

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.

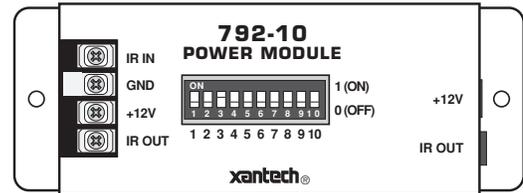


Fig.1 792-10 Power Module

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.

PLEASE NOTE: The Xantech Smart Pads and the CFL Friendly IR receivers, will not operate with the 2-wire Phantom Power connection!

- 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.

DIP SWITCH SETTINGS		SWITCHES									
INPUT MODE	OUTPUT MODE	1	2	3	4	5	6	7	8	9	10
NORMAL 3-WIRE	LOW CURRENT	1	1	0	0	0	0	0	0	0	0
	HIGH CURRENT	1	1	0	0	0	0	0	1	1	1
PHANTOM 2-WIRE	LOW CURRENT	0	0	1	0	0	0	0	0	0	0
	HIGH CURRENT	0	0	1	0	0	0	0	1	1	1

Fig. 2 DIP Switch Setting Chart

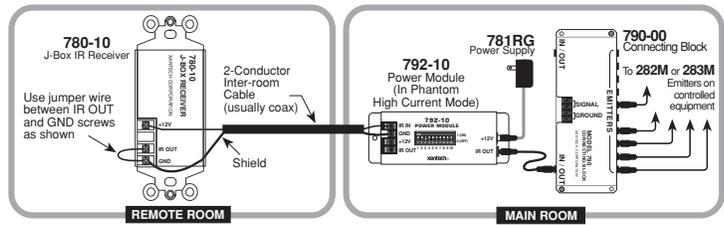


Fig.3 A Basic Phantom Powered System

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.

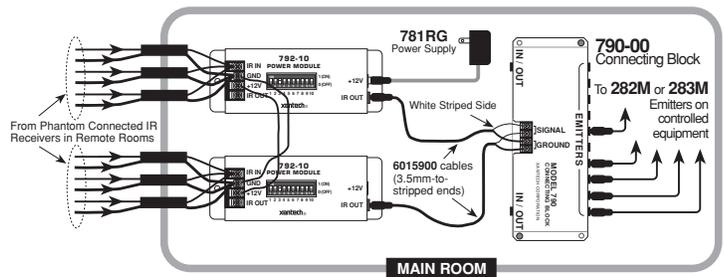


Fig.4 Using Additional 792-10's

- 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.

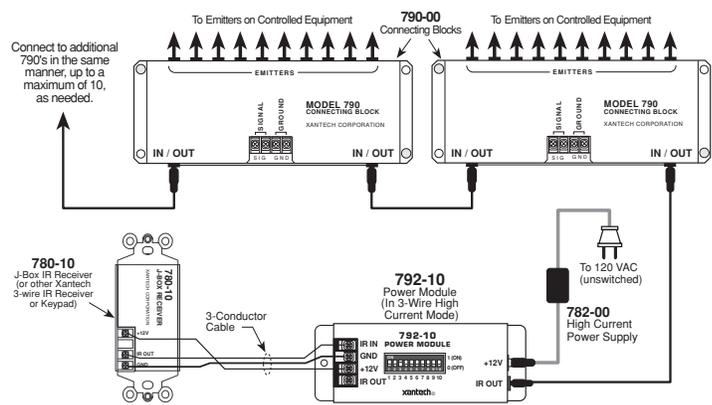


Fig.5 Driving Multiple-Emitters in High Current Mode

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.