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XTENDEX® Series

# ST-C6HD-HDBT
# ST-C6HD-DA-HDBT
# ST-C6HD(A)E-HDBT
# ST-C64K-300

## HDMI, Digital/Stereo Audio, Ethernet, RS232 and IR Extender

## Installation and Operation Manual


ST-C6HD-DA-HDBT Local Unit
(Left and Right End Views)

ST-C6HDE-HDBT Local Unit
(Left and Right End Views)

HDMI®
HIGH-DEFINITION MULTIMEDIA INTERFACE

## TRADEMARK

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## COPYRIGHT



## CHANGES

The material in this guide is for information only and is subject to change without notice. Network Technologies Inc reserves the right to make changes in the product design without reservation and without notification to its users.

***Note: CATx connection cable used between NTI XTENDEX Series Local and Remote or any XTENDEX Series products should not be run underground, outdoors or between buildings.***

**WARNING: Outdoor or underground runs of CATx cable could be dangerous and will void the warranty.**

***WARNING: The CATx connection cable used between NTI XTENDEX Series Local and Remote or any XTENDEX Series products must be wired straight through (pin 1 to pin 1, pin 2 to pin 2, etc.) The use of a CROSSOVER CABLE will damage the extender and void your warranty.***

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# INTRODUCTION

The XTENDEX Series ST-C6HD-HDBT HDMI HDBase-T Extender transmits uncompressed digital HDMI signal, IR, and optional SPDIF digital audio up to 600 feet over a single CAT6a/7 23AWG cable (or up to 450 feet with solid CAT5e/6) using HDBase-T technology. Each video extender consists of a local unit that connects to an HDMI source and IR emitter; and a remote unit that connects to an HDMI display, IR receiver, and optional SPDIF speakers.

The XTENDEX Series ST-C64K-300 4K HDMI Extender transmits uncompressed digital HDMI signal, and IR up to 300 feet over a single CATx solid wire cable. Each video extender consists of a local unit that connects to an HDMI source and IR emitter; and a remote unit that connects to an HDMI display and IR receiver.

The XTENDEX Series Extender is extremely simple to install and has been thoroughly tested to insure reliable performance. Through the use of CAT5e/6/6a/7 (CATx) cable it is possible to economically increase the flexibility of an entertainment system. Here are some of the features and ways this can benefit you:

**ST-C6HD-HDBT Features:**

- Transmits an uncompressed high speed HDMI signal over one CATx cable.
- Supports HDTV resolutions to 1080p and video resolutions to 1920x1200.
    - Extend 1080p up to 5,600 feet when combined with NTI's ST-FOHDMI-LC HDMI Extender via Fiber Optic Cable.
- HDMI features supported:
    - 1920x1200 resolution
    - x.v.Color, sYCC601 color, Adobe RGB Color and Adobe YCC601 color
    - Dolby TrueHD, DTS-HD Master Audio, Dolby Digital, and DTS
    - Bandwidth up to 154 MHz (3.76Gbps)
    - Support for CEC (consumer electronic control) compatible devices.
    - Lip Sync
- HDCP compliant.
- Supports the DDC2B protocol.
- High quality, rugged steel construction with durable powder coat finish.
- Only one power supply is necessary. (Power supply can be connected to either the local or remote unit.)
- Full Infrared Remote (IR) control of HDMI source from remote HDTV using existing source remote control.

**Options:**
Available with optional SPDIF Digital Audio support. (order ST-C6HD-**DA**-HDBT)

Available with optional SPDIF Digital Audio and Stereo Audio support (order ST-C6HD**A**-HDBT)

Available with Ethernet port for 100BaseT extension to support a Local or Wide Area Network (LAN/WAN) connection + an RS232 port for serial devices such as Touch Screen monitors (order ST-C6HD**E**-HDBT).

Available with “12VDC 2A” power rating (order ST-C6HD-HDBT-**12VNPS**)- 2.1 x 5.5mm power jack, AC adapter sold separately

**ST-C64K-300 Features:**

- Transmits an uncompressed high speed HDMI signal over one CATx cable.
- Supports Ultra HD 4Kx2K resolutions to 3840x2160(30Hz) 2K resolutions to 2048x1080, HDTV resolutions to 1080p and computer resolutions to 1920x1200.
- Supports embedded digital audio through HDMI compatible TV's or audio receivers.
- HDMI features supported:
    - HDMI 1.4
    - x.v.Color, sYCC601 color, Adobe RGB Color and Adobe YCC601 color
    - Dolby TrueHD, DTS-HD Master Audio, Dolby Digital, and DTS
    - Bandwidth up to 340MHz (10.2Gbps)
    - Support for CEC (consumer electronic control) compatible devices.
    - Lip Sync
- HDCP compliant.
- Supports the DDC2B protocol.
- High quality, rugged steel construction with durable powder coat finish.
- Only one power supply is necessary. (Power supply can be connected to either the local or remote unit.)
- Full Infrared Remote (IR) control of HDMI source from remote HDTV using existing source remote control.

## MATERIALS

**Materials Included with ST-C6HD-HDBT/ST-C64K-300 kit:**

- ✓ NTI XTENDEX Local Unit
- ✓ NTI XTENDEX Remote Unit
- ✓ 1-HD-3-MM 3 foot male-to-male HDMI video cable
- ✓ 1-RCA-3-MM 3 foot male-to-male RCA cable (ST-C6HD-**DA**-HDBT and ST-C6HD**A**(E)-HDBT models only)
- ✓ 1- SA-3-MM 3 foot male-to-male 3.5mm stereo audio cable (ST-C6HD**A**(E)-HDBT models only)
- ✓ 1-100VAC to 240VAC at 50 or 60Hz-24VDC/1.0A AC Adapter (NTI#PS4202) (NOT included with ST-C6HD-HDBT-**12VNPS**)
- ✓ 1- Power Cord- country specific (NOT included with ST-C6HD-HDBT-**12VNPS**)
- ✓ 3 Foot IR-EMITTER (IR-EMTR-3)
- ✓ 3 Foot IR-RECEIVER (IR-RCVR-3)
- ✓ 2.1x.5.5mm DC Plug with 36" Lead **(ST-C6HD-HDBT-12VNPS only)**

**Additional Materials Included with ST-C6HDE-HDBT kit:**

- ✓ CT6182 DB9 Female-to-RJ45 Female adapter
- ✓ CT6488 DB9 Male-to-RJ45 Female adapter
- ✓ 2-CB4352 5 foot RJ45-to-RJ45 CAT5 patch cable

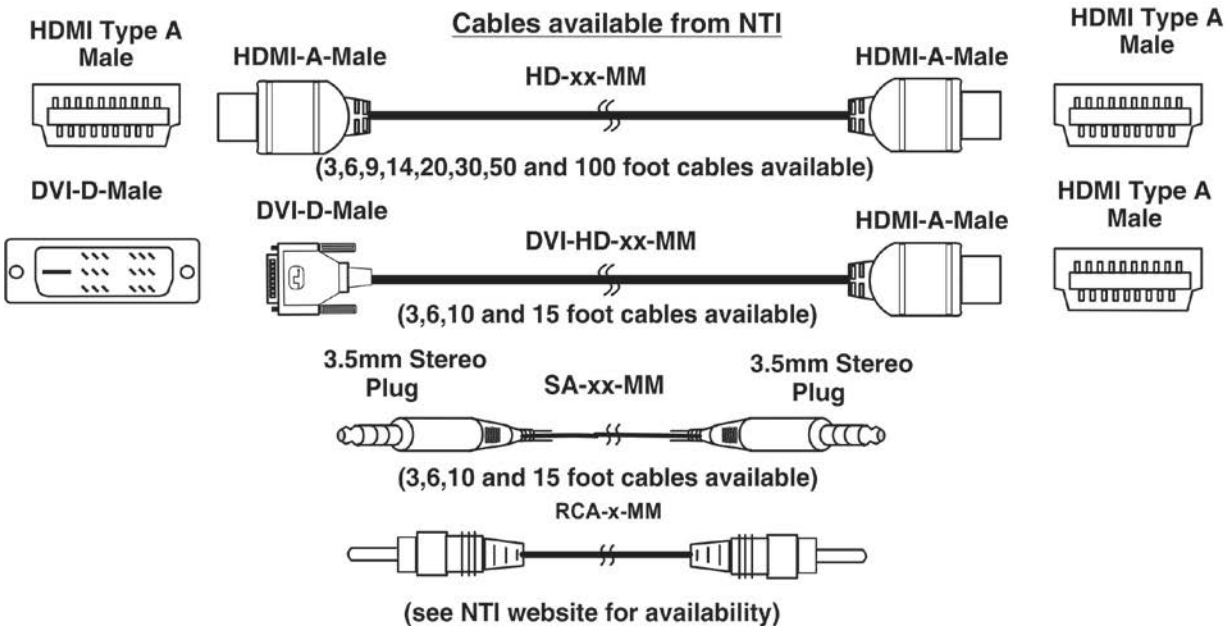
**Additional materials may be required but are <u>not supplied</u>:**

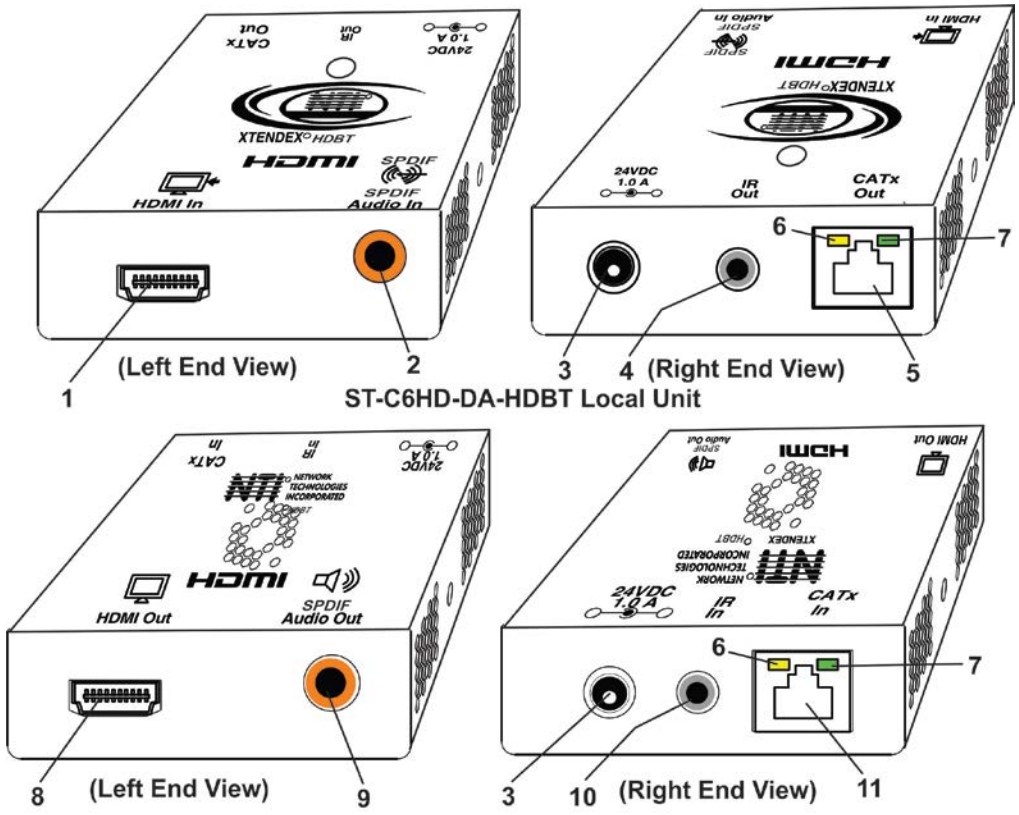
- ➢ CAT5e solid UTP ; 6/6a solid UTP; CAT6a solid UTP 23AWG; /CAT7 solid STP 23AWG (CATx) twisted-pair cables terminated with RJ45 connectors wired straight thru- pin 1 to pin 1, etc. (see page 14 for proper EIA/TIA 568 B wiring method)
- ➢ HDMI male-male cable to connect a HDMI source or display (Order NTI # HD-xx-MM where xx=3, 6, 9,14,20,30, 50 and 100 foot cable).
- ➢ DVI-D male to HDMI-A male single link cable to connect a DVI source or display (Order NTI # DVI-HD-xx-MM where xx=3, 6, 10, or 15 foot cable)

- RCA male-male cable to connect the SPDIF digital audio (when supported) to an audio output device (Order NTI # RCA-x-MM – see website for available lengths)

**Always use the shortest possible cable for best performance.**

Contact your nearest NTI distributor or NTI directly for all of your KVM needs at 800-RGB-TECH (800-742-8324) in US & Canada or 330-562-7070 (Worldwide) or at our website at **http://www.networktechinc.com** and we will be happy to be of assistance.

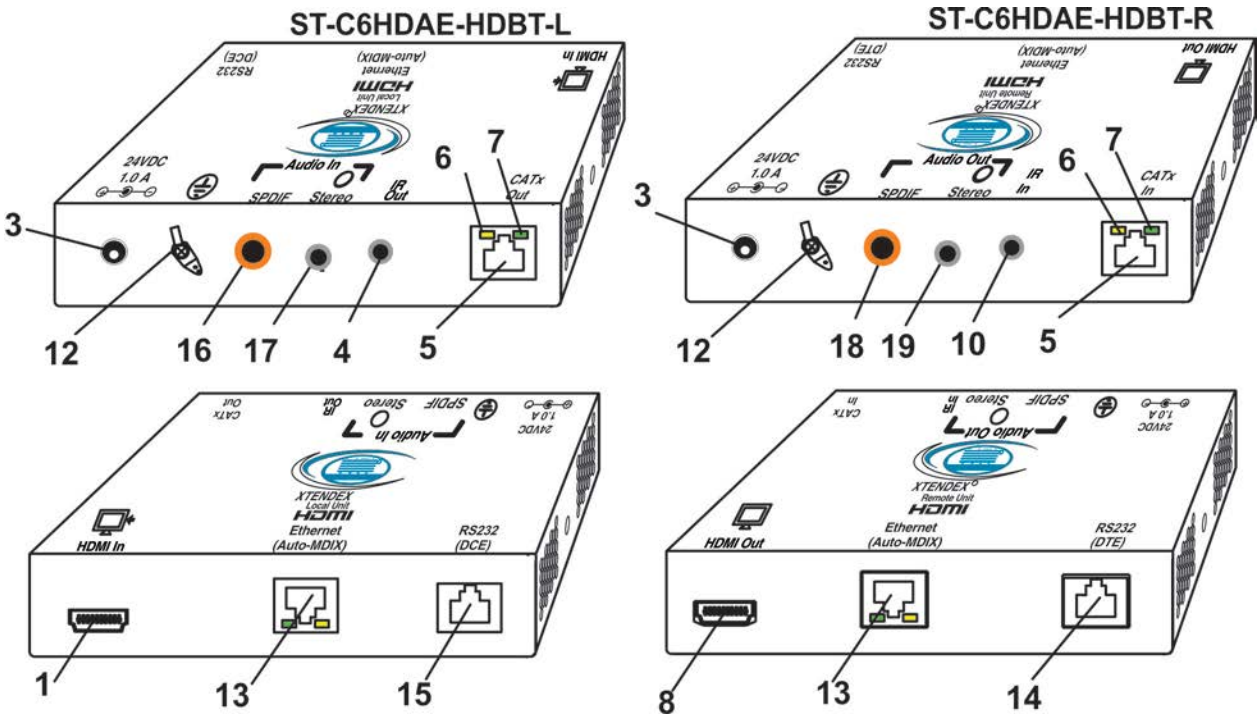





## CONNECTORS AND LEDS

| # | LABEL | CONNECTOR | DESCRIPTION |
|---|---|---|---|
| 1 | **HDMI In** | HDMI female video connector | for connecting an HDMI cable between the Local Unit and the video source |
| 2 | **SPDIF Audio In** | RCA Jack | For connecting SPDIF digital audio source (ST-C6HD-**DA**-HDBT only) |
| 3 | **24VDC- 1.0A** | 1.0mm Power Jack | connection jack for the AC adapter (only the Local or the Remote Unit needs to be powered, not both) (**Not applicable** to ST-C6HD-HDBT-12VNPS) |
| | **12VDC- 2.0A** | 2.1X5.5mm Power Jack | connection jack for the 12V AC adapter (only the Local Unit) (ST-C6HD-HDBT-**12VNPS** model only) |
| 4 | **IR Out** | 3.5mm Stereo Jack | for connecting the IR Emitter |
| 5 | **CATx Out** | RJ45 connector | for connecting the CAT5e/6/6a/7 cable between the Local and Remote units |
| 6 | **Yellow LED** | -- | **traffic indicator**- illuminates when there is communication between the local and remote units. |
| 7 | **Green LED** | -- | **power indicator**- illuminates when power has been supplied to the unit |
| 8 | **HDMI Out** | HDMI female video connector | for connecting the remote display device |
| 9 | **SPDIF Audio Out** | RCA Jack | For connecting SPDIF digital audio device (ST-C6HD-**DA**-HDBT only) |
| 10 | **IR In** | 3.5mm Stereo Jack | for connecting the IR Receiver |
| 11 | **CATx In** | RJ45 connector | for connecting the CAT5e/6/6a/7 cable between the Local and Remote units |

***Note: ST-C64K-300 has same connections as ST-C6HD-HDBT (above). (SPDIF Audio is not supported)***

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| 4 | **IR Out** | 3.5mm Stereo Jack | for connecting the IR Emitter |
| 5 | **CATx Out** | RJ45 connector | for connecting the CAT5e/6/6a/7 cable between the Local and Remote units |
| 6 | **Yellow LED** | -- | **traffic indicator**- illuminates when there is communication between the local and remote units. |
| 7 | **Green LED** | -- | **power indicator**- illuminates when power has been supplied to the unit |
| 8 | **HDMI Out** | HDMI female video connector | for connecting the remote display device |
| 10 | **IR In** | 3.5mm Stereo Jack | for connecting the IR Receiver |
| 11 | **CATx In** | RJ45 connector | for connecting the CAT5e/6/6a/7 cable between the Local and Remote units |
| 12 | **Ground** | Ground terminal | for connecting external ground wire |
| 13 | **Ethernet** | RJ45 connector | for connecting cable to either the LAN or an extended Ethernet connected device **(model with 100BaseT support only)** |
| 14 | **RS232 (DTE)** | RJ45 connector | for connecting serial cable to touchscreen monitor |
| 15 | **RS232 (DCE)** | RJ45 connector | for connecting serial cable from CPU |
| 16 | **SPDIF Audio In** | RCA connector | for connecting SPDIF digital audio source |
| 17 | **Stereo Audio In** | 3.5mm Jack | for connecting stereo audio source |
| 18 | **SPDIF Audio Out** | RCA connector | for connecting SPDIF digital speaker system |
| 19 | **Stereo Audio Out** | 3.5mm Jack | for connecting stereo speakers |

***WARNING: If the CATx IN or CATx OUT ports of a powered Remote or Local extender are connected to the RS232 port of another Remote or Local unit, the CATx port will be damaged and render the XTENDEX unusable and void the warranty.***

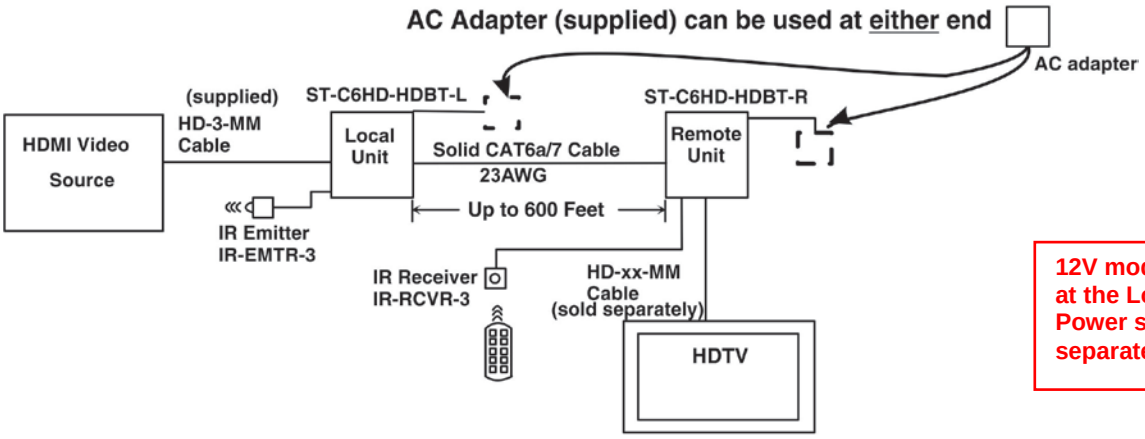
## LIMITATIONS

- The use of CAT5e or of any stranded cabling will reduce the maximum distance and resolution.

***WARNING: If the CATx IN or CATx OUT ports of a powered Remote or Local extender are connected to the RS232 port of another Remote or Local unit, the CATx port will be damaged and render the XTENDEX unusable and void the warranty.***

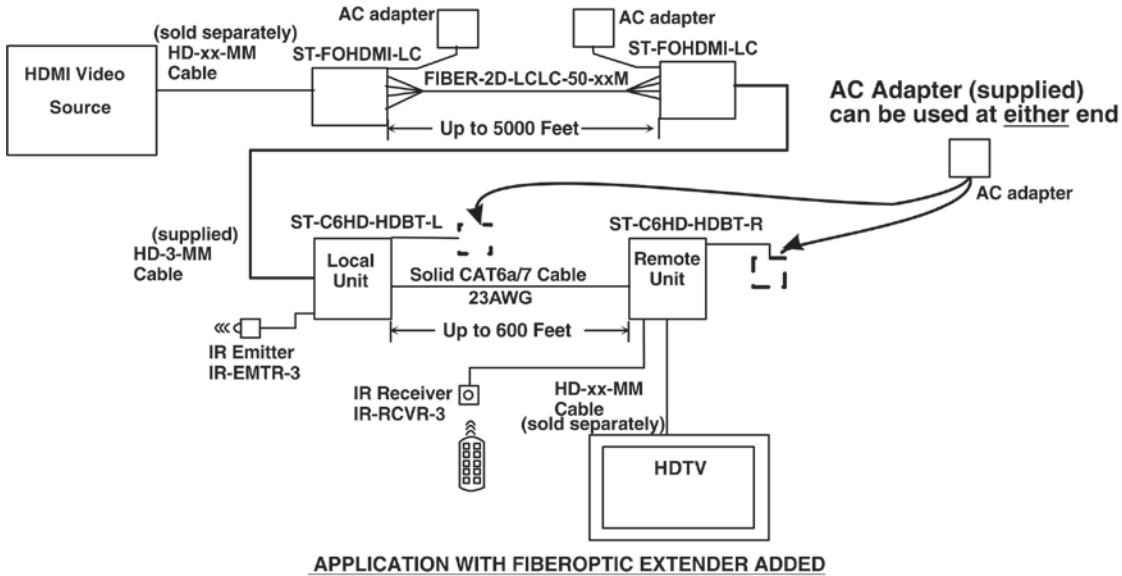
## PREPARATION FOR INSTALLATION

- Locations should be chosen for the monitor that also has space to connect the Remote unit within the distance provided by the cables. If extension cables are needed, contact NTI for the cables required.
- The CATx cables must be run to the locations where the Remote and Local units will be connected. Be careful to route the cables away from any sources of magnetic fields or electrical interference that might reduce the quality of the video signal (i.e. AC motors, welding equipment, fluorescent lighting, etc.).
- All cables should be installed in such a way that they do not cause stress on their connections to the equipment. Extended lengths of cable hanging from a connection may interfere with the quality of that connection. Secure cables as needed to minimize this.
- Properly shut down and disconnect the power from the video source and monitor to be separated. If other equipment is involved whose connections are being interrupted, be sure to refer to the instruction manuals for that equipment for proper disconnection and reconnection procedures before proceeding.
- Be very careful not to obstruct the air vents on the Remote Unit in its installed location.




**12V model is powered at the Local Unit only. Power supply sold separately.**

TYPICAL APPLICATION




APPLICATION WITH FIBEROPTIC EXTENDER ADDED

# INSTALLATION

## Installing The Remote Unit

1. Position the Remote Unit such that the CATx cable, the monitor cable(s), and audio cables (if applicable) can each reach the Remote Unit without putting strain on the cables.
2. Connect a HD-xx-MM (or DVI-HD-xx-MM cable depending upon what connector your display will accept) to the female HDMI video connector labeled "HDMI Out" on the Remote Unit.
3. Connect the RCA cable (optional) between the audio device and the “SPDIF Audio Out” on the Remote Unit.

***Note: The audio signal will be present at the “SPDIF Audio Out” connector if an audio source is connected to the “SPDIF Audio In” connector on the Local Unit.***

***Note: Be very careful that the installed location does not obstruct the air vents in Remote Unit case.***

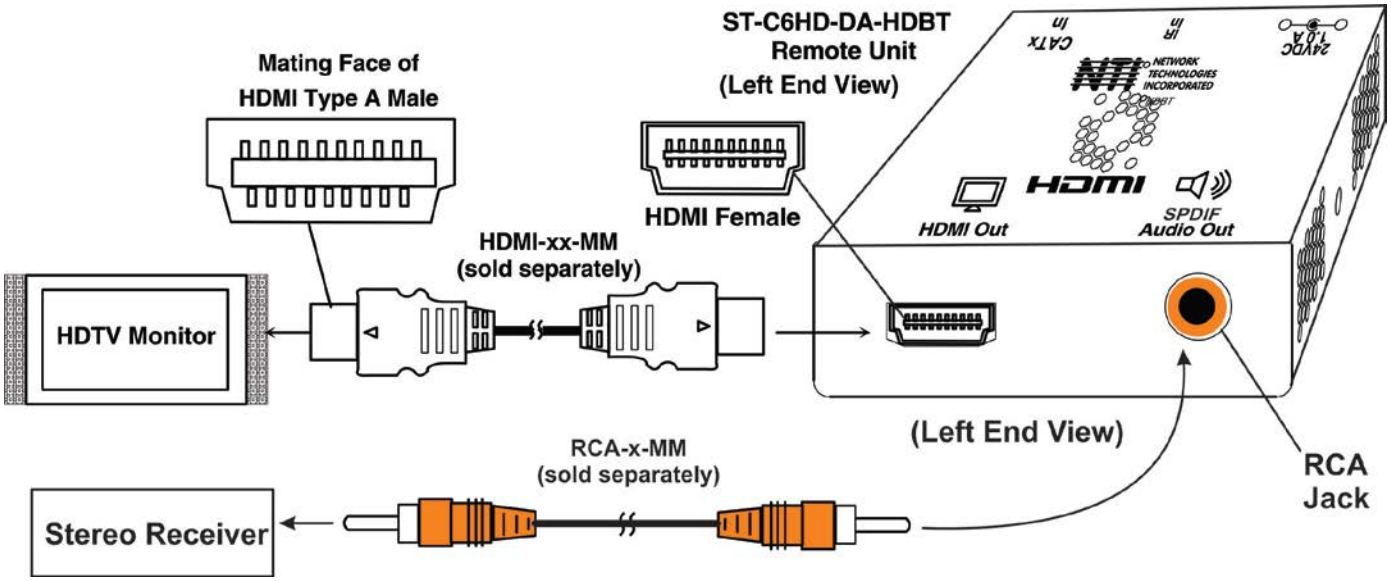



**Figure 1- Connect the extended components to the Remote Unit**

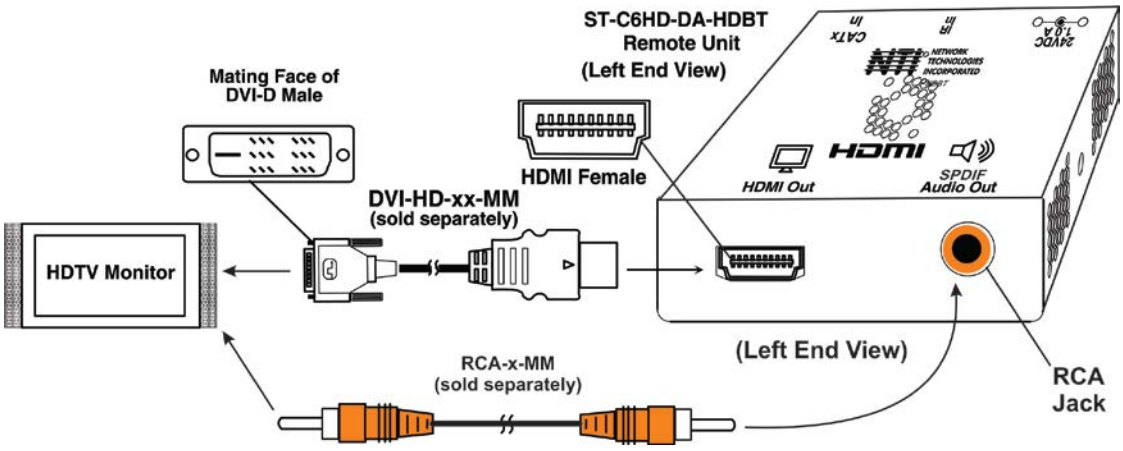



**Figure 2- Installation with DVI-only monitor**

## Installing The Local Unit

1. Connect an HD-3-MM (supplied) or DVI-HD-xx-MM cable (page 3) between the video source and the "HDMI In" connector on the Local Unit.
2. Connect a RCA-3-MM (supplied) between an audio out port on the audio source and the “SPDIF Audio In” connector on the Local Unit (model ST-C6HD-DA-HDBT only).

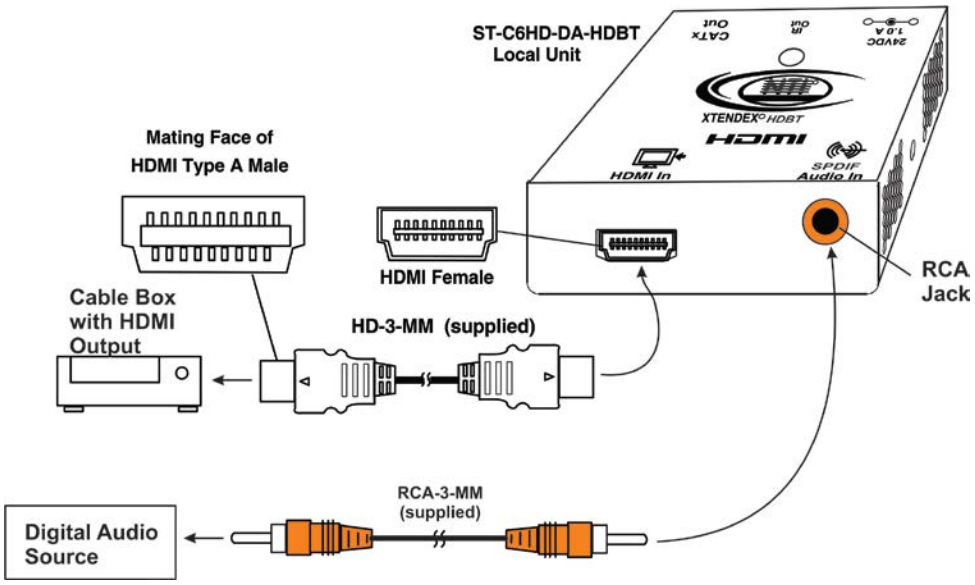



**Figure 3- Connect the XTENDEX Local Unit to the source**

## Connect the CATx Cables

Connect the CATx cable between the “CATx” ports on the Local and Remote Unit. (See Figure 4) When properly inserted the cable ends should snap into place.

***Note: The ST-C64K-300 can be connected with a maximum 300 foot cable (CAT6a/7 STP).***

***WARNING: Never connect the XTENDEX to an Ethernet card, Ethernet router, hub or switch or other Ethernet RJ45 connector of an Ethernet device. Damage to devices connected to the Ethernet may result.***

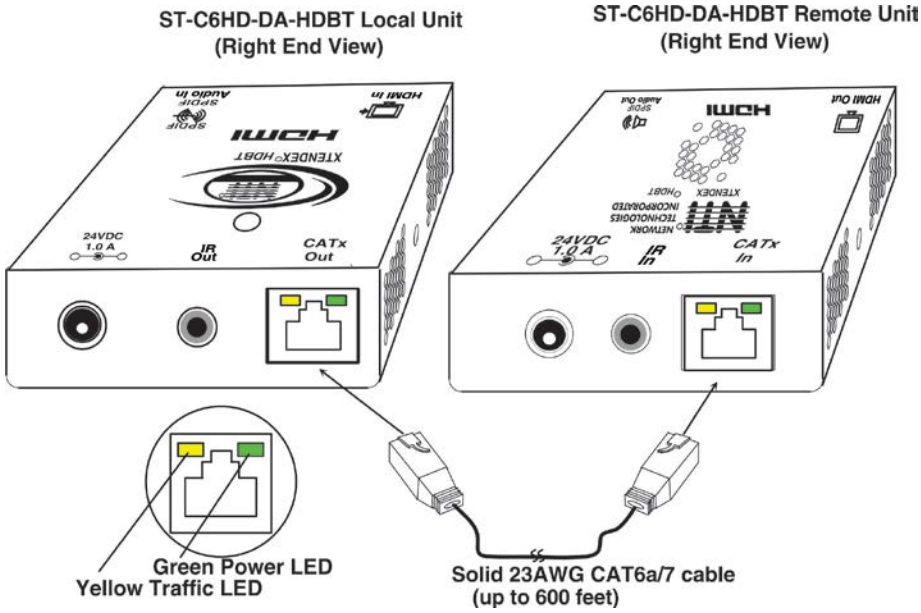



**Figure 4- Connect CATx cable**

***WARNING: The CATx connection cable used between NTI XTENDEX Series Local and Remote or any XTENDEX Series products must be wired straight through (pin 1 to pin 1, pin 2 to pin 2, etc.) The use of a CROSSOVER CABLE will damage the extender and void your warranty.***

## SPDIF and Stereo Audio Feature

Models ST-C6HDA(E)-HDBT include extra ports to support the connection of a separate audio source if desired. Either a SPDIF digital audio source OR a stereo audio source can be connected (not both) to the Local Unit. The audio source will be heard at the Remote Unit through digital speakers and/or self-powered stereo are connected to it.

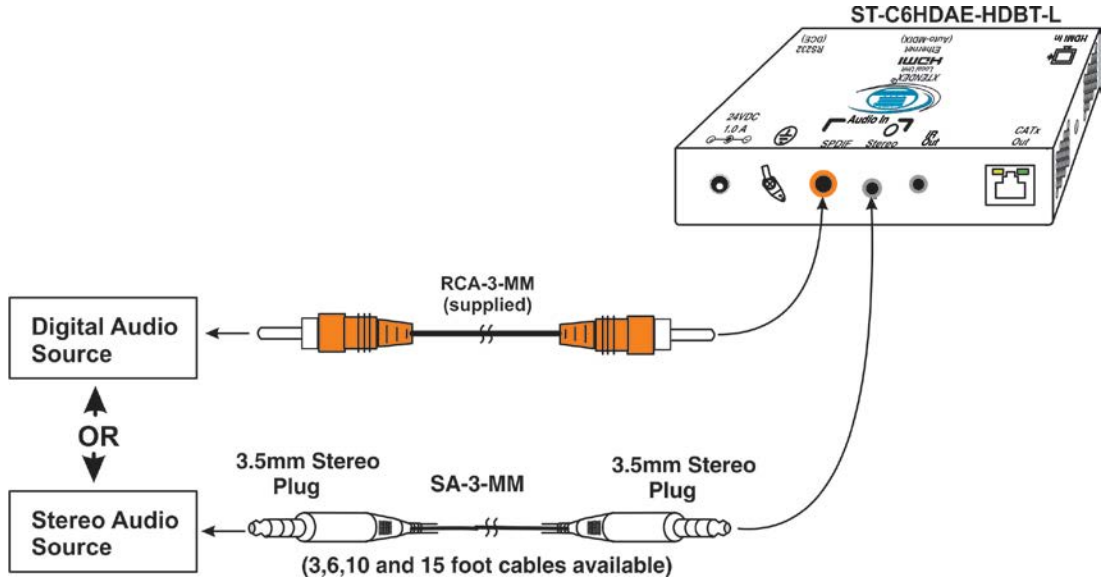



**Figure 5- Connect an audio source to the Local Unit**

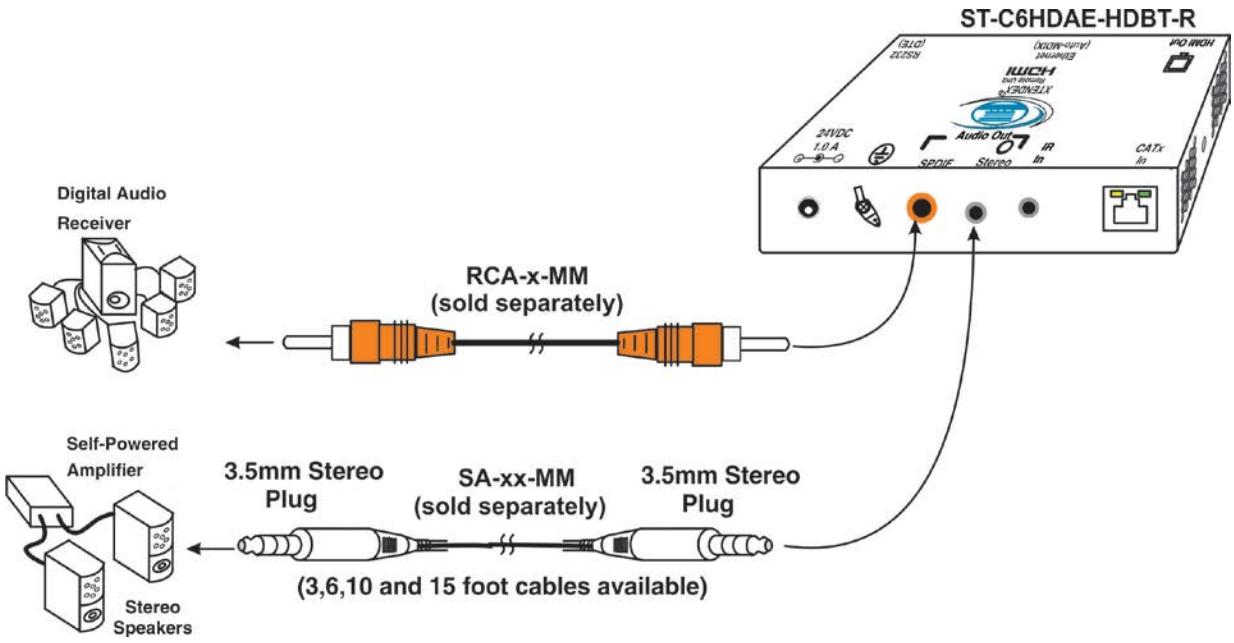



**Figure 6- Connect SPDIF Digital and/or Stereo Speakers**

## Plug-in and Boot Up

1. Plug the power cord from the monitor into the power outlet.

2. Connect an AC adapter power connector to the 24VDC port on **either** the Remote Unit or the Local Unit. Plug the AC adapter into a power outlet. The green LED on the RJ45 connector of both the Remote and Local Units should illuminate, indicating that a proper power connection has been made to them. (See Figure 7)

3. Turn ON the video source and monitor. The yellow LED on both the Local and Remote Units should illuminate. The video source and monitor should each react as if directly connected to each other.

**NOTE: The ST-C6HD-HDBT-12VNPS is powered by a 12VDC 2A power supply (sold separately) and at the Local Unit only. The Remote Unit is powered by the Local Unit through the CATx cable.**

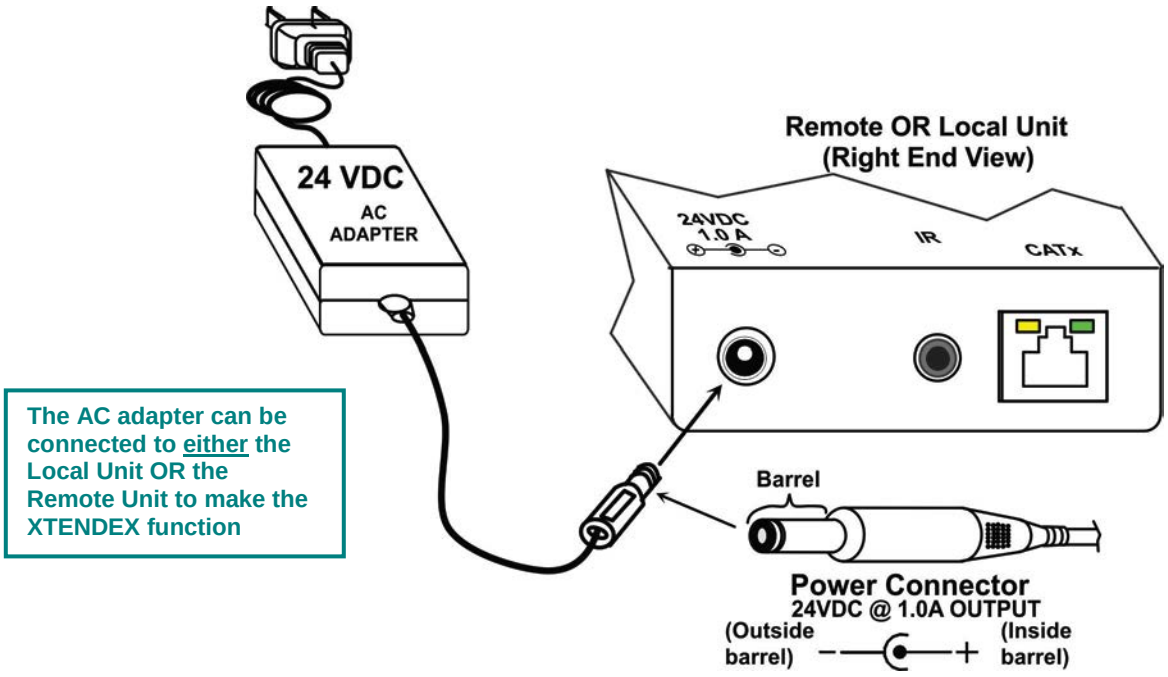



**Figure 7- Connect the AC adapter to either the Remote Unit or the Local Unit**

## INFRARED CONTROL

The XTENDEX includes ports for connecting an infrared emitter and receiver (included) to work in conjunction with the IR remote control used to operate the signal source. Connect the receiver to the "IR IN" port on the Remote Unit and the emitter to the "IR OUT" port on the Local unit. Position the end of the receiver such that the signal from the remote control can easily reach the IR sensor. Position the end of the emitter such that the extended signal can be sent to the signal source.

**Note: The IR Emitter and Receiver work within a frequency range of 30-50kHz. Check the specifications for the device you are extending to make sure the XTENDEX will work with it.**

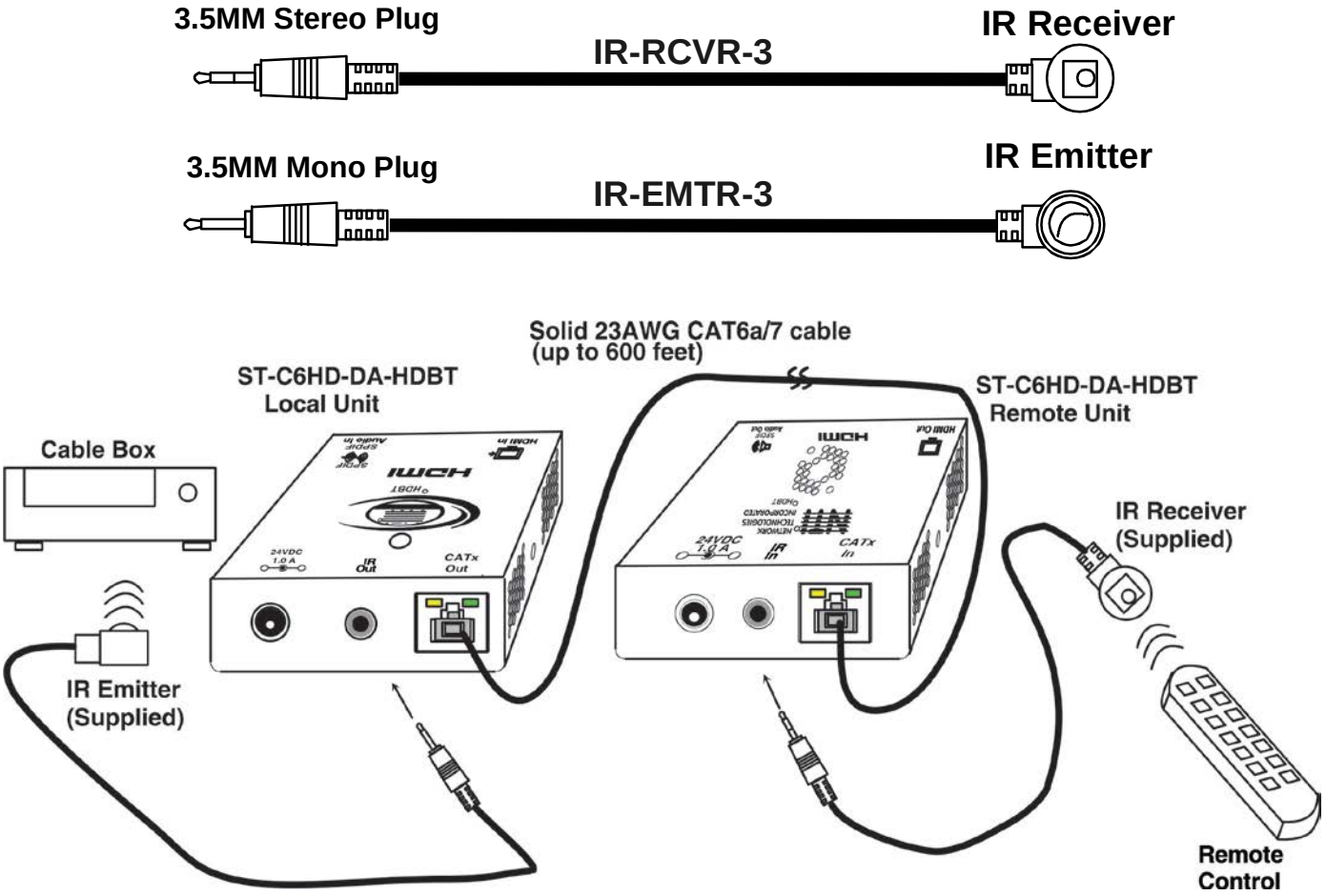



**Figure 8- Connect IR Emitter and Receiver**

# 100BASET + RS232 SUPPORT

If you have purchased the STC6HDE-HDBT, then your unit includes additional support for 100BaseT and RS232 extension.

With the 100BaseT support option, the "Ethernet Port" can be used to extend a Local or Wide Area Network (LAN/WAN) connection. The Local or Remote unit can be used to connect a modem, Blu-Ray player, router or switch or a network device (PC, printer, hub etc) If the network device is connected at the Local Unit, then the LAN/WAN connection must be at the Remote Unit, and visa versa.

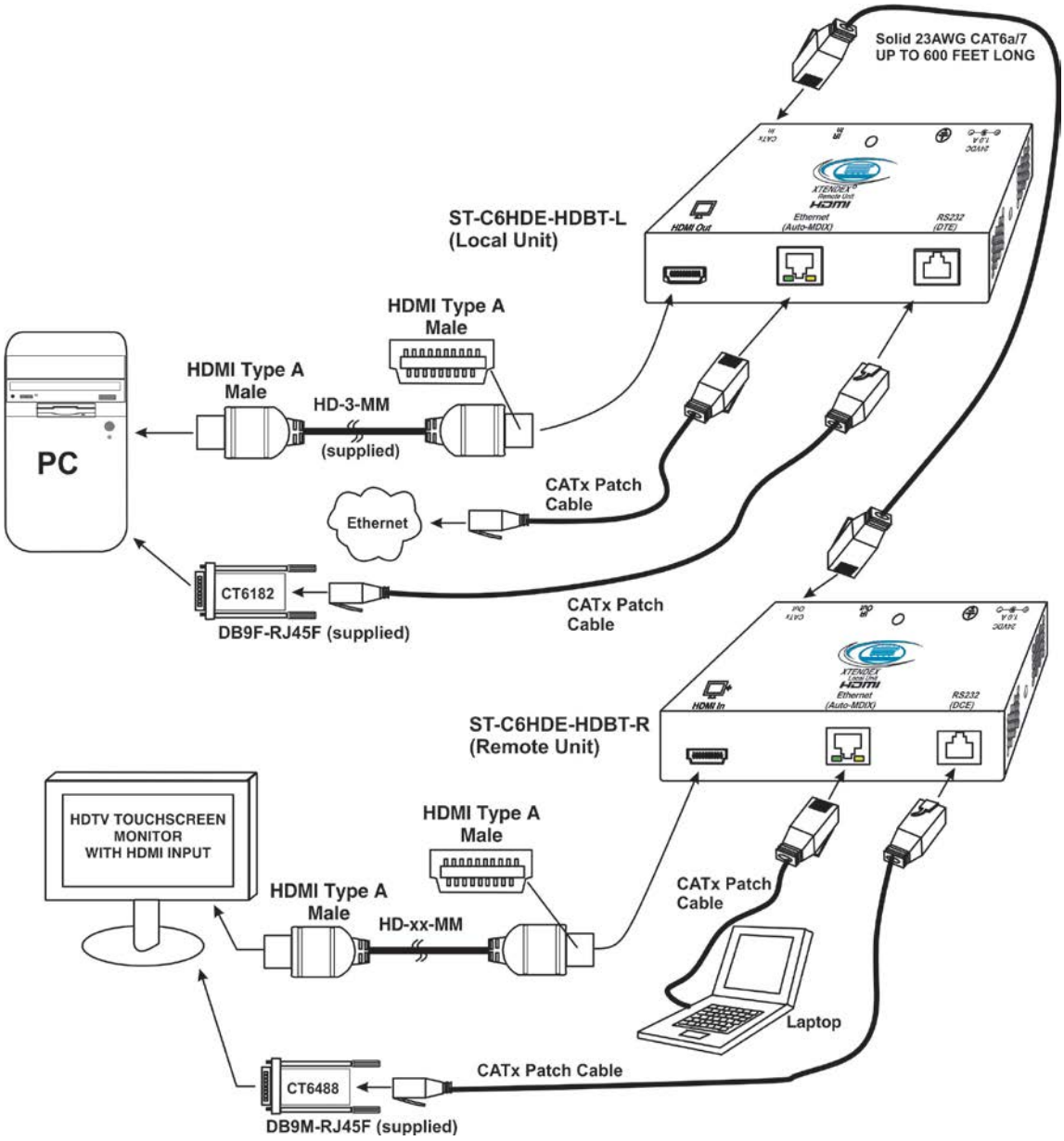



**Figure 9- Connections for Ethernet and RS232 Support**

Additionally, RS232 extension provides support for serial device communication, like touchscreen monitors as shown in the figure above.

- Connect the DB9F to RJ45 adapter (supplied) to the CPU and a CATx patch cable between the adapter and the "RS232" port on the Local Unit.
- Connect the DB9M to RJ45 adapter (supplied) to the monitor and a CATx patch cable between the adapter and the "RS232" port on the Remote Unit.

***WARNING: If the CATx IN or CATx OUT ports of a powered Remote or Local extender are connected to the RS232 port of another Remote or Local unit, the CATx port will be damaged and render the XTENDEX unusable and void the warranty.***

# TECHNICAL SPECIFICATIONS

| | |
|---|---|
| **Video** | |
| Video Connectors | HDMI Type A Female |
| Input Video Signal | TMDS |
| Bandwidth | 340MHz (10.2Gbps) (**ST-C64K-300 model only**)<br>154 MHz (3.76Gbps) (All other models) |
| HDMI Version | HDMI1.4 (**ST-C64K-300 model only**)<br>HDMI 1.2 (All other models) |
| DVI Support | DVI 1.0 |
| DDC Support | DDC2b |
| HDCP Version | HDCP 1.2 |
| **Digital Audio (where supported)** | |
| Audio Connectors | RCA phono plug |
| Audio Format (SPDIF) | LPCM,Dolby Digital (AC3)(Plus),DTS,DSD, Dolby TrueHD,DTS-HD Master Audio |
| **Stereo Audio (where supported)** | |
| Audio Connectors | 3.5mm stereo jacks |
| Signal Type | Line Level, stereo, unbalanced |
| Audio Frequency Response | 20Hz to 20Khz, ± 1dB |
| Signal-to-noise ratio | -85 dB |
| Total Harmonic Distortion and Noise | 0.05% |
| Stereo Crosstalk | -80 dB |
| Audio Maximum I/O Levels | 2V RMS input 1V RMS output |
| Output Impedance | Max 20 Ohms, unbalanced |
| **IR** | |
| Input/Output | 3.5mm Stereo Jack |
| Signal Type | TTL, 0-5VDC |
| Input Impedance | 1.5 kohm |
| Output Impedance | 33 ohm |
| Maximum Input/Output Level | 5.0 Vp-p |
| Center Carrier Frequency | 36kHz |
| Frequency Range | 30-50kHz |
| Maximum Distance (from receiver) | 10 feet, straight; 5 feet at 45 degree angle |
| **Ethernet (where supported)** | |
| Input/Output | RJ45 Female |
| Speed | 100BaseT |
| **RS232 (where supported)** | |
| Input/Output | RJ45 Female |
| **General** | |
| Interconnect Cable | CAT5e solid UTP/STP; CAT6/6a Solid UTP/STP; CAT7 Solid STP EIA/TIA 568 B wiring with male RJ45 connectors (see table page 14) |
| Operating Temperature | 0-50º C |
| Operating Humidity Range | 17 to 90% non-condensing RH |
| Power | ST-C6HD(-DA)-HDBT- 100V to 240VAC at 50 or 60Hz-24VDC/1.0A via AC Adapter (Included) (for Remote or Local, not both)<br>ST-C6HD(AE)-HDBT- 100V to 240VAC at 50 or 60Hz-24VDC/1.0A via AC Adapter (Included) (for Remote or Local, not both)<br>ST-C6HD-HDBT-12VNPS- 12VDC/ 2.0A via AC Adapter (sold separately) (Local Unit only)<br>ST-C64K-300- 100V to 240VAC at 50 or 60Hz-24VDC/1.0A via AC Adapter (Included) (for Remote or Local, not both) |
| Enclosure type | Electro-galvanized steel black powder coated |
| Size (In.) WxDxH | 2.54x3.08x1.08 (ST-C6HD-(DA)-HDBT and ST-C64K-300)<br>6.06x3.05x1.08 (ST-C6HD(AE)-HDBT only) |
| Compliance Certifications | CE, RoHS |

**Cable Ranges Tested**

| Model | Cable Type | Cable Length (In Feet) | Resolution |
|---|---|---|---|
| ST-C6HD(AE)-HDBT | CAT5e/6 | 450 | 1900x1200, 1080p@60Hz |
| | CAT6a/7 23AWG | 600 | |
| ST-C64K-300 | CAT5e/6 Solid UTP | 150 | 3840x2160 @30Hz |
| | CAT5e/6 Solid STP | 250 | |
| | CAT6a/7 Solid STP | 300 | 3840x2160 @30Hz |

## INTERCONNECTION CABLE WIRING METHOD

The CATx connection cables between the Remote and Local are terminated with RJ45 connectors and must be wired according to the EIA/TIA 568 B industry standard. Wiring is per the table and drawing below.

| Pin | Wire Color | Pair | Function |
|---|---|---|---|
| 1 | White/Orange | 2 | T |
| 2 | Orange | 2 | R |
| 3 | White/Green | 3 | T |
| 4 | Blue | 1 | R |
| 5 | White/Blue | 1 | T |
| 6 | Green | 3 | R |
| 7 | White/Brown | 4 | T |
| 8 | Brown | 4 | R |

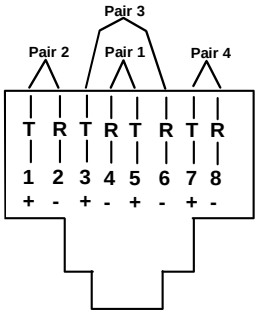



**Figure 10- View looking into RJ45 female**

# TROUBLESHOOTING

Each and every piece of every product produced by Network Technologies Inc is 100% tested to exacting specifications. We make every effort to insure trouble-free installation and operation of our products. If problems are experienced while installing this product, please look over the troubleshooting chart below to see if perhaps we can answer any questions that arise. If the answer is not found in the chart, a solution may be found in the knowledgebase on our website at http://information.networktechinc.com/jive/kbindex.jspa or please call us directly at (**800) 742-8324 (800-RGB-TECH)** or **(330) 562-7070** and we will be happy to assist in any way we can.

| Problem | Cause | Solution |
|---|---|---|
| **Power LED does not illuminate** | • Power supply is not connected or plugged-in. | • Make sure outlet is live and AC adapter is plugged-in.<br>• Make sure 24VDC jack is fully connected |
| **Power LED illuminates on one end, and not the other** | • CATx cable not properly connected | • Check the CATx cable connection at both ends. |
| **No Video on monitor** | • One or more video cables is loose or disconnected.<br>• No power to Remote Unit.<br>• CATx cable is not connected.<br>• CATx cable is too long<br>• HDMI/DVI cable is too long | • Check all video cable connections<br>• Make sure "Power" LED is illuminated on local and remote. If not, see solutions for first problem above.<br>• With all the cables properly connected, power cycle the video/audio source. Make sure "Traffic" LED on local and remote is illuminated.<br>• Make sure they are snapped-in properly and completely and reboot.<br>• Switch to shorter cable or lower resolution |
| **Video Picture is noisy** | • All Video Cables are not firmly seated.<br>• CATx /HDMI/DVI cable is too long<br>• The CATx cable is not properly connected.<br>• CATx cable is poor quality for the length of cable used<br>• CATx cable is installed near noisy equipment | • Check all connections. Make sure all cables are fully seated.<br>• Switch to shorter cable or lower resolution<br>• Check cable connections. Make sure they are snapped-in properly and completely.<br>• Install a higher quality CATx cable.<br>• Relocate run of CATx cable away from other electrical equipment |
| **Monitor flashes or goes blank for a second or two** | • Electrical power system is very noisy, particularly the ground.<br>• The CATx cable is not properly connected.<br>• CATx cable is too long<br>• HDMI/DVI cable is too long | • Make sure the interconnection cable is not near any power lines.<br>• Check cable connections. Make sure ends are snapped-in properly and completely.<br>• Switch to shorter cable or lower resolution (maximum length is 600 feet).<br>• Switch to shorter cable |

***WARNING: If the CATx IN or CATx OUT ports of a powered Remote or Local extender are connected to the RS232 port of another Remote or Local unit, the CATx port will be damaged and render the XTENDEX unusable and void the warranty.***

# WARRANTY INFORMATION

The warranty period on this product (parts and labor) is two (2) years from the date of purchase. Please contact Network Technologies Inc at **(800) 742-8324** (800-RGB-TECH) or **(330) 562-7070** or visit our website at http://www.networktechinc.com/return-policy.html for information regarding repairs and/or returns. A return authorization number is required for all repairs/returns.

***WARNING: The CATx connection cable used between NTI XTENDEX Series Local and Remote or any XTENDEX Series products must be wired straight through (pin 1 to pin 1, pin 2 to pin 2, etc.) The use of a CROSSOVER CABLE will damage the extender and void your warranty.***