## AllAboutAdapters IR-EXT3

# AllAboutAdapters IR Remote Over Cat5/Cat6 Repeater Extender Kit

Model: IR-EXT3 User Manual

## 1. Introduction

The AllAboutAdapters IR-EXT3 is an Infrared (IR) remote extender kit designed to extend the reach of your IR remote control signals over a single Cat5, Cat5e, or Cat6 Ethernet cable. This system enables control of up to five Audio/Video (A/V) devices from a distance of up to 800 feet (250 meters), allowing you to place your equipment out of sight while maintaining full remote functionality.
The kit consists of two main units: an IR Transmitter/Repeater and an IR Receiver/Extender. The Transmitter unit can also function independently as a local IR blaster for two devices, while the Receiver unit provides control for up to three distant A/V devices.

## 2. Package Contents

Please verify that all items are present in your package:

- 1x IR Transmitter/Repeater Unit
- 1x IR Receiver/Extender Unit
- 1x IR Remote Sensor Wire (6.5 feet long, 3.5mm plug)
- 5x IR Remote Blaster/Emitter Wires (6.5 feet long, 3.5mm plug)
- 1x Power Adapter (DC 5V)
- User Manual (this document)

## 3. Product Overview

Familiarize yourself with the components and their functions before proceeding with installation.


**Image 3.1:** AllAboutAdapters IR-EXT3 Transmitter and Receiver Units. This image displays the two main components of the kit: the IR Transmitter/Repeater unit and the IR Receiver/Extender unit, both housed in silver metal enclosures.

## 3.1. Unit Interfaces

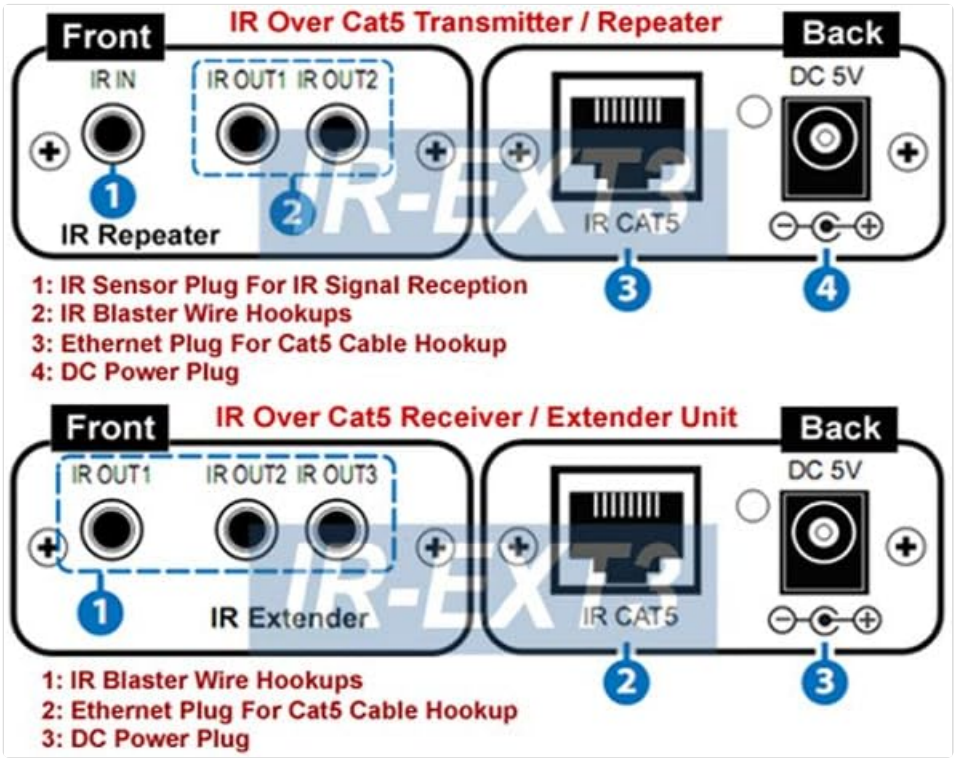


**Image 3.2:** IR-EXT3 Transmitter and Receiver Port Diagram. This diagram illustrates the front and back panels of both the Transmitter and Receiver units, labeling each port and indicator light for easy identification.

### IR Transmitter/Repeater Unit (TX)

- **IR IN:** 3.5mm jack for connecting the IR Sensor Wire to receive signals from your remote control.
- **IR OUT1, IR OUT2:** 3.5mm jacks for connecting IR Blaster/Emitter Wires to control local A/V devices.
- **IR CAT5:** RJ45 port for connecting a Cat5/Cat6 Ethernet cable to the Receiver unit.
- **DC 5V:** Power input jack for the included 5V DC power adapter.

### IR Receiver/Extender Unit (RX)

- **IR OUT1, IR OUT2, IR OUT3:** 3.5mm jacks for connecting IR Blaster/Emitter Wires to control distant A/V devices.
- **IR CAT5:** RJ45 port for connecting a Cat5/Cat6 Ethernet cable to the Transmitter unit.

- **DC 5V:** Power input jack for the included 5V DC power adapter. (Note: Only one power adapter is needed for the entire system, connected to either the TX or RX unit).

## 4. Setup Instructions

This section details the steps for setting up your IR extender kit. Ensure all devices are powered off before making connections.

### 4.1. Basic Connection Diagram

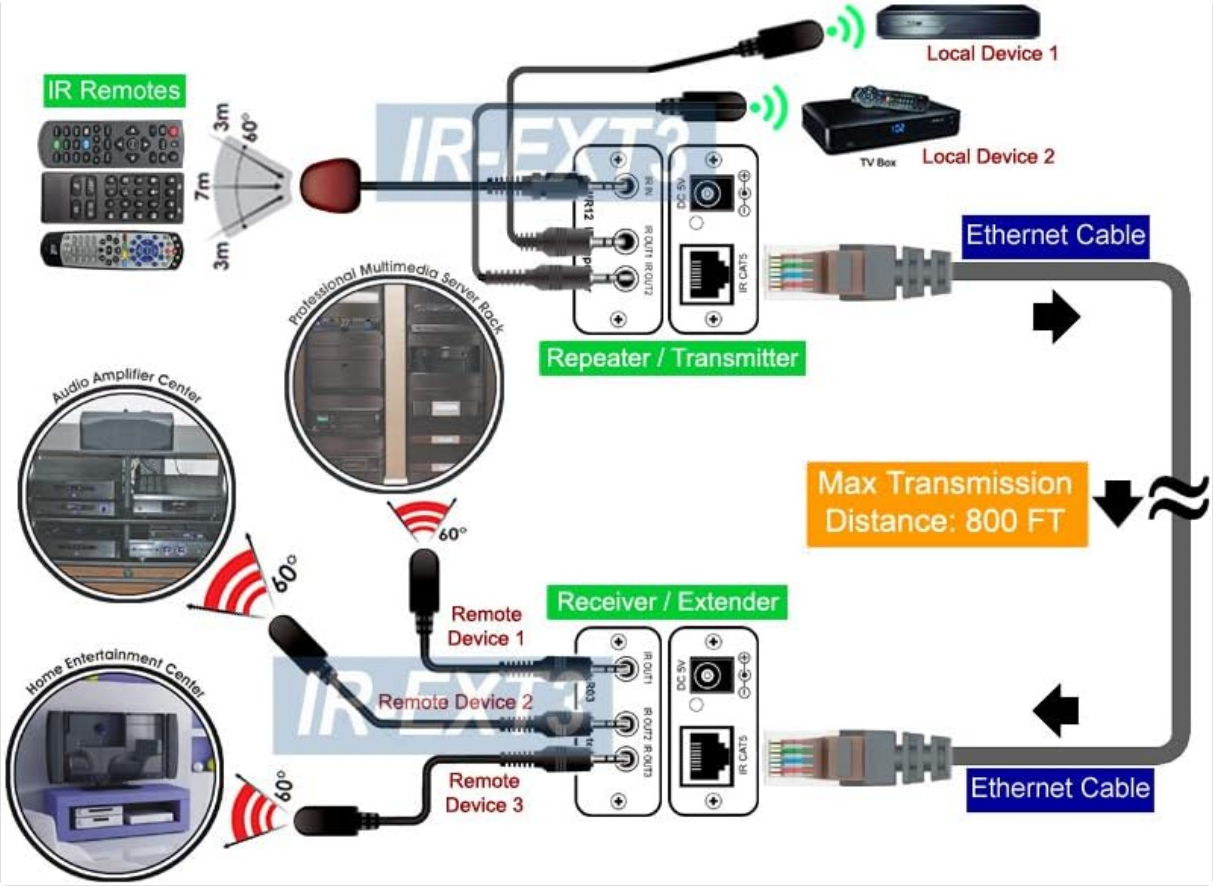


**Image 4.1:** IR-EXT3 System Connection Diagram. This diagram illustrates the overall connection of the Transmitter, Receiver, IR Sensor, IR Blasters, and the Cat5/Cat6 cable, showing how remote signals are extended.

### 4.2. Local Setup (Transmitter Only)

The Transmitter unit can operate independently to control up to two local A/V devices.

1. Connect the IR Sensor Wire to the **IR IN** port on the Transmitter unit. Position the IR sensor in a location where it can receive signals from your remote control (e.g., near your TV or viewing area).
2. Connect up to two IR Blaster/Emitter Wires to the **IR OUT1** and **IR OUT2** ports on the Transmitter unit.
3. Attach the IR blasters directly over the IR receiver windows of your local A/V devices (e.g., DVD player, TV box). Ensure the blaster is securely placed over the device's IR sensor.
4. Connect the 5V DC power adapter to the **DC 5V** port on the Transmitter unit and plug it into a power outlet.

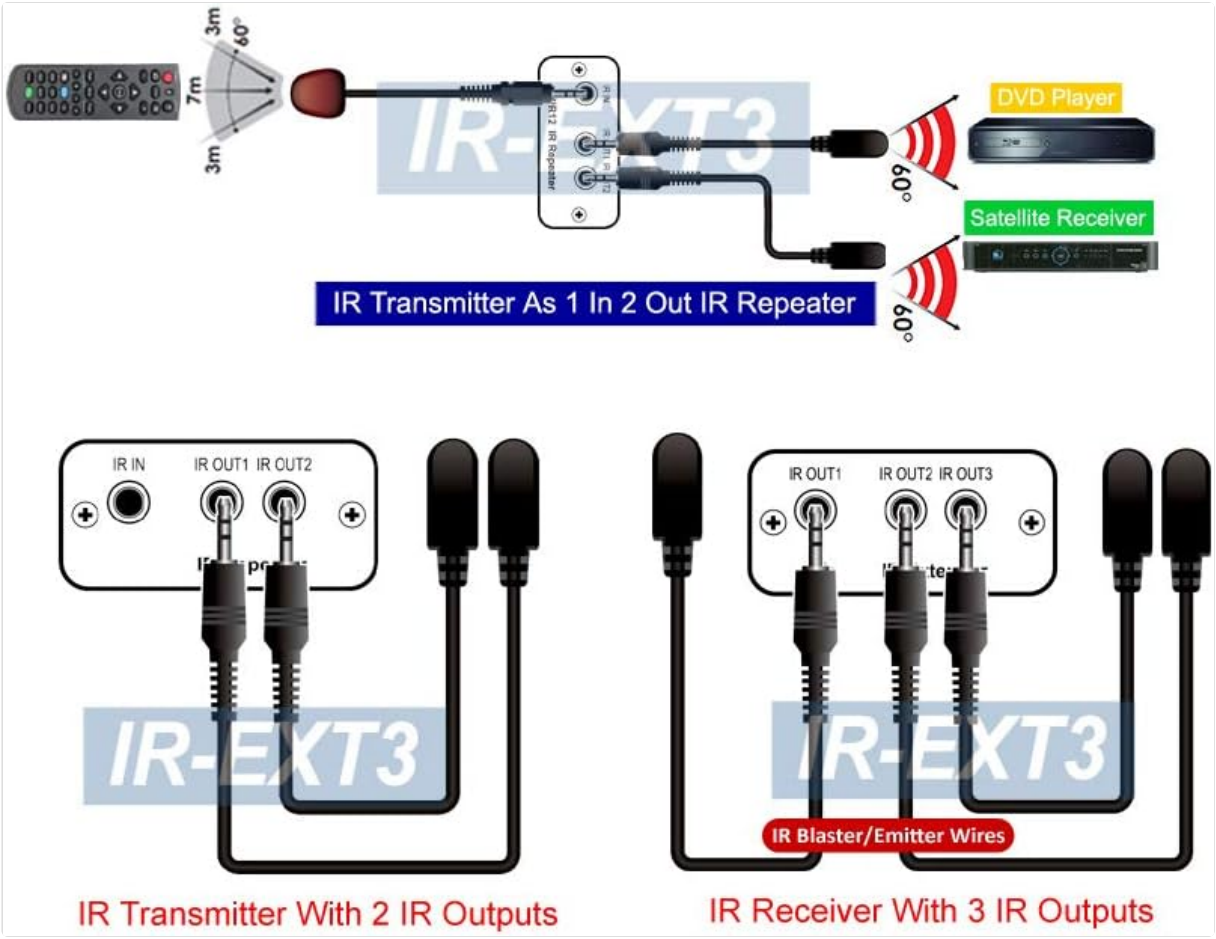


**Image 4.2:** IR Transmitter Local Setup Diagram. This image shows the Transmitter unit configured for local control, with the IR sensor connected and two IR blasters attached to A/V devices.

## 4.3. Long Distance Setup (Transmitter and Receiver)

This setup allows control of up to five A/V devices, with two local and three distant, over a Cat5/Cat6 cable.

1. **Transmitter Unit (Local Location):**
    - Connect the IR Sensor Wire to the **IR IN** port. Position the sensor to receive remote signals.
    - (Optional) Connect up to two IR Blaster/Emitter Wires to **IR OUT1** and **IR OUT2** to control local A/V devices. Place blasters over device IR windows.
    - Connect one end of a Cat5, Cat5e, or Cat6 Ethernet cable (up to 800ft/250m) to the **IR CAT5** port on the Transmitter unit.
2. **Receiver Unit (Distant Location):**
    - Connect the other end of the Cat5/Cat6 Ethernet cable to the **IR CAT5** port on the Receiver unit.
    - Connect up to three IR Blaster/Emitter Wires to the **IR OUT1**, **IR OUT2**, and **IR OUT3** ports on the Receiver unit.
    - Attach these IR blasters directly over the IR receiver windows of your distant A/V devices.
3. **Power Connection:** Connect the 5V DC power adapter to the **DC 5V** port on *either* the Transmitter unit *or* the Receiver unit. Plug the adapter into a power outlet. The system is designed to share power over the Ethernet cable, so only one power source is required.

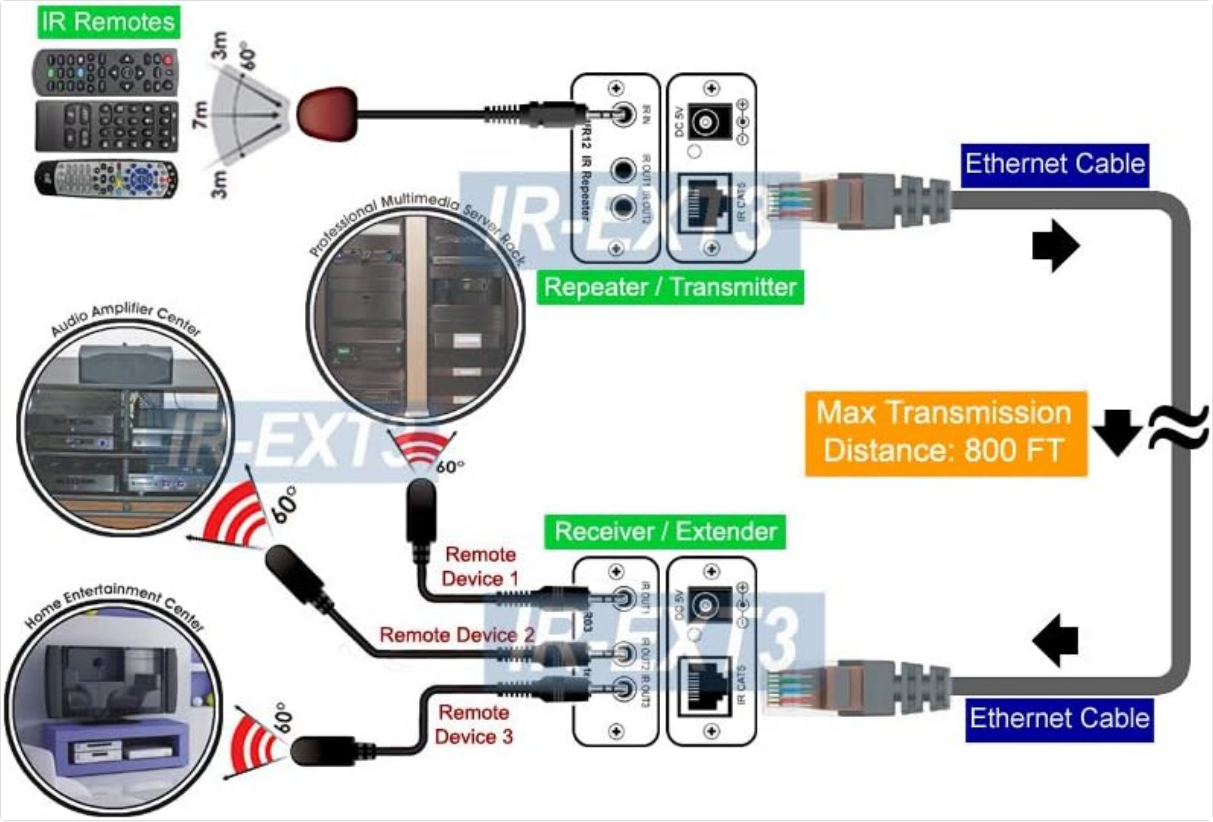


**Image 4.3:** IR-EXT3 Full System Connection Diagram. This diagram provides a comprehensive view of the long-distance setup, showing the Transmitter and Receiver units connected via an Ethernet cable, with IR sensors and blasters controlling multiple devices.

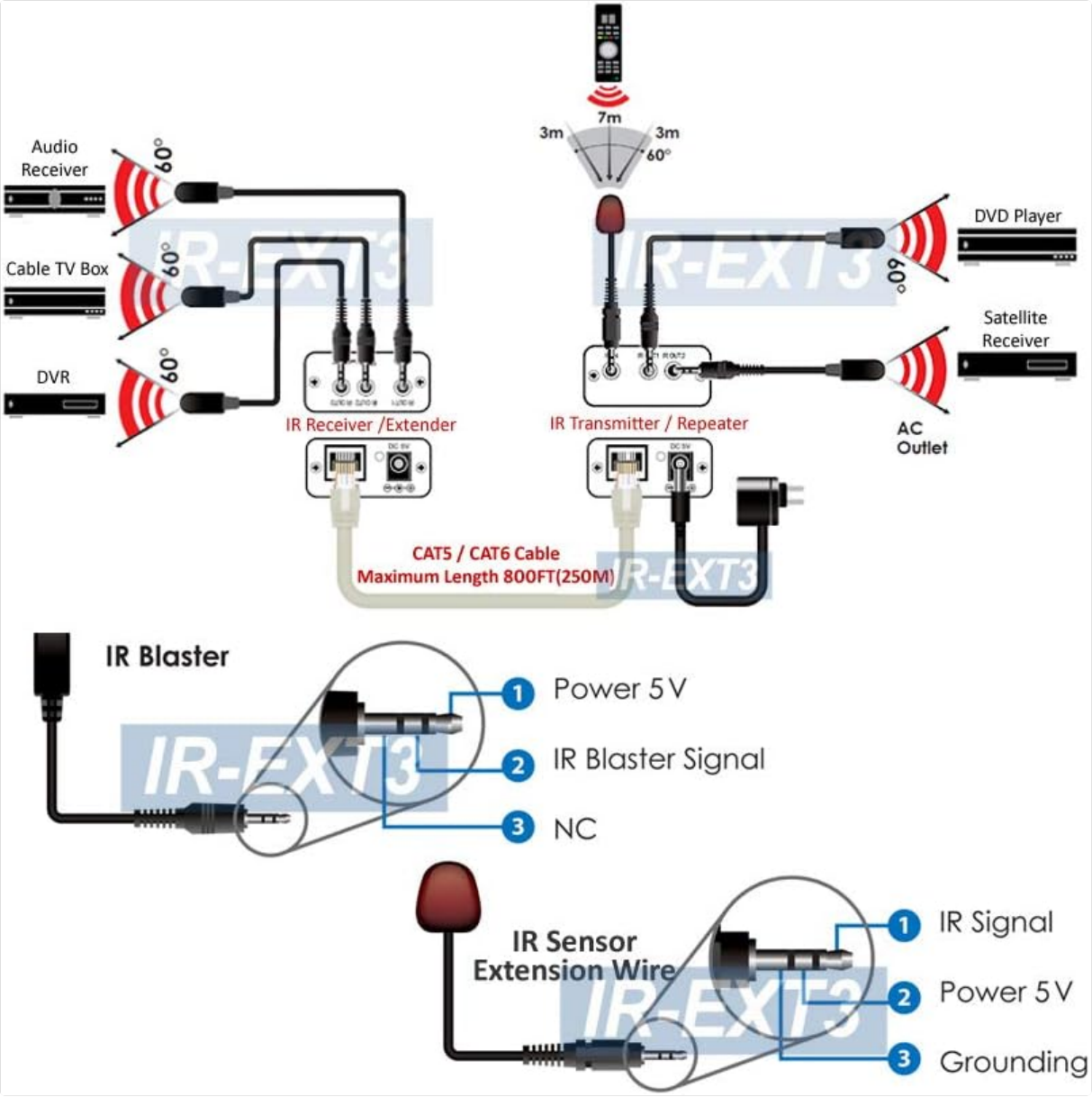


**Image 4.4:** IR Blaster and Sensor Wire Pinout Diagram. This image details the pinout configuration for both the IR Blaster and IR Sensor wires, indicating Power, Signal, and Grounding connections for 3.5mm plugs.

## 5. Operating Instructions

Once the system is set up and powered, operation is straightforward:

1. Ensure all A/V devices you wish to control are powered on and in standby mode.
2. Point your original IR remote control at the IR Sensor Wire connected to the Transmitter unit.
3. Press the desired function button on your remote. The IR signal will be captured by the sensor, transmitted through the Cat5/Cat6 cable, and then re-emitted by the IR Blaster/Emitter Wires to control your A/V devices.
4. Confirm that your A/V devices respond to the remote commands.

**Note:** The IR sensor has a reception angle of approximately 60 degrees and a range of up to 7 meters (23 feet). Ensure your remote control is within this range and angle for optimal performance.

## 6. Maintenance

To ensure the longevity and optimal performance of your IR extender kit, follow these simple maintenance

guidelines:

- Keep the units and wires clean and free from dust. Use a soft, dry cloth for cleaning.
- Avoid placing the units in areas with extreme temperatures, high humidity, or direct sunlight.
- Ensure all cable connections are secure and free from kinks or damage.
- Do not attempt to open or repair the units yourself, as this may void the warranty and cause damage.

## 7. Troubleshooting

If you encounter issues with your IR extender kit, please refer to the following common problems and solutions:

| Problem | Possible Cause / Solution |
| --- | --- |
| **No response from A/V devices.** | ◦ Ensure the power adapter is connected and the power indicator light on the unit is on.<br>◦ Verify that the IR Sensor Wire is correctly plugged into the Transmitter's**IR IN** port and positioned to receive remote signals.<br>◦ Check that the IR Blaster/Emitter Wires are securely connected to the**IR OUT** ports and positioned directly over the IR receiver windows of your A/V devices.<br>◦ Confirm the Cat5/Cat6 cable is properly connected between the Transmitter and Receiver units (for long-distance setup).<br>◦ Test with fresh batteries in your remote control. |
| **Intermittent control or poor range.** | ◦ Ensure the IR Sensor is not obstructed and is within direct line of sight of your remote.<br>◦ Reposition the IR Blaster/Emitter Wires to ensure they are directly over the A/V device's IR receiver.<br>◦ Check the Cat5/Cat6 cable for damage or loose connections.<br>◦ Avoid strong light sources (e.g., direct sunlight, plasma TVs) near the IR sensor, as they can interfere with IR signals. |
| **Power indicator light is off.** | ◦ Verify the power adapter is securely connected to the unit and a working power outlet.<br>◦ If using the long-distance setup, ensure the Cat5/Cat6 cable is properly connected, as power is shared between units.<br>◦ Try connecting the power adapter to the other unit (if using both TX and RX). |

## 8. Specifications

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| --- | --- |
| **Model Number** | IR-EXT3 |
| **Brand** | AllAboutAdapters |
| **Wireless Communication Standard** | Infrared (IR) |

| | |
|---|---|
| **Extension Cable Type** | Cat5, Cat5e, or Cat6 Ethernet Cable |
| **Maximum Extension Distance** | 800 feet (250 meters) |
| **Supported Devices** | Up to 5 A/V devices (2 local via TX, 3 distant via RX) |
| **IR Sensor Wire Length** | 6.5 feet |
| **IR Blaster/Emitter Wire Length** | 6.5 feet |
| **Power Supply** | DC 5V (single adapter powers both units) |
| **Item Weight** | 15.8 ounces (approx.) |

## 9. Warranty and Support

For warranty information or technical support, please contact AllAboutAdapters directly through their official website or the retailer from whom you purchased the product. Please have your model number (IR-EXT3) and purchase details ready when contacting support.