

xantech®

INSTALLATION INSTRUCTIONS

HDMIC5IRD

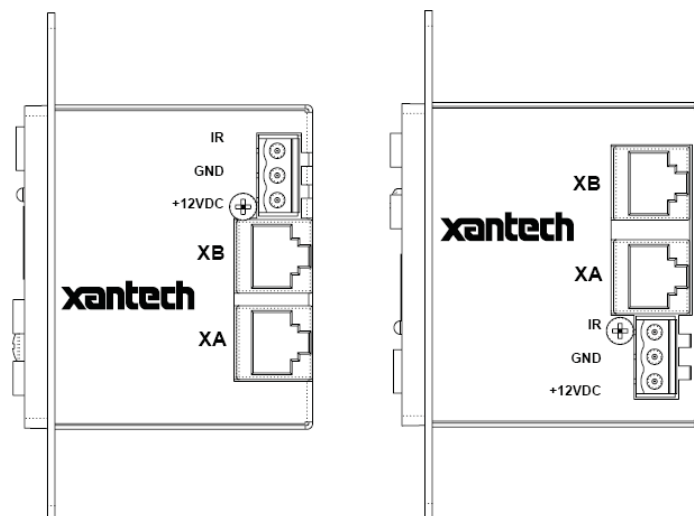
Point to Point HDMI & IR Over CAT5e\CAT6 Extender

INTRODUCTION

The HDMIC5IRD extends your HDTV display up to 135 feet away (see installation notes) from your HDTV source using two CAT5e or CAT6 cables. CAT5e and CAT6 type cables have an advantage over long distance HDMI cables; CAT5e and CAT6 are lower cost and easier to install. Also, the system is specifically designed to send HDMI™ (high definition multimedia interface) and infrared signals providing an additional control conduit for the HDTV and source. The in-wall Decora style units are compatible with the box-type enclosure style units.

GENERAL INFO

- Package Includes:
 - (1) Transmitter
 - (1) Receiver
 - (1) Power Supply
 - (1) Instruction Manual
- Dimensions: 1.5"W x 2.50"D x 4.125"H (both 'Transmitter' and 'Receiver' units)
- Compatible with Xantech infrared receiver and emitter products



WARNING!

It is highly recommended to simulate the installation before the wiring job takes place. Not all wiring components (CAT5e, CAT6 wires and RJ-45 crimps) are made to the same standard. The compatibility of the HDMIC5IRD and the various quality of wiring components may result in performance differences that can complicate an installation.

As with any installation, do not make any wiring connections when the extender system is powered on. Doing so may result in equipment failure.

CONNECTIONS

- **CONNECTION TO SOURCE:** The 'Transmitter' extender should be connected to the source equipment (Blu-Ray player, Cable/Satellite box) using the shortest possible HDMI cable. Less than 6 feet or (2 meters) is best. Be sure the HDMI cable is capable of 1080p performance.
- **CONNECTION TO DISPLAY:** The 'Receiver' extender should be connected to the display (Plasma, LCD) using the shortest possible HDMI cable. Less than 6 feet (2 meters) is best. Be sure the HDMI cable is capable of 1080p performance.
- **POWER SUPPLY:** The extender system requires only one power supply. The included power supply (+12VDC, 500mA) can be connected to either the 'Transmitter' or 'Receiver' side. In applications with an infrared receiver, the infrared receiver must be connected on the same side as the power supply. If the distance between 'Transmitter' and 'Receiver' exceeds 70 feet (21 meters), it is strongly suggested to connect the power supply on the 'Receiver' side.
- **INFRARED SYSTEM:** Infrared receiver and emitters can be connected to either the 'Transmitter' or 'Receiver' side. The infrared receiver must be connected on the same side as the power supply.

SYSTEM SETUP

- Make all connections to the system. Be sure the source and display are both powered 'on'. It is a good idea to set the source to the lowest possible resolution (480i) to confirm the extender system is functional. Products such as the PlayStation3 are often set to 1080p output by default and may require to be set a lower resolution during system installation.
- **LED:**
The 'Transmitter' LED will turn BLUE to indicate power.
The 'Receiver' LED will turn GREEN to indicate power and BLUE when an HDMI connection has 'sync' to the system.
- **ADJUSTMENT SWITCH:** There are three switches on the 'Receiver' unit that will adjust the extender system. For optimal performance, set the switch a setting step or two above (or sometimes below) where the poor image quality (blinking white dots, fuzzy image, streaks) appears. In some situations, setting the extender system to the highest setting may not yield the best results on shorter cable runs.



SETTING	SWITCH 1	SWITCH 2	SWITCH 3
A – SHORT	OFF	OFF	OFF
B	ON	OFF	OFF
C	OFF	ON	OFF
D	ON	ON	OFF
E	OFF	OFF	ON
F	ON	OFF	ON
G	OFF	ON	ON
H – LONG	ON	ON	ON

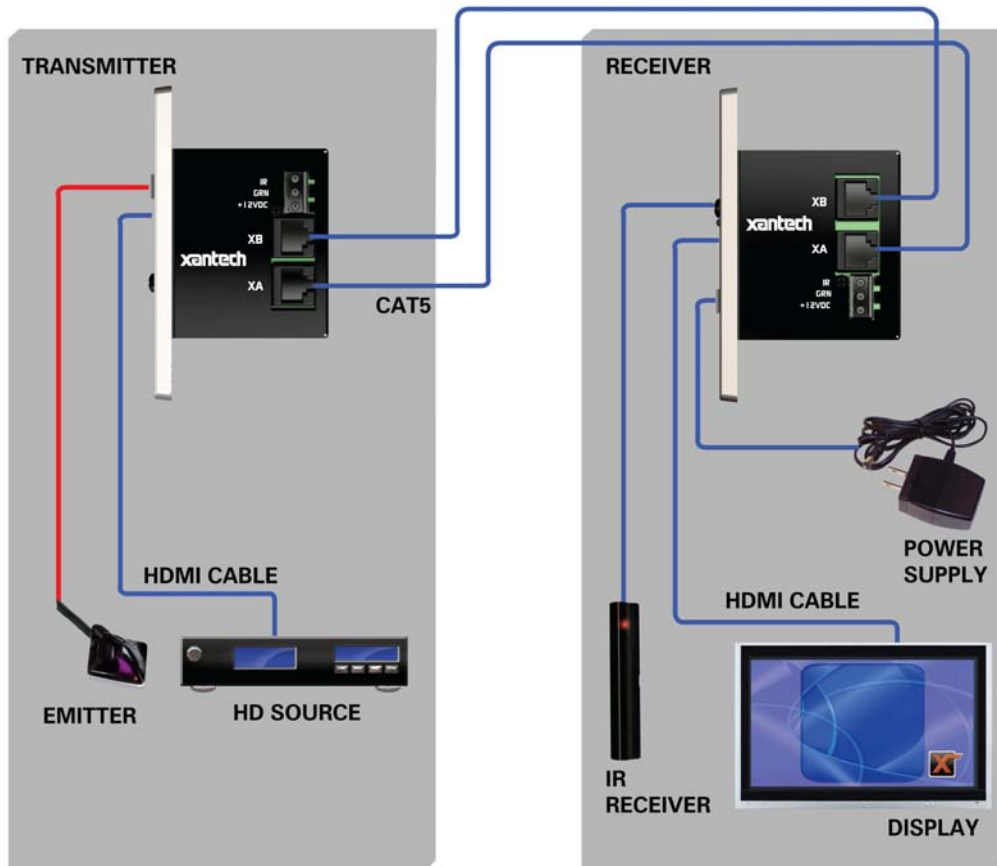


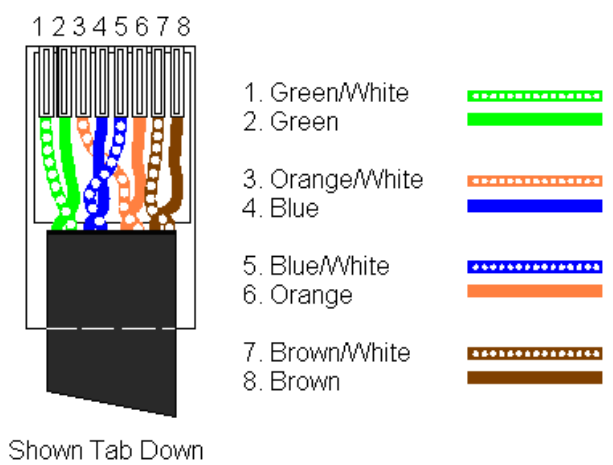
Figure A: Basic HDMIC5IRD Application

HDMIC5IRD APPLICATION

The HD Source (Blu-Ray, Hi-Definition Satellite\Cable Box) can be placed in a remote location away from the panel display. An IR RECEIVER is placed next to the panel display. Using the existing CAT5e or CAT6 wiring, remote control commands (such as play/pause or channel up/down) can be sent from the IR RECIEVER to an EMITTER located on the HD SOURCE.

WIRING

- The extender system requires two CAT5e or CAT6 wires used in between the 'Transmitter' and 'Receiver'. All 8 conductors on both wires are used.
- Do not use couplers, splitters, or junctions with the CAT5e or CAT6 wire. There should be only a direct connection between 'Transmitter' and 'Receiver'. Connection between the extender system and CAT5e or CAT6 wire is made with an RJ-45 crimp connector (wiring and connectors not supplied).
- Be sure to use standard CAT5e and CAT6 wiring practices (568-A shown in figure to the right) and test the connection before system connection. Using the correct wire pairs and polarity is very important.



INSTALLATION NOTES

- **WARNING:** To be installed and/or used in accordance with appropriate electrical codes and regulations. If you are not sure about any part of these instructions, consult a qualified electrician.
- **CAUTION:** Do not install this product in an electrical junction box with 110V or higher unless an approved barrier separates the high and low voltage sections.
- **NOTE:** Please note the maximum wire length for reliable operation of 1080p is 115 feet or 35 meters with high quality CAT6 cable. A longer cable length could result in an unreliable connection and audio/video drop-outs. For lower resolutions such as 720p or 1080i, the maximum length is 135 feet or 41 meters with high quality CAT6 cable. The use of CAT5e or lower quality CAT6 cable could result in reduced range. Results may vary based on installation variables such as wiring components and location.
- Tests have shown that CAT6 cables have better performance over CAT5e cables.
- Both XA and XB wire runs must be equal in length, wire material and connectors. CAT5e and CAT6 wires should be as short as possible.
- Never run the CAT5e or CAT6 wires near or along side high voltage wires. If high voltage lines are nearby, cross the CAT5e or CAT6 wires to them at 90 degree angles.
- Never coil up CAT5e or CAT6 wires. This can increase the inductance of the wire and give an unreliable picture.
- Make sure a good quality RJ45 8-8 crimper is used to connect the RJ-45 crimp connector to the CAT5e or CAT6 wires. Poor crimping and mismatched wires are the most frequent cause of installation problems. Do not allow the twisted pairs to unravel when connecting to the RJ-45 crimp connector. Do not use couplers, splices, junctions, etc. as it will degrade performance.
- Make absolutely sure the XA port on the 'Transmit' unit is connected to the XA port on the 'Receive' unit. Likewise the XB port on the 'Transmit' unit is connected to the XB port on the 'Receive' unit. Both wires are required.

SPECIFICATIONS

- **POWER SUPPLY:**
 - Input 100 to 240VAC, 50/60Hz, 0.2A
 - Output 12VDC, 0.5A
 - Listing UL, CE, FCC

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