INSTALLATION INSTRUCTIONS

792-10
POWER MODULE

The 792-10 is a multipurpose device designed for use in the following applications:

1. As an output amplifier and power source to convert Xantech 3-wire IR Receivers to 2-wire PHANTOM POWER operation.

2. As an output amplifier for any Xantech IR Receiver or Controller to drive large numbers of emitters when plugged into one or more 790-00 passive Connecting Blocks.

FEATURES AND SPECIFICATIONS

- Phantom Power and/or Current booster modes.
- Phantom mode powers the 291-10, 480-00, 490 and 780-10 series IR receivers for 2-wire operation.
- Screw terminals provide for wired input connections.
- 3.5 mm mono mini jack emitter IR OUT port.
- Low current mode drives up to 4 emitters in series.
- High current mode drives up to 100 emitters in parallel through 790-00 Connecting Blocks.
- Maximum peak output current - Low Current mode: 100 mA.
- Maximum peak output current - High Current mode: 1 A.
- 2.1mm coaxial DC power jack (+12V).
- Requires a 781RG or a 782-00 power supply.
- Dimensions: 3-5/8" L x 1-5/8" W x 1" D.

GENERAL

The input and output parameters for setting Normal 3-wire, Phantom 2-wire and Output Current modes are configured by setting the DIP switches. These switches are accessible through the slot in the case.

- In the **Normal 3-Wire** mode, +12V is applied to Xantech IR Receivers and Keypads on a third wire in the same manner as on Xantech Connecting Blocks.
- In the **Phantom 2-Wire** mode, +12V is applied to the IR Receivers on the same wire that carries the IR control signal.
- In the **Low Current** mode, the 792-10 IR OUT jack will drive a single or dual emitter or connecting blocks in the same manner as an IR receiver.
- In the **High Current** mode the 792-10 IR OUT jack will drive up to 10 Model 790-00 Connecting Blocks, each having up to ten emitters connected to it.

**CAUTION:** *Do not plug single or dual emitters into the IR OUT jack when the 792-10 dip switches are set to the High Current mode. To do so will destroy emitters!*
INSTALLATION

Set the DIP switches to the desired mode, using the chart below. Check your settings carefully to be sure they are correct.

NOTE: Do not connect the power supply until all switches are set & all other connections are made.

<table>
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<td>HIGH CURRENT</td>
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<td>PHANTOM 2-WIRE</td>
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<tr>
<td>LOW CURRENT</td>
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<tr>
<td>HIGH CURRENT</td>
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Fig. 2 DIP Switch Setting Chart

Phantom Power Connections

Some existing installations may have only 2 wires (such as coax) going to a remote room. Fig. 3 illustrates Phantom Power connections in a basic system:

- Although a 780-10 is shown, other Xantech 3-wire IR Receivers may be used.
- In each case, the OUTPUT and GND leads of the IR receiver are jumpered together and connected, through the inter-room cable, to the GND terminal of the 792. The +12V lead is connected to the IN terminal of the 792.
- Additional 780’s or other Xantech IR Receivers may be wired in parallel at the IN and GND terminals of the 792, up to a maximum of three. More than this may cause unreliable results.
- If you have more than three IR receivers, connect additional 792-10’s as shown in Fig. 4

NOTE: Phantom power mode is not recommended unless faced with an existing coax or other 2-wire situation. For new construction, always pull three wires and use the normal 3-wire connections for best IR operation.

Multiple-Emitter High Current Operation

The high current output capability of the 792-10 allows up to 100 single or 100 dual emitters to be driven. Fig. 5 illustrates the necessary connections:

- The IR OUT jack of the 792-10 is connected to multiple 790-00 Connecting Blocks as shown. (The output of the 792-10 is also available between the IR OUT and GND screw terminals, in the event a wired connection is needed.)
- Set the DIP switches to the 3-Wire High Current mode. Refer to Fig 2.
- A high current power supply, model 782-00, is used to supply the high peak currents required.

MOUNTING - Holes are provided in the end flanges of the 792-10 for mounting. Use the 2 screws provided to secure it to any flat surface.

NOTE: With any of these systems, be sure the power supply is plugged into an un-switched AC outlet. This maintains the IR system in “standby” operation so that power-on commands can be sent to the controlled equipment.