e cable.
- Cascade network switches to extend the length long distances.
  - The max cable lengths between the first switch/transmitter and between the last switch/receiver are 394 feet (120 meters) for CAT6/6a/7 or 328 feet (100 meters) for CAT5e cables.
  - The max cable lengths between switches is switch dependent, but 328 feet (100 meters) is typical.
  - An unlimited number of switches can be cascaded.
- Ideal solution for digital signage applications.
- 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 CATx cable.
- Plug-and-Play installation allows receivers to find the transmitters automatically on the same subnet. (Network configuration may be required for managed network switch.)
- Web interface for firmware updates.
- Easily expandable. Add remote units as you add monitors.
- Inexpensive CATx cable replaces bulky video cables.
- Supports 100/1000 Base-T Ethernet connection.
- Built in default EDID table.
- HDMI 1.3 and HDCP 1.4 compliant.
- Support for multiple transmitters requires a managed network switch with VLAN support. Standard LAN switches can only support one transmitter.
  - The managed switch must support port-based IEEE 802.1Q VLAN.
  - Each VLAN acts as a separate HDMI Over IP Channel on the network.
    - ◆ Each VLAN channel supports one transmitter.
  - Number of local and remote units that can be used is dependent on the backplane bandwidth of the 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.
  - Up to 253 receivers supported.
  - It is not recommended to use any other network devices on this standalone network as it may cause a degradation in performance.
- Uses H.264 technology to process image compression.
- Local and remote units must be in the same LAN. The units do not support WAN connections.



**ST-IPHD-LC-V4 Receiver  
(Front & Back)**

The XTENDEX® Low-Cost HDMI Over Gigabit IP Extender multicasts digital video and audio signals to one or more receivers up to 394 feet away over a 100/1000 Base-T Gigabit Network connected with CAT6/6a/7 cable.

Each Low-Cost 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 or a Point-to-Many connection via a network switch. Support for multiple transmitters requires a managed network switch.

- **Extend 1080p video up to 394 ft via One CATx Cable**
- **Use with cascaded network switches to extend the length**
- **Supports Point-to-Point, Point-to-Many, & Many-to-Many connections**

**NOTE:** ST-IPHD-LC-V4 models are NOT compatible with ST-IPHD-LC(-CLR) models due to different chipsets being used.

# Low-Cost HDMI Over Gigabit IP Network Range Extender (Next-Generation Model) XTINDEX®

Extend an HDMI display up to 394 feet away from the source using gigabit Ethernet. Use with cascaded network switches to extend the length long distances.

## Specifications

### Local Unit

- One female HDMI-A port for source connection.
- One female 1000Mbps RJ45 port for sending high definition video/audio signals.
- Supported input resolutions: 480i@60Hz, 480p@60Hz, 576i@50Hz, 576p@50Hz, 720p@50/60Hz, 1080i@50/60Hz, 1080p@50/60Hz
- Codec: H.264
- Encoding delay: <100 ms latency

### Remote Unit

- One female HDMI-A port for HDTV or computer display.
- One female 1000Mbps RJ45 port for receiving high definition video/audio signals.
- Supported output resolutions: 480p@60Hz, 576p@50Hz, 720p@50/60Hz, 1080p@50/60Hz
- Supports embedded digital audio through HDMI compatible TVs or audio receivers.

### Power

- Local and remote unit:
  - Input: 100 to 240 VAC at 50 or 60 Hz via AC adapter.
  - Output: 5VDC, 1A
  - Power Cord Plug
    - ST-IPHD-LC-V4: US NEMA 1-15P
    - ST-IPHD-LC-V4EU: Europlug CEE 7/16
    - ST-IPHD-LC-V4UK: UK BS1363
    - ST-IPHD-LC-V4AU: AS/NZS 3112
    - ST-IPHD-LC-V4UNV: US NEMA 1-15P with country-specific universal power plug adapter
- Power consumption:
  - Local: 2W
  - Remote: 1.85W

### Dimensions

- WxDxH: 2.28x4.33x1.02 in (58x110x26 mm)

### Max Distance

- 394 feet (120 meters) over CAT6/6a/7 cable.
- 328 feet (100 meters) over CAT5e cable.

### Cables

- Use HD-xx-MM cable to connect an HDMI source or display up to 50 feet (not included).
- Use HD-ACT-xx-MM 4K HDMI Active Cables to connect an HDMI source or display up to 100 feet.
- Use DP-HD-xx-MM cables to connect a DisplayPort source up to 15 feet away from the transmitter.
- Use CATx solid or stranded straight through cable for TIA/EIA-568B wiring terminated with standard RJ45 connectors (not included).

### Environment

- Operating temperature: 32 to 140°F (0 to 60°C).
- Storage temperature: -4 to 158°F (-20 to 70°C).
- Operating and storage relative humidity: 0 to 95% non-condensing RH.

### Regulatory Approvals

- CE, FCC, RoHS

### Warranty

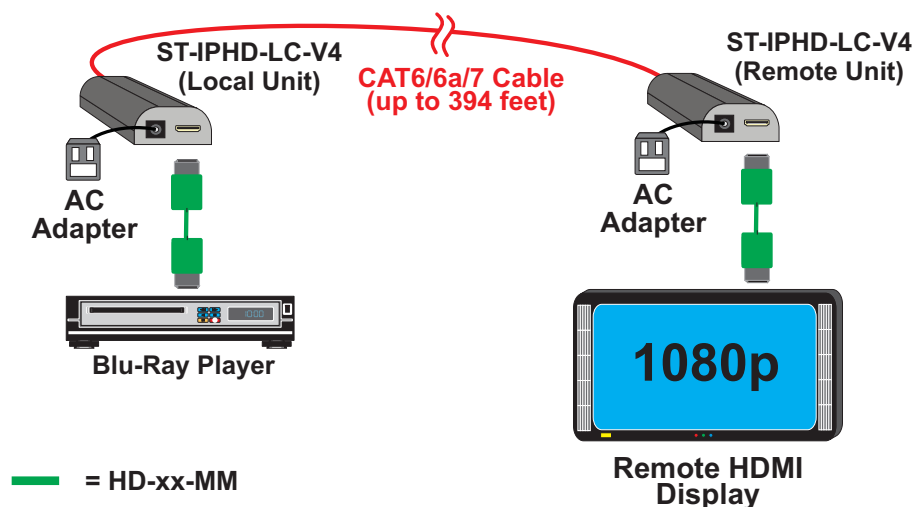
- Two years.

### Compatible NTI Products

- Combine NTI's video splitters and extenders for complex applications
  - 4K DVI/HDMI Video Splitter (VOPEX-DVI4K-2)
    - Supports HDTV resolutions to 1080p when used with the extenders.
  - HDMI Quad Screen Splitter/Multiviewer (SPLITMUX-HD-4RT)
  - HDMI 2.0 EDID Emulator (HD4K-EDID-EMLTR)

## Configuration and Cable Illustrations

### Point-to-Point Connection



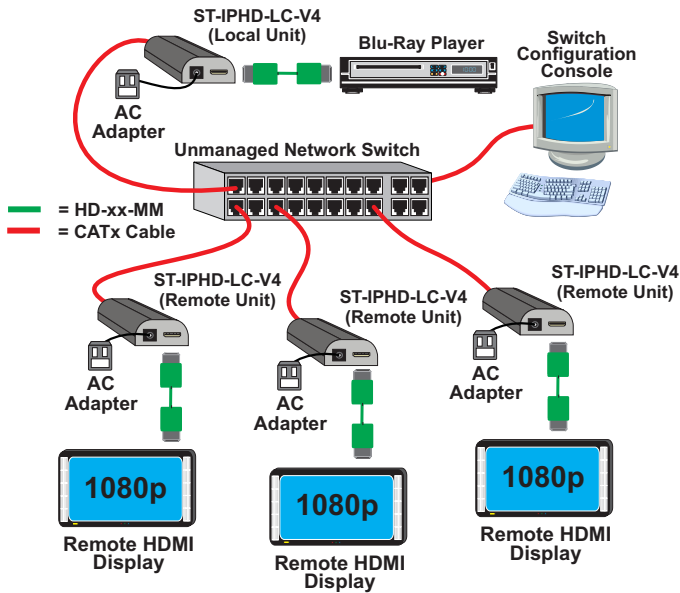
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**XTENDEX®**

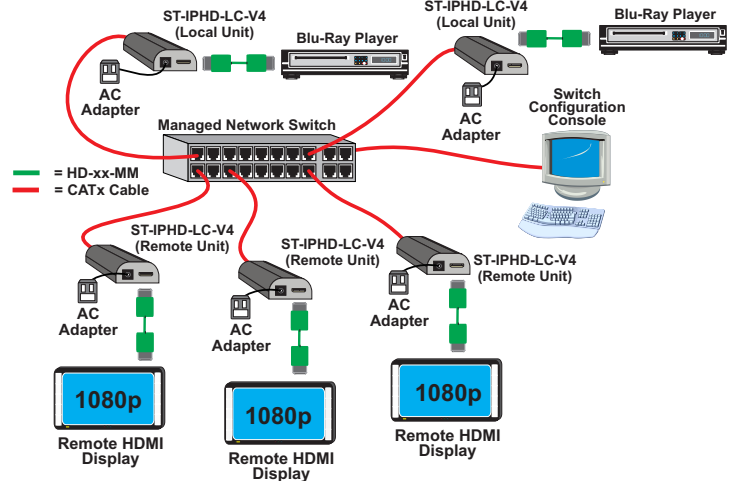
Extend an HDMI display up to 394 feet away from the source using gigabit Ethernet. Use with cascaded network switches to extend the length long distances.

## Configuration and Cable Illustrations (Continued)

### Point-to-Many Connections



### Many-to-Many Connections



### Low-Cost HDMI Over Gigabit IP Extender - Transmitter & Receiver Set

NTI Part #	Power Cord Plug
ST-IPHD-LC-V4	US NEMA 1-15P
ST-IPHD-LC-V4EU	Europlug CEE 7/16
ST-IPHD-LC-V4UK	UK BS1363
ST-IPHD-LC-V4AU	AS/NZS 3112
ST-IPHD-LC-V4UNV	US NEMA 1-15P with country-specific universal power plug adapter

### Low-Cost HDMI Over Gigabit IP Extender - Receiver Only

NTI Part #	Power Cord Plug
ST-IPHD-R-LC-V4	US NEMA 1-15P
ST-IPHD-R-LC-V4EU	Europlug CEE 7/16
ST-IPHD-R-LC-V4UK	UK BS1363
ST-IPHD-R-LC-V4AU	AS/NZS 3112
ST-IPHD-R-LC-V4UNV	US NEMA 1-15P with country-specific universal power plug adapter