

INSTALLATION INSTRUCTIONS

291-10 HIDDEN LINK™ INFRARED RECEIVER

The 291-10 is a small shelf-top infrared repeater assembly. It includes a 291-00 IR Receiver and a CB12 Connecting Block. The 291-00 is equipped with a 7-foot cable and 3.5 mm stereo mini plug, which is plugged directly into the "IR RCVR" jack on the CB12. It can also be plugged into the "AUX" or "IR RCVR" jack of other Xantech connecting blocks, such as the models 789-44, CB-60 and 791-44. The 291-10 is primarily intended for use in installations where the connecting block is within reach of its 7-foot cable — as when installing the 291-10 in a cabinet where the controlled equipment is behind closed doors.

A typical system is shown in **Fig. 1**. Refer to this diagram when making connections:

In this system a 286M Dual Blink-IR Emitter is shown connected to the "OUT" jack. A single emitter could also be used, such as the model 282M or 283M. If expansion beyond two emitters is required, use a Xantech 789-44, CB-60 or 791-44 Connecting Block in place of the CB12. Do not use the CB12 in this case.

291-00 Cable Connections

291's may also be used where the 7-foot cable is not long enough. Simply cut off the mini plug, strip the leads and splice them to a 3-conductor extension cable with a terminal block or other means. Then connect the extension cable to the 3-terminal block on the CB12 as shown in **Fig. 2**.

Caution: The 291's have been built with two wire color codes, as shown in tables 1 and 2.

Be sure to identify the version you have by referring to the insulator color on the mini plug, the label on the bottom of the unit or the yellow label attached to the cable near the mini plug.

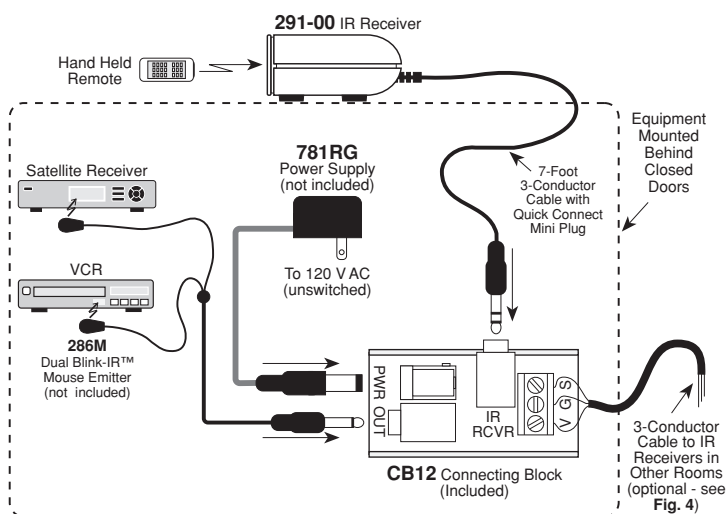


Fig. 1 The 291-10 in a Typical IR Repeater System

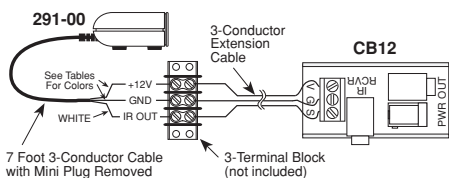


Fig. 2

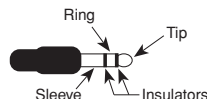
Table 1 Black Insulator (older units)

PLUG	CABLE LEADS	CIRCUIT ITEM
RING	RED	GROUND
TIP	WHITE	SIGNAL
SLEEVE	BLACK	+ 12 V

Table 2 Red Insulator (new units)

PLUG	CABLE LEADS	CIRCUIT ITEM
RING	BLACK	GROUND
TIP	WHITE	SIGNAL
SLEEVE	RED	+ 12 V

Fig. 3 Stereo Mini Plug



Connecting IR Receivers From Other Rooms

The CB12 Connecting Block, supplied with the 291-10, has a three terminal input strip for connection of external infrared receivers should you wish to control your equipment from other rooms.

1. The terminals are marked V G S. (**V**= +12V, **G**=Ground, and **S**=IR Signal).
2. Make connections as shown in Fig. 4. Run a 3-conductor cable (24 to 18 gauge wire, stranded or solid) from each remote room to the VGS terminals on the CB12.
3. When you use a 291 IR Receiver in a remote room, do not plug in a power supply or use the "OUT" jack on the CB12, as shown in Fig. 4.
4. You may use more IR receivers, connected in the same manner, up to a maximum of 12.

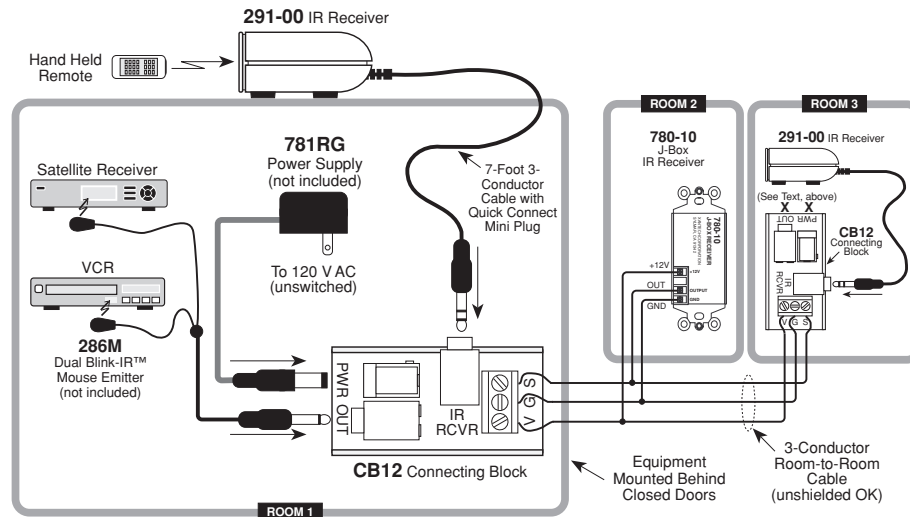


Fig. 4 3-Conductor Cable to IR Receivers in Other Rooms

TROUBLE SHOOTING:

1. Perhaps the most common problem you may encounter is stray IR (infrared) or RF (Radio Frequency) interference preventing proper operation of the controlled equipment.
Examples of such interference are:
 - Fluorescent, Compact Fluorescent, Neon or Halogen lights, Neon Art, and light dimmers.
 - Direct or reflected sunlight.
 - Infrared security sensors (active types).
 - RF radiation from TV sets that may be close to the 291-00 IR Receiver.
2. You can confirm the source of the interference by temporarily turning off the TV set, isolating the 291-00 Receiver from all sunlight and turning off all lights, light dimmers and Infrared security systems. Then check to see if the 291-00 operates the component.
 - Sometimes interference will cause the red Talk-Back LED on the front of the 291-00 to blink dimly, intermittently, or continuously.
 - **The Talk-Back LED should only blink when you are sending infrared commands to the 291-00 from a remote control!**
 - It may be necessary to move either the interfering source or the 291-00 IR receiver to achieve proper operation.

3. If the red Talk-Back LED or the 286M Emitters do not blink when you are sending IR commands to the 291-00 from a remote control, check the following:
 - Make sure the 781RG power supply is plugged securely into a live 120V AC wall outlet.
 - Be sure the stereo mini plug of the 291-00 IR Receiver is plugged into the "IR RCVR" jack on the CB12 Connecting Block, not into the "OUT" jack.
 - Check to see that all the mini plugs are properly seated into the mini jacks on the CB12 Connecting Block.
4. If the 286M Emitters blink, but the component does not respond, reposition the 286M Emitter(s). They may not be located directly over the component's infrared receiving "window". Consult the owner's manual of the unit or the manufacturer for the exact location of the infrared "window".
5. If the system still does not work, contact the dealer from whom you purchased the 291-10 Hidden Link, or contact XANTECH Technical Support at 800-843-5465.