

CROWN® RPA-RMT

Installation Guide

Introduction

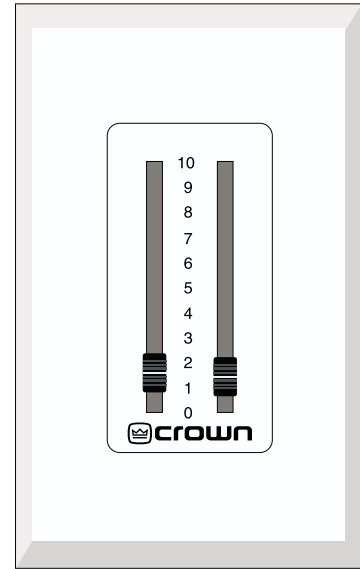
The RPA-RMT is a two-channel, wall-mount remote volume control for use with the P.I.P.-RPA. It was designed to offer an attractive, inexpensive method for controlling audio levels in a system that uses Crown amplifiers fitted with P.I.P.-RPA modules. The P.I.P.-RPA has four remote control inputs, so two RPA-RMTs are used to control the four channels.

Resistors

Installations often require control over the volume range of the system. To

limit the system's maximum output, simply turn down volume controls on the *PIP™* or the amplifier. To control minimum output, you will need to install resistors in the sockets located on the back of the RPA-RMT.

One resistor socket in a parallel circuit is provided for each potentiometer. When the potentiometer pulls the output voltage below the resistor value, the resistor allows current to pass which will control the minimum output for that channel.



The resistor that you install determines how much attenuation is available. With no resistor installed, the RPA-RMT will provide full attenuation. Thirty-two resistors with eight different values are included with each pair of RPA-RMTs. These eight resistor values range from 390 to 2.7 K ohms and will satisfy most applications. Figure 2 shows the corresponding maximum attenuation for several resistor values.

Once you know the attenuation requirements for your system, use Figure 2 to determine which resistors are needed. An equation is provided in the *P.I.P.-RPA Reference Manual* to calculate other resistor values.

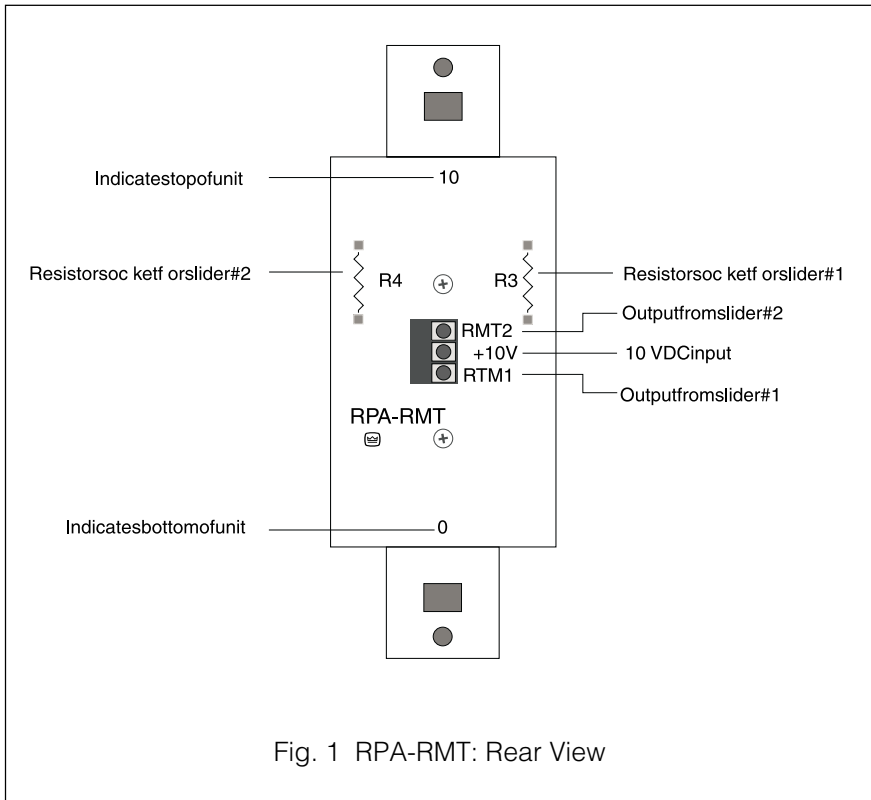


Fig. 1 RPA-RMT: Rear View

Limit Resistor Value	Maximum Attenuation	ColorCode
180Ω	3 dB	BRN-GRY-BRN-GLD
390Ω	6 dB	ORG-WHT-BRN-GLD
620Ω	9 dB	BLU-RED-BRN-GLD
820Ω	12dB	GRY-RED-BRN-GLD
1.1kΩ	15dB	BRN-BRN-RED-GLD
1.3kΩ	18dB	BRN-ORG-RED-GLD
1.6kΩ	21dB	BRN-BLU-RED-GLD
2k Ω	24dB	BRED-BLK-RED-GLD
2.7kΩ	30dB	RED-VIO-RED-GLD
3.9kΩ	36dB	ORG-WHT-RED-GLD
5.1kΩ	42dB	BGRN-BRN-REDGLD
6.8kΩ	48dB	BBLU-GR Y-RED-GLD
9.1kΩ	54dB	WHT-BRN-RED-GLD
13kΩ	60dB	BBRN-ORG-ORG-GLD

I N C L U D E D

Fig. 2 Remote Control Resistance/Voltage

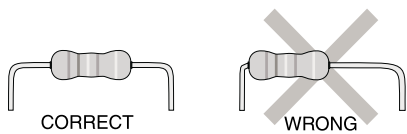


Fig. 3 Bending the Resistor Leads

To install a resistor, trim the leads leaving plenty to span the distance between the sockets and enough to insert into each socket. Bend the leads as shown in Figure 3. Be sure not to bend the leads near the body of the resistor. Push the leads down firmly into the sockets. That's it.

Wiring

Each RPA-RMT has two slide potentiometers. They can be used to control any two of the four audio inputs on the P.I.P.-RPA, or they can be ganged to control more channels. When using two channels of one amplifier to feed different rooms, the RPA-RMT will often be wired to control inputs A and B, or C and D (see Figure 4). Here, *PIP* inputs A and B are set to feed the amplifier's channel 1, and C and D are set to feed channel 2. This wiring scheme allows each RPA-RMT to control a separate room.

The RPA-RMT does not receive any audio signals. Instead, it receives 10 VDC supplied by the P.I.P.-RPA. The voltages that return to the *PIP* control its VCAs (Voltage-Controlled Amplifiers) which control the levels of the corresponding audio inputs.

Connect the P.I.P.-RPA's 10 V output to the RPA-RMT's +10 V input. Inside the RPA-RMT, the 10 V signal is fed to both potentiometers. In turn, the potentiometers control the voltages leaving through the RMT 1 and RMT 2 outputs. Connect these outputs to any of the four remote inputs on the P.I.P.-RPA labeled RMT A, B, C or D.

When connecting two remote control units, run the DC output from the P.I.P.-RPA in parallel to feed both DC inputs on the remote units.

When ganging several channels on one remote slider, run jumper wires from the remote input on the P.I.P.-

RPA to the other channels being controlled (see the P.I.P.-RPA *Reference Manual* for more details).

Mounting

Mount the RPA-RMT as you would an AC outlet. **Do not** mount it in a box having hot AC! Also, be careful not to mount it upside down. You can orient the unit by rotating it until the number 10 on back is at the top and the number 0 is at the bottom (see Figure 1). Line up the threaded holes in the receptacle box with the square openings in the RPA-RMT and secure it with the provided screws.

The RPA-RMT is designed to accept "designer" series cover plates. Cover plates are not included because the provided stick-on labels allow considerable flexibility when choosing colors to match different interiors.

Labels

Three labels are supplied, each with a different color scheme: white background with brown print, ivory background with brown print and brown background with ivory print. These labels match industry standard colors and allow you to select cover plates to match almost any interior.

Select a stick-on label and affix it to the remote control faceplate. You can use the opening in the cover plate as a guide. Peel the backing and the plastic front protector from the label and affix it to the remote unit faceplate. The last step is to push on the slider knobs.

If you need more information or further assistance, feel free to contact Crown Technical Services at 219-294-8200 or 1-800-342-6939.

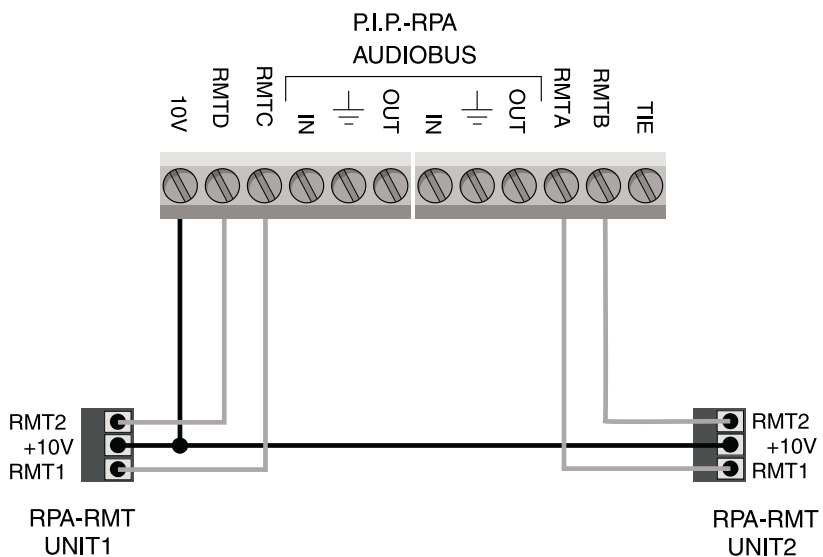


Fig. 4 Wiring for Two RPA-RMTs

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