INSTALLATION AND SETUP GUIDE

INTRODUCTION

The 5800RP RF Repeater Module contains an RF receiver and a transmitter. It is intended for use in extending the range of ADEMCO's 5800 series RF devices.

The 5800RP receives alarm, status, and control messages from 5800 devices, and forwards these messages to control panel connected receivers such as the 5881EN and 5883. The control then responds accordingly (arm/disarm the system, initiate an alarm, etc.).

The 5800RP also transmits it's own status including tamper, AC loss and RF jam detect via a unique serial number. Status is sent whenever a change occurs or as part of a supervisory check-in message sent approximately once an hour.

The 5800RP contains a re-chargeable battery that provides up to 6 hours of standby operation after AC is lost.

The 5800RP features a Spatial Diversity system that virtually eliminates the possibility of "Nulls" and "Dead Spots" within the coverage area.
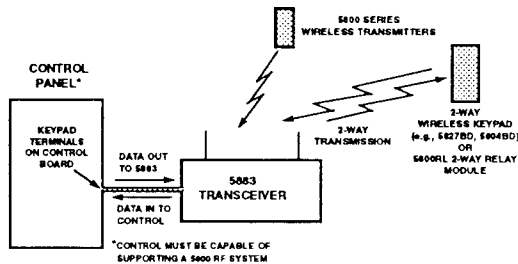

Figure 1. Block Diagram

Update Figure 1 to include a 5800RP 'box' inserted between the wireless devices and the 5881EN/5883.

INSTALLATION

The 5800RP is mounted remotely in its own housing. Avoid mounting the 5883 with its antennas touching a metal surface. Follow the mounting directions below.

1. Remove the 5800RP's cover by inserting and twisting a screwdriver blade in the slot at the center of the cover's lower edge. Note that removing the cover also places the 5800RP in the Go/No Go Test mode. This decreases its range during installation to insure an adequate margin during normal operation.

2. For concealed wiring, route wires through the rectangular opening at the rear of the base before mounting. For surface wiring entry, a thin breakaway area is provided along the base's right edge.

3. Mount the module in the selected location. For greatest security, use all four mounting holes (two keyslot holes and two round holes) in the plastic base.

4. Install the antennas in the right-hand terminals of the two terminal blocks at the upper edge of the 5800RP's circuit board, one into each block's right-hand terminal, and tighten the screws to secure them.

5. Affix the 5800RP's Summary of Connections label to the inside of the housing cover. Make sure the arrows and large 'plus sign' on the label line up with the corresponding posts in the cover.

6. Set DIP switches 4-8 to the appropriate House ID (1-31) using Figure 3. Make sure the House ID set by the DIP switches matches that entered in the control.

7. Connect the power supply to the 5800RP's terminals. Refer to Figure 3. These terminals are not polarized. The leads from DC supplies may be connected to either terminal.

8. If module supervision is desired, program the 5800RP as a zone and enroll its serial number. Press and release the tamper switch to send RF messages while enrolling. The yellow LED should blink on when messages are sent.
   Note the following when enrolling:
   Zone type = 5 (trouble by day / alarm by night)
   Input type = 3 (RF)
   Loop number = 1

9. Use the RF interference LED located on the 5800RP's circuit board as an indicator of strong local radio frequency interference. See Figure 2. If this LED is continuously lit, the 5800RP's module should be relocated.

10. Begin battery installation by attaching an adhesive backed velcro strip to the Summary of Connections label in the cover. Place the strip within the large box drawing labeled 'BATTERY'. Refer to Figure 2.

11. Attach another adhesive backed velcro strip to the battery. Attach the battery to the cover by firmly pressing the two velcro strips together. Make sure the the battery is positioned as shown in Figure 2.

12. Plug the battery connector into a matching connector on the 5800RP PCB. Refer to Figure 2.

    Note that the battery must be allowed to charge overnight in order to reach its full capacity.

13. Replace the cover on the 5800RP.