ADEMCO 5800RL Wireless Relay Module – Installation Instructions

INTRODUCTION

The ADEMCO 5800RL is a Wireless Relay Module that enables use of remote sounders and/or remote arm/disarm indicators using two relays activated by wireless signals from a LYNX control. The 5800RL can also send tamper and supervision signals to the LYNX if so programmed. The 5800RL is compatible with LYNX Plus controls having software versions 9.0 or higher and LYNX Touch controls. Refer to the LYNX control installation and setup guide for software compatibility and zone programming information.
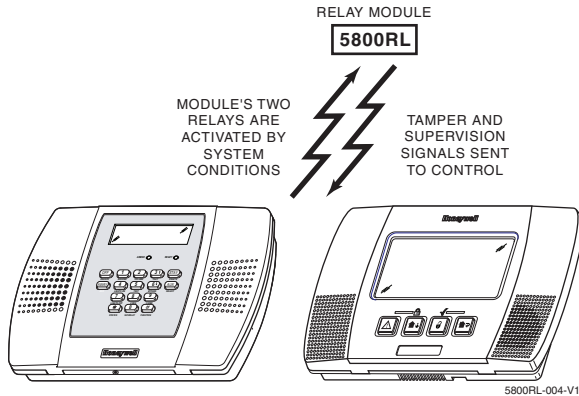

Figure 1. Lynx Interface Diagram

MOUNTING LOCATION GUIDELINES

Use the following guidelines when selecting a mounting location for the 5800RL Relay Module (see Figure 2):

- Mount the 5800RL in a high location for best wireless reception.
- Do not mount the 5800RL on or near metal objects. This decreases range and/or blocks wireless transmissions.
- Locate the 5800RL at least 10 feet from any remote keypad to avoid interference from the microprocessors in those units.
- To avoid voltage loss that occurs on long power lines, mount the external power supply unit in close proximity to the 5800RL.

Mounting, Wiring, and Setup

IMPORTANT: Before permanently mounting the 5800RL, perform the setup procedure described in the ***Setting Up the 5800RL*** section.

1. Remove the 5800RL's cover from the base (using a small flat head screwdriver, insert screwdriver's tip in slot at top of the cover and twist).
2. Using the 5800RL base as a template, position in the desired location and mark the two mounting holes. See Figure 2 for mounting hole locations.
3. Attach the 5800RL base using the fasteners supplied. Screws and plastic anchors are suitable for a typical installation, but you may use any two fasteners that secure the base firmly to the mounting surface.

NOTE: This product uses latching relays, which retain their open/closed position even when power is disconnected. Due to shocks or vibration during shipment and installation, the out-of-box state of these relays may be either open or closed. When power is first applied, the relay will be set to its correct initial state. Please bear this in mind during installation; it is strongly recommended that you wire this module and apply power to it before energizing any external circuit controlled by the latching relay.

4. Connect relay and power wiring to the 5800RL's terminals. Refer to Figure 3 for a typical relay application.

The 5800RL can be powered from either an AC transformer or DC power supply external power source connected to terminals 7 and 8 (see Figure 3).

Power source ratings and connections are as follows:

Type	Rating	Connected to…	Source Example
AC	9VAC, 15VA	terminals 7 and 8	Ademco 1332
DC	12VDC, 100mA	terminals 7 and 8 or plugged into power connector.	AD12612

NOTE: Use of power sources with higher or lower voltages may result in damage or failure to operate properly. Non-ADEMCO power supplies may have connectors installed. Remove these connectors prior to attempting to connect power supply to 5800RL.
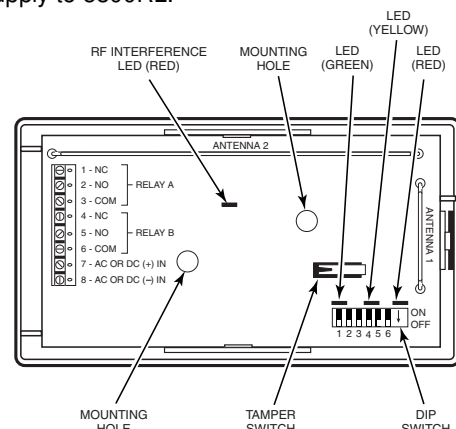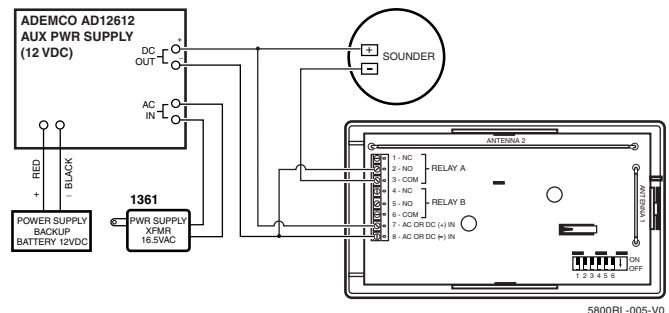

Figure 2. 5800RL Diagram

Figure 3. Typical Sounder Wiring Installation

Setting Up the 5800RL

Refer to RELAY and LED Operation section and DIP Switch (Figure 4) in order to set up the 5800RL as follows:

5. Set DIP switches 3-6 (Figure 4) to the appropriate House ID (1-31). Make sure the House ID set by the DIP switches matches that entered in the LYNX control.
6. If module supervision and/or tamper protection is desired, program the 5800RL's tamper/supervisory loop (1) as a zone and enroll its serial number.

Note the following when enrolling:
    Zone Type = 5 (trouble by day/alarm by night)
    Input Type = 3 (RF)
    Loop Number = 1

7. Position the wiring in the exit slot and reinstall the 5800RL's cover on the base.

Test the 5800RL module with the rest of the system.

HOUSE ID	DIP SWITCH POSITIONS 2	3	4	5	6	HOUSE ID	DIP SWITCH POSITIONS 2	3	4	5	6
0	-	-	-	-	-	16	ON	-	-	-	-
1	-	-	-	-	ON	17	ON	-	-	-	ON
2	-	-	-	ON	-	18	ON	-	-	ON	-
3	-	-	-	ON	ON	19	ON	-	-	ON	ON
4	-	-	ON	-	-	20	ON	-	ON	-	-
5	-	-	ON	-	ON	21	ON	-	ON	-	ON
6	-	-	ON	ON	-	22	ON	-	ON	ON	-
7	-	-	ON	ON	ON	23	ON	-	ON	ON	ON
8	-	ON	-	-	-	24	ON	ON	-	-	-
9	-	ON	-	-	ON	25	ON	ON	-	-	ON
10	-	ON	-	ON	-	26	ON	ON	-	ON	-
11	-	ON	-	ON	ON	27	ON	ON	-	ON	ON
12	-	ON	ON	-	-	28	ON	ON	ON	-	-
13	-	ON	ON	-	ON	29	ON	ON	ON	-	ON
14	-	ON	ON	ON	-	30	ON	ON	ON	ON	-
15	-	ON	ON	ON	ON	31	ON	ON	ON	ON	ON

" – " indicates "OFF"

SV6 7L

SW-1 NOT USED

2-6 SETS HOUSE ID

OFF POSITION INDICATOR

5800RL DIP Switch
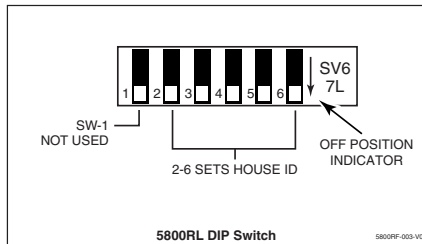
5800RF-003-V0

Figure 4. DIP Switch Settings

RELAY and LED Operation

The 5800RL contains two relays (Figure 2) (SPDT, rated 2A. 28VAC/VDC) that may be used to activate remote sounders and/or remote arm/disarm indicators. There are three LEDs (green, yellow, red) located above the DIP switch and one LED (red) located approximately in the center of the pc board. The LEDs located above the DIP switch, indicate power and relay activity. Refer to Figure 2 on the previous page. The RF Interference LED monitors local radio frequency interference. If this LED is continuously lit, the 5800RL should be relocated.

Relay	LED	Activates Upon…
A	Yellow	Alarm conditions as follows: Steady ON = burglary alarm (NO contact connects to COM) Temporal ON = fire alarm (NO contact connects temporal to COM) OFF = no alarms present (NC contact connects to COM)
B	Red	System armed/disarmed as follows: ON = system armed Away, Stay, or Instant (NO contact connect to COM) OFF = system disarmed (NC contact connects to COM)
N/A	Green	Normally on (lighted) when power is applied. Flickering indicates RF is being processed.
N/A	RF Inter-ference	Lights when RF activity is present. If this LED is continuously lit, relocate the 5800RL module.

SPECIFICATIONS

Dimensions: 2-3/4"W x 4-15/16"H x 1-1/16"D
(70mm x 125mm x 27mm)
Voltage: 12VDC 100mA **or**
9VAC, 15VA (use ADEMCO 1332 or equivalent)
Current: 100mA
Relay: Two relays, each with choice of normally open (NO) or normally closed (NC) operation.
Operating Temperature: 0 - 50°C / 32 - 122°F

Federal Communications Commission (FCC) Part 15

The user shall not make any changes or modifications to the equipment unless authorized by the Installation Instructions or User's Manual. Unauthorized changes or modifications could void the user's authority to operate the equipment.

CLASS B DIGITAL DEVICE STATEMENT

This equipment has been tested to FCC requirements and has been found acceptable for use. The FCC requires the following statement for your information:

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• If using an indoor antenna, have a quality outdoor antenna installed.
• Reorient the receiving antenna until interference is reduced or eliminated.
• Move the radio or television receiver away from the receiver/control.
• Move the antenna leads away from any wire runs to the receiver/control.
• Plug the receiver/control into a different outlet so that it and the radio or television receiver are on different branch circuits.
• Consult the dealer or an experienced radio/TV technician for help.

INDUSTRY CANADA CLASS B STATEMENT

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

FCC/IC STATEMENT

This device complies with Part 15 of the FCC rules and RSS 210 of Industry Canada. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

Cet appareil est conforme à la partie 15 des règles de la FCC & de RSS 210 des Industries Canada. Son fonctionnement est soumis aux conditions suivantes: (1) Cet appareil ne doit pas causer d' interférences nuisibles. (2) Cet appareil doit accepter toute interférence reçue y compris les interférences causant une réception indésirable.

Honeywell