INSTALLATION INSTRUCTIONS
SMR1 AND SMR1P
SURFACE MOUNT IR RECEIVERS

SONANCE
The Leader in Architectural Audio™

The **SMR1** and **SMR1P** are small IR receivers that have been designed primarily for mounting in panels, doors, cabinets, etc. for control of A/V equipment behind closed doors. They may be mounted in walls, ceilings, wall speakers, etc., virtually anywhere an inconspicuous appearance is desired. Their high sensitivity allows placement behind speaker grilles and still receive IR commands up to 25 feet away. If longer range is necessary, a 1/2-inch hole must be drilled in the grille to allow unobstructed entry of the IR signal.

SMR1 - Standard version, with brass bezel, and a 7 Foot three-conductor ribbon cable.
**SMR1P** - Same as **SMR1** with a mini phone plug on the end of the cable.

FEATURES
- Very small size, only 2 1/4 inches deep.
- Works in a standard 3-wire system.
- System testing talk-back LED.
- Includes 3-Terminal Block for easy extension of the 7 Foot ribbon cable (not in **SMR1P**).
- 12 units may be powered by one **PS1** power supply.
- RF Grid included for EMI interference reduction.

SPECIFICATIONS
- Infrared modulation frequency bandwidth: 30 - 100 kHz.
- Reception range: up to 25 feet.
- Nominal reception angle: $\pm$ 55 degrees off axis.
- Cable requirements: 3-conductor. Use 24 gauge up to 200', 22 gauge up to 600', 20 gauge up to 2000', 18 gauge up to 5000' -- unshielded OK.
- Maximum current output: 100 mA.
- Dimensions: 1/2" diameter x 2 1/4" deep.
- Power requirements: 12 volts DC @ 10 mA.
- Maximum number of directly driven IR Emitters: 4 (8 if 4 E2 emitters are used).

INSTALLATION
SMR1 is intended to be wired to the input terminals of Sonance Connecting Blocks or other devices, using the supplied 3-terminal block in the remote room location. A 3-conductor cable (refer to specifications above) is run to the main room. Connections are then made to a Sonance connecting block, power supply, and emitters as shown in the following illustration of a typical basic system:
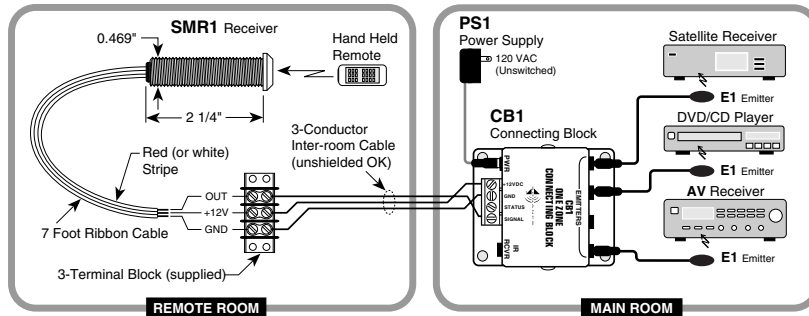
While it is possible to make wired connections without the connecting block, it is not recommended. The connecting block reduces installation time, helps to eliminate errors, allows easy troubleshooting, and permits easy system upgrades later, if needed. Input connections must be made as illustrated.

TIME SAVING TIP

The threads on the chassis of the **SMR1** and **SMR1P** are coarse for ease of installation. To further save on installation time, it is recommended that the lens cap is removed and the nut is set to a predetemined length (see table on right). Place the **SMR1** or **SMR1P** into the predrilled 1/2" diameter knockout in the speaker baffel. Then reattach the lens cap (and lens) from the front. Twist the tube counterclockwise in the nut to lock the **SMR1** or **SMR1P** in place. This can greatly ease installation and save you time.
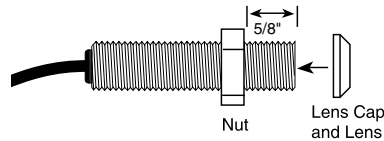
SPEAKER TYPE	PRESET LENGTH
C SERIES	5/8" (16.5MM)
SYMPHONY	1/2" (12.7MM)
VIRTUOSO	5/8" (16.5MM)

The **SMR1P** is the same as the **SMR1** except it's 7-foot cable is terminated with a 3.5 mm stereo type mini plug. It plugs directly into the "IR RCVR" jack on Sonance Connecting Blocks, such as the **CB1**, **CB2Z**, **ACB1**, etc. The **SMR1P** should be used in installations where the connecting block is within reach of the 7-foot cable -- such as when installing the **SMR1P** in a cabinet where the controlled equipment is behind closed doors.

A typical system, with an **SMR1P**, **PS1** Power Supply, and **E1** Emitters plugged into an **ACB1** Amplified Connecting Block, is shown in the following diagram:
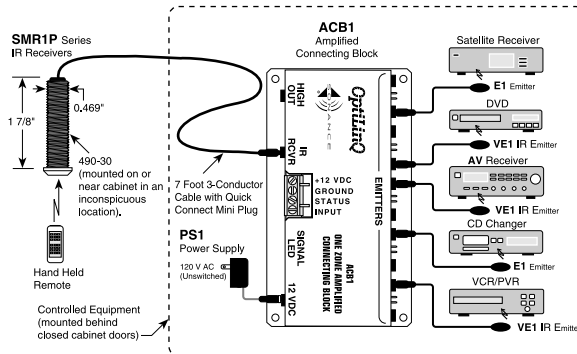

Mounting: Drill a 1/2" hole in any flat surface, such as a cabinet panel. Pass the lead and the body of the **SMR1P** through the hole and secure from the rear with the nut (supplied).

Affix the Mini-Emitters, such as the **E1**, **E2**, **VE1**, and **VE2** series, to the IR sensor windows of the controlled equipment in accordance with the instructions that come with them.

SMR1P Cable Connections

The **SMR1P** may also be used where the 7-foot lead is not long enough. In this case, 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 **SMR1**. See product label for wire color code.
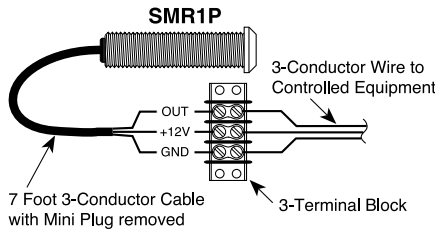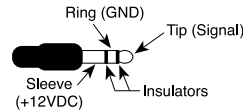
NOTE: With any of these systems, be sure the **PS1** power supply is plugged into an un-switched AC outlet. This maintains the **SMR1/SMR1P** system in "standby" operation so that power-on commands can be sent to the controlled equipment.

OPTILINQ RECEIVER TROUBLE SHOOTING TIPS:
1. The most common problem encountered is stray IR or electronic interference or noise disrupting the IR signal from the remote control preventing proper transmission to the source equipment.
Examples of such interference:
   • Fluorescent, Halogen or Neon lights, and light dimmers.
   • Direct or reflected sunlight.
   • Electronic noise from tube or flat panel televisions.
   • Infrared security sensors.
2. Determine possible sources of interference by turning off lights, TV sets, and alarm systems as well as isolating the receiver from any sunlight. Then test the operation of the system.
   • Sometimes interference will cause the talk-back LED to blink or illuminate dimly indicating noise entering the receiver.
   • The talk-back LED should ONLY blink when IR commands are sent from a remote control to the receiver.
   • When the source of interference is determined, it may be necessary to move either the source of the noise or the receiver to achieve proper operation.
3. If the talk-back LED on the receiver does NOT blink when IR commands are sent from the control, check the following:
   • Make sure the **PS1** power supply is securely plugged into a live 120V AC wall outlet.
   • Be sure that if you are using a receiver with a stereo mini plug that it is plugged into the IR RCVR jack and not any of the EMMITER jacks.
   • Check to see that all mini plugs are properly seated into the jacks and that the wires are securely attached to the screw header.
4. If using a **VE1** or **VE2** and it is flashing but the component is not responding, make sure that the emmiter is located directly over the IR receiver of the component. Consult the owners manual of the component or the manufacturer if you are having trouble locating the receiver.
5. If you continue to have problems with your OptiLinQ system, please call our Technical Assistance Department at:
  (800) 582-0772 or (949) 492-7777 between 7 AM and 5 PM PST.

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