

xantech®

MODEL

49085D

**Micro Link™ Peep-Hole Style
CFL/LCD Proof IR Receiver**

INSTALLATION INSTRUCTIONS

DESCRIPTION

The Micro Link IR Receiver is a small peep-hole style infrared repeater assembly. The Micro 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 connecting block, such as the models 789-44, CB60, and 791-44. The Micro 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 Micro Link IR Receiver in a cabinet where the controlled equipment is behind closed doors.

FEATURES & SPECIFICATIONS

- Infrared carrier reception bandwidth: 30 – 60 kHz.
- IR carrier adjustment: 32 to 56 kHz (allows output carrier frequency to be matched to a controlled component for optimum performance).
- IR reception range: > 50 feet.
- Dimensions: 2.75" Length x 0.75" DIA. Bezel is 0.90" DIA.
- Works in normal 3-wire model (12VDC, IR, GND).
- Red talkback LED for system verification.
- RF grid included for EMI interference reduction.
- Drives IR emitters through Xantech Connecting Blocks, Controllers, etc.
- 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

MOUNTING

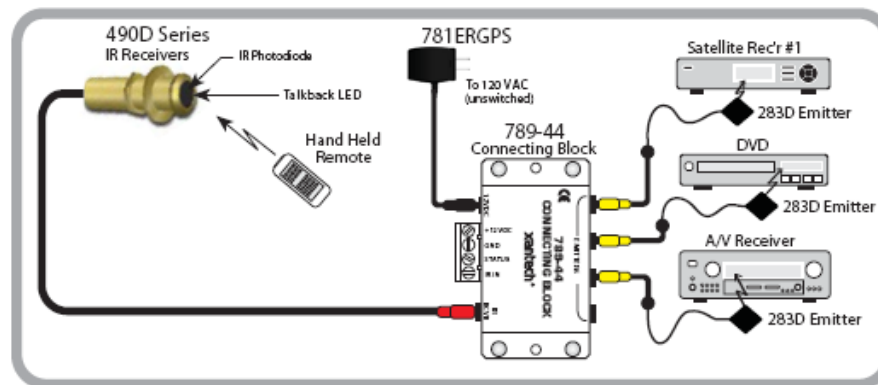
Drill a 3/4" hole in any surface, such as a cabinet panel. Pass the lead and the body of the 490 through the hole and secure from the rear with the nut (supplied).

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.

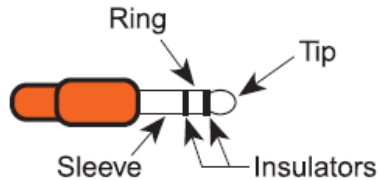
LOCAL SYSTEM APPLICATION

In this system a 283D Blink-IR Designer Emitter is shown connected to the "OUT" jack. If expansion beyond two emitters is required, use a Xantech 789-44, CB60, or 791-44 Connecting Block.



CABLE CONNECTIONS

490'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- or 4-terminal block on the connecting block.



3.5mm mini plug	Signal Name
TIP	SIGNAL
RING	GROUND
SLEEVE	+12VDC

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.

IR CARRIER ADJUSTMENT

The 49085D 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 RCA DSS satellite receivers that use 56kHz). If carrier frequencies fall within the range of 32 kHz to 56 kHz, you can adjust the 49085D to match them for the best range performance. The adjustment can be made through the small opening in the rear.

To adjust, proceed as follows:

1. First, try the 49085D in a repeater system. If it works well with good range, do not make any adjustments!
2. If it does not work or has poor range (less than 15 feet), 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. Using a small blade type screwdriver, rotate the adjustment shaft until the remote control can control the component.
4. If you have products in the same IR system that has different IR carrier frequencies, you will have to adjust the 49085D to a midway position. For example, some may operate at 38kHz and others at 56kHz. In this case, set the adjustment to approximately 47kHz, a midway position.

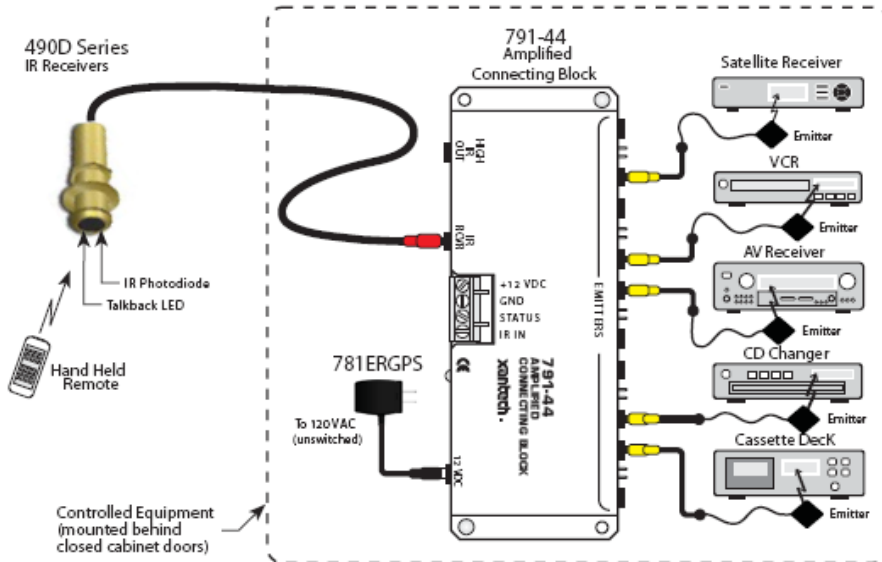
Note: Some products are more tolerant of compromised frequency settings than others. You may have to "fine tune" the adjustment to "favor" the least tolerant component for the best performance of all units in the system.

Clock-wise (CW)	Increase carrier frequency
Counter Clock-wise (CCW)	Decrease carrier frequency

LARGE SYSTEM APPLICATION

The 490D Series IR receiver is compatible with all Xantech Connecting Blocks. Different connecting blocks are provided for application specific situations. For instance, in the diagram below, a 791-44 connecting block is used to control several components.

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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". Consul 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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