

xantech®

MODEL

29185D

**Hidden Link™ Shelf Top
CFL/LCD Proof IR Receiver**

INSTALLATION INSTRUCTIONS

DESCRIPTION

The Hidden Link IR Receiver is a small shelf-top infrared repeater assembly. It includes an IR receiver and a CB12 Connecting Block. The Hidden Link IR Receiver is equipped with a 7-foot cable and a 3.5mm 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, CB60, and 791-44. The Hidden Link IR Receiver is primarily intended for use in installations where the connecting block is within reach of its 7-foot cable – as when installing the Hidden Link IR Receiver in a cabinet where the controlled equipment is behind closed doors.

FEATURES

- Very small package, only 2.00"L x 3.15"W x 0.70"H.
- System testing red-talk-back LED.
- Includes CB12 Connecting Block for easy system installation.

SPECIFICATIONS

- Infrared carrier input frequency bandwidth: 30 - 60kHz.
- Reception range: Up to 50 feet, depending on conditions.
- Nominal reception angle: 55 degrees off axis.
- Cable requirements: See "INSTALLATION" below.
- Max. transmission length: 1 mile using 18 gauge wire.
- Maximum current output: 100mA
- Drives IR emitters through Xantech Connecting Blocks, Controllers, etc.
- Dimensions: 2.00"x3.15"x0.70" (51mm x 80mm x 18mm)
- Power requirements: +12VDC, 20mA.

INSTALLATION

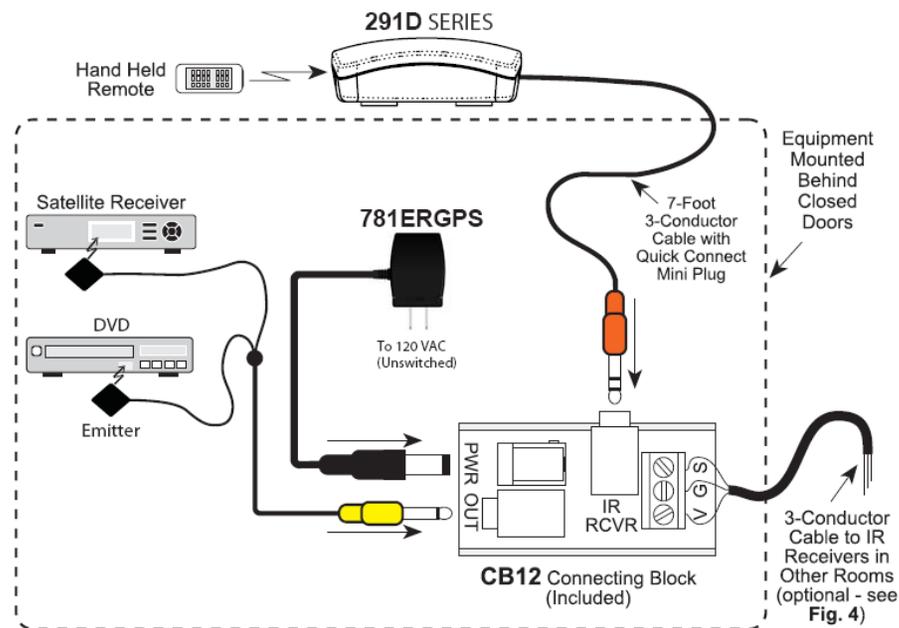
QUICK-START

A typical system will use an IR receiver, several emitters, and a power supply all connected to a connecting block.

1. Connect the IR receiver to the "IR RCVR" port on the connecting block. The 'red' connector is installed to the 'red' plug.
Note: In some extended distances, additional 3-conductor may be required and can be connected to the terminals on the connecting block.
2. Connect the Emitters to the connecting block. The 'yellow' connector is installed to the 'yellow' plug.
3. Connect the power supply to the connecting block.
4. Installation complete

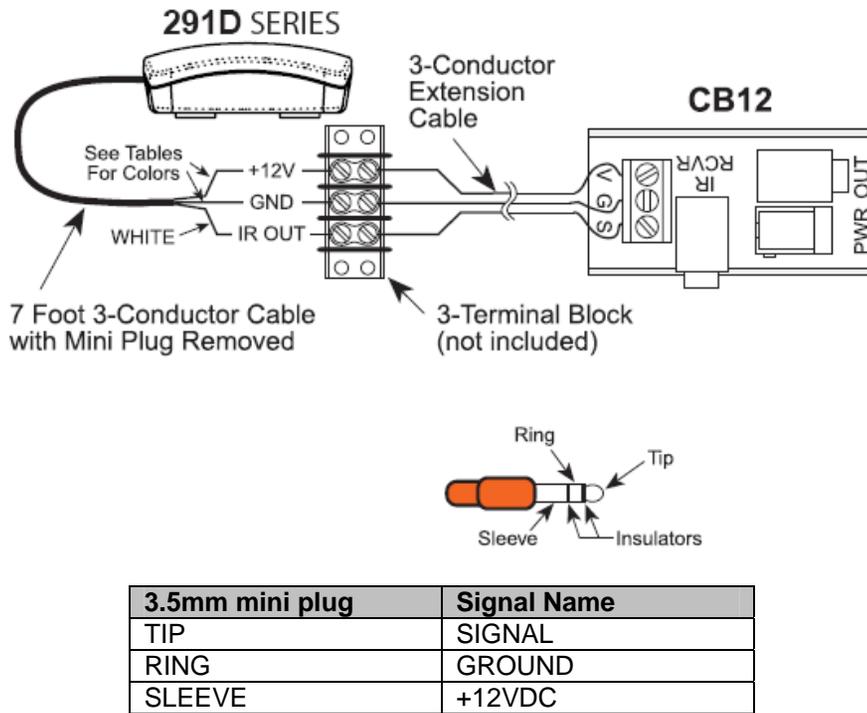
LOCAL SYSTEM APPLICATION

In this system a 286D Dual Blink-IR Designer Emitter is shown connected to the "OUT" jack. A single emitter could also be used, such as the model 282D or 283D. If expansion beyond two emitters is required, use a Xantech 789-44, CB60, or 791-44 Connecting Block in place of the CB12. Do not use the CB12 in this case.



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 the figure below.



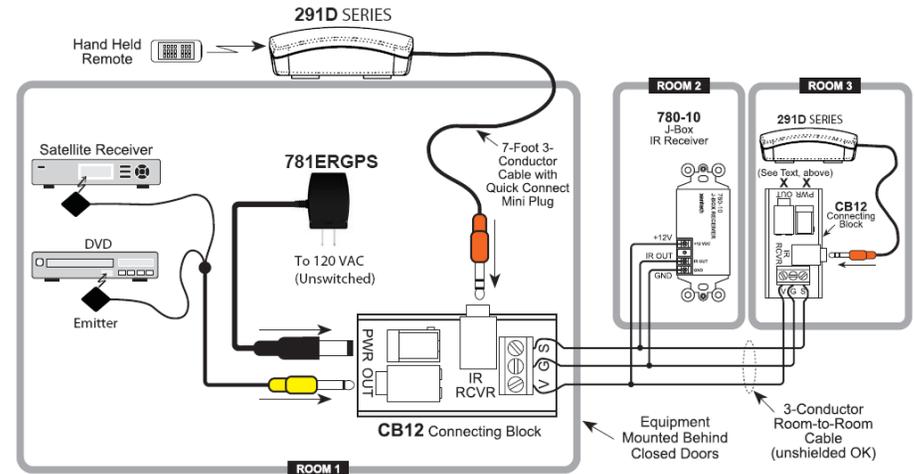
The 3-conductor inter-room cable (24 gauge up to 200', 22 gauge up to 600', 20 gauge up to 2000', 18 gauge up to 5000'), is run to the main room.

While it is possible to make wired connections without the connecting block, it is not recommended. The connecting block reduces installation time, helps to eliminate errors, allows easy troubleshooting and permits easy system upgrades later, if needed.

REMOTE ROOM APPLICATION

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

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



PLACEMENT

The IR receiver should be located so that it is not directly facing a light source such as lamps or displays (standard, LCD, and Plasma). When mounted near a display, it should be flush to the display and away from light reflections that may occur.

ADJUSTING THE IR CARRIER FREQUENCY

The 29185D is factory set to an IR carrier repeat frequency of 38kHz. This will be correct for the majority of installations. However, some manufacturer's components that you wish to control may use different carrier frequencies (such as the RCA DSS receivers that use 56kHz). If such carrier frequencies fall within the range of 32kHz to 56kHz, you can adjust the 29185D to match them for best range performance. The adjustment can be made through the small thumbwheel on the rear of the unit.

To adjust, proceed as follows:

1. First, try the IR receiver in the system. If the system controls all the desired components with adequate range, do not make any adjustments.
2. If the system does not work or has poor range, determine the IR carrier frequency of the product you wish to control. Contact the manufacturer of the product, if necessary, to determine this frequency.
3. Facing the rear of the unit, rotate the thumb-wheel adjustment slightly either left to obtain carrier's less than 38kHz or right to obtain carrier's greater than 38kHz .
4. If you have audio/video equipment in the same system that has different IR carrier frequencies, you will have to adjust the IR receiver to the midway position. For example, some products may operate at 38kHz and others at 56kHz. In this case, set the adjustment in between this range so both products can operate in the system.

Note: Some products are more tolerant of compromised frequency settings than others. You may have to "fine tune" the adjustment to "favor" the least tolerant component for the best performance of all units in the system.

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.
 - 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 Hidden Link IR Receiver.
2. You can confirm the source of the interference by temporarily turning off TV sets, isolating the Hidden Link IR Receiver from all sunlight and turning off all lights, light dimmers and Infrared security systems. Then check to see if the Hidden Link IR Receiver operates the component.

- Sometimes interference will cause the red Talk-Back LED on the front of the Hidden Link IR Receiver to blink dimly, intermittently, or continuously.
 - The Talk-Back Led should only blink when you are sending infrared commands to the Hidden Link IR receiver from a remote control.
 - It may be necessary to move either the interfering source of the Hidden Link IR Receiver to achieve proper operation.
3. If the Talk-Back LED or the 286D Emitters do not blink when you are sending IR commands to the Hidden Link IR Receiver from a remote control, check the following:
 - Make sure the power supply is plugged securely into a live AC electrical outlet.
 - Be sure the stereo mini plug of the Hidden Link 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 286D Emitters blink, but the component does not respond, reposition the 286D 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".

Limited Warranty

Xantech® warrants its products to be free of defects in materials or workmanship. This is a Limited Lifetime warranty from the date of purchase by the original consumer. Any products returned to Xantech and found to be defective by Xantech within the warranty period will be repaired or replaced, at Xantech's option, at no charge. Xantech will not be responsible for the actual cost of installation or removal of the product, nor for any incidental or consequential damages. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you. This warranty gives you specific legal rights. You may have additional legal rights that vary from state to state.

Xantech Corporation

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