

INSTALLATION INSTRUCTIONS

480 SERIES DINKY LINK™ INFRARED RECEIVERS

These small IR receivers have been designed for mounting in very small spaces. They may be mounted under shelf edges, cabinet ledges, in wall speakers, etc. - anywhere an inconspicuous appearance is desired. The high sensitivity of these receivers allows placement behind speakers grilles and still receive IR commands up to 20 feet away. If longer range is necessary, a 3/8-inch hole must be drilled in the grille to allow unobstructed entry of the IR signal. The model versions covered by these instructions are as follows:

- 480B-00** Standard version, with black case. Has a 7 foot, three-conductor ribbon cable with stripped and tinned ends.
- 480W-00** Same as the 480B-00 except with white case.
- 480B-30** Quick connect version of the 480B-00. 7-foot cable with 3.5 mm stereo mini plug for direct plug-in to Xantech Connecting Blocks, such as the CB12, CB20, 789-44, 791-44, etc.
- 480W-30** Same as 480B-30 except with white case.

Each version in the 480 series has the same features and specifications as follows:

FEATURES

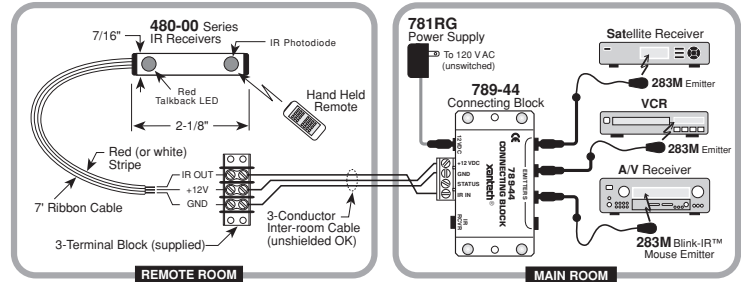
- Very small package, only 7/16" x 5/16" x 2-1/8".
- Works in normal 3-wire mode or 2-wire phantom power mode.
- Phantom mode requires 792-10 power module.
- System testing red talk-back LED.
- Includes 3-Terminal Block for easy extension of 7 foot ribbon cable.
- 20 units may be powered by one 781RG power supply.
- SUN480 Sunscreen filters available separately. Order these to help with sunlight and stray IR problems. They fit easily over the photodiode opening.

SPECIFICATIONS

- Infrared carrier frequency bandwidth: 30 - 100 kHz.
- Reception range: up to 30 feet, depending on local conditions.
- Nominal reception angle: 55 degrees off axis.
- Cable requirements: see "INSTALLATION" on following page (unshielded OK).
- Maximum transmission length: One mile using 18 gauge wire.
- Maximum current output: 100 mA.
- Drives IR emitters through Xantech Connecting Blocks, Controllers, etc.
- Dimensions: 7/16" x 5/16" x 2-1/8".
- Power requirements: 12 volts DC @ 10 mA.

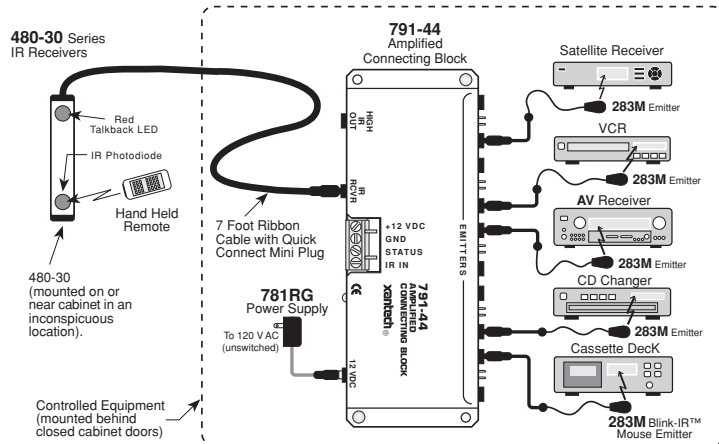
INSTALLATION

Model 480-00 Series. These units are intended to be wired to the input terminals of Xantech Connecting Blocks or other devices, using the supplied 3-terminal block in the remote room location. A 3-conductor 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. Connections are then made to a Xantech connecting block, power supply and emitters as shown in the following illustration of a typical basic system:



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. Input connections must be made as illustrated. To extend the Emitter wires to a more distant location, you may splice in 2-conductor wire, in the wire gauges mentioned before, as needed.

Model 480-30 Series. These units, equipped with a 7-foot cable and 3.5 mm stereo type mini plug, are plugged directly into the "IR RCVR" or "AUX" jack on Xantech Connecting Blocks, such as the CB12, CB20, 789-44, 791-44, etc. The 480-30 should be used in installations where the connecting block is within reach of the 7-foot cable -- such as when installing the 480-30 on a cabinet where the controlled equipment is behind closed doors.



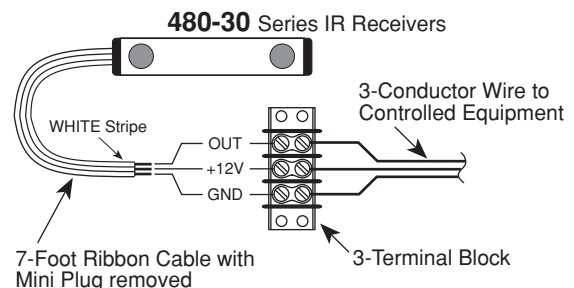
A typical system, with a 480-30, 781RG Power Supply and 282M Emitters plugged into a 791-44 Amplified Connecting Block, is shown in the diagram to the left.

Mounting: The 480-00 and 480-30 series can be mounted to any flat surface, using the 3/8" x 1-3/4" two-sided adhesive tape supplied. Two screws are included for mounting the 3-terminal block provided with the 480-00 series. Affix the Mini-Emitters, such as the 282, 283, 284 and 286 series, to the IR sensor windows of the controlled equipment in accord with the instructions that come with them.

480-30 Cable Connections

480-30's may also be used where the 7-foot lead is not long enough. In this case, you would simply cut off the mini plug, strip the leads and connect them to a 3-terminal block in the same way as you would for the 480-00. To do this, you will need the lead identification as given in the following table and diagram:

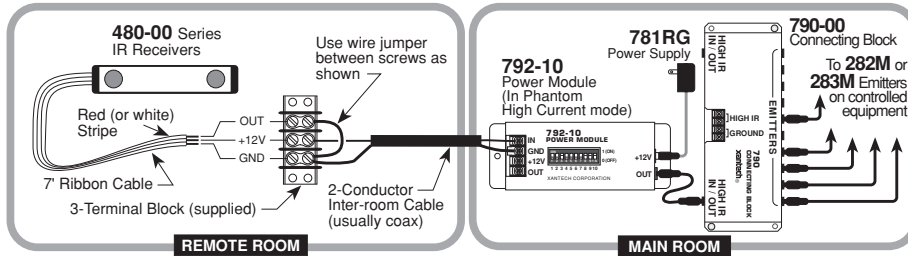
Plug	Ribbon Cable	Circuit Item
Ring	Outer Lead	Ground
Tip	White Stripe	Signal
Sleeve	Center Lead	+ 12 V



PHANTOM POWER CONNECTIONS

Some existing installations may have only 2 wires (such as coax) going to a remote room. The 480, when used with a 792-10 Power Module, may be connected for 2-wire phantom power operation as follows:

Additional 480's may be wired in parallel at the 3-terminal block, up to a maximum of three. More than this may cause unreliable results.



CAUTION: With any of these systems, be sure the 781 power supply is plugged into an un-switched AC outlet. This maintains the 480 system in "standby" operation so that power-on commands can be sent to the controlled equipment.