Describing the IR Modulator/Demodulator

The **IRD** is bidirectional and is designed to be part of a chain of signal transmission where an IR signal must be modulated or demodulated to accommodate devices that require either a modulated or a demodulated signal, such as, the **TP-574**, **TP-573**, or a Kramer RC series room controller.

The **IRD** is powered externally by a compatible device, for example, the **TP-573**. Power is received via the female, 3.5mm mini jack socket on the **IRD**.

Connecting the IR Modulator/Demodulator

The **IRD** can be connected as shown in **Figure 1**.

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**Figure 1**: The IR Modulator/Demodulator Example Connection Diagrams
Compatibility

The IRD is compatible with the following Kramer devices:

- TP-573 and TP-574
- TP-581 and TP-582
- SL, RC and PL series

Modifying a Cable to Connect to a Room Controller

Connecting to a Room Controller with a terminal block connection requires a custom cable.

To connect to a Room Controller using the IRD:

1. Cut the male 3.5mm mini jack connector from a C-A35M/A35F cable.
2. Separate the two wires and strip approximately 7mm of insulation from the two wires.
3. Connect the wire with the stripe to the IROUT terminal block on the Room Controller.
4. Connect the wire with no stripe to the GND terminal block on the Room Controller.

Technical Specifications

| INPUTS/OUTPUTS: | 1 3.5mm mini jack (M)  
|                | 1 3.3mm mini jack (F) |
| FREQUENCY:     | 38kHz |
| POWER CONSUMPTION: | 3.3V DC, 25mA |
| OPERATING TEMPERATURE: | 0° to +40°C (32° to 104°F) |
| STORAGE TEMPERATURE: | -40° to +75°C (-40° to 158°F) |
| HUMIDITY: | 10% to 90%, RHL non-condensing |
| DIMENSIONS: | 4.6cm x 1.7cm x 1.4cm (1.81” x 0.67” x 0.55”) W, D, H |
| WEIGHT: | 0.028kg (1oz) approx. |
| OPTIONS: | C-A35M/IR—IR Receiver cable 50ft  
|          | C-A35M/IRE—IR Emitter cable 10ft  
|          | C-A35M/A35M—Extension cable 50ft  
|          | C-A35M/A35F—Extension cable 50ft (to be modified to connect to a Room Controller) |