

## ADEMCO 5843 Switching Module

### INSTALLATION AND SETUP GUIDE

#### GENERAL INFORMATION

The 5843 is a wireless receiver module intended for use with alarm systems that support 5800 series wireless devices. The 5843 enables the use of up to eight wireless transmitters to operate a relay-activated device. The 5843 may only be used with other ADEMCO security products. It is compatible with the following wireless transmitters:

- 5804
- 5804-2
- 5804E
- 5804BD
- 5804BDV
- 5804WATCH

**IMPORTANT:** When the **5804WATCH** is used in conjunction with the 5843, it has a limited transmission range. Therefore, use the **5804WATCH** when in close proximity to the 5843 (EX. use **5804WATCH** in lieu of the system keypad).

#### INSTALLATION AND SETUP

Use the following guidelines when selecting a mounting location for the 5843 Switching Module:

- Mount the 5843 in a high location for best wireless reception.
- Do not mount the 5843 on or near metal objects. This decreases range and/or blocks wireless transmissions.
- The 5843 must be located at least 10 feet from any remote keypads to avoid interference from the microprocessors in those units.
- To avoid voltage loss that occurs on long power lines, the external power supply unit should be mounted in close proximity to the 5843.

#### Mounting

**IMPORTANT:** Before permanently mounting the 5843, perform the setup procedure described in the **Setting Up the 5843** section.

1. Remove the 5843's cover (using a small flathead screwdriver, insert screwdriver's tip in slot at top of cover to remove).
2. Using the 5843 base as a drill template, position in the desired location and drill two pilot holes. See Figure 1 for mounting hole location.
3. Attach the 5843 base using the fasteners supplied.

**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 desired relay switching wire to 5843 terminal 3 (COM) and terminal 1 (NC) or 2 (NO) as required by the relay. Refer to relay manufacturer's instructions to determine if it operates with a NC or NO switch.
5. Connect power wiring to the 5843's terminals. Refer Figure 1.

The 5843 can be powered from either a 12VDC or 9VAC external power source.

| Type | Rating                            | Connection         |
|------|-----------------------------------|--------------------|
| AC   | 9VAC, 15VA<br>(e.g., ADEMCO 1332) | Terminals 4 and 5  |
| DC   | 12VDC, 100 ma                     | Terminals 4 and 5. |

**Note:** Use of power sources with higher or lower voltages may result in damage or failure to operate properly.

6. Position the wiring in the exit slot and reinstall the 5843's cover on the base.

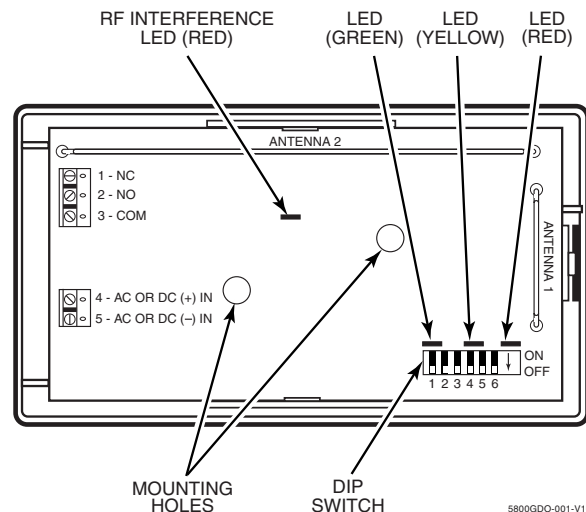


Figure 1. Connection Diagram

#### LED Operation

The Yellow, Red, and Green LEDs located above the DIP switch and the RF interference LED located between the two mounting holes, are described below.

| LED             | Activates Upon                                                                                                                                                                                                                                                             |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Yellow          | Indicates Relay state:<br>LED OFF = Reset State, NC contact connected to COM.<br>LED ON = Set State, NO contact connects to COM.<br>The relay state momentarily changes when an enrolled button is pressed. When power is applied, the relay is forced to the reset state. |
| Red             | Wireless Key enrollment/erase indicator. (Used to determine status during Enrolling RF Transmitters and Erasing All RF Transmitters procedures).                                                                                                                           |
| Green           | Normally on (lighted) when power is applied. Flickering indicates RF is being processed.                                                                                                                                                                                   |
| RF Interference | Lights when RF activity is present.                                                                                                                                                                                                                                        |

## DIP Switch Settings

Normal operation of the 5843 requires all DIP switches be in the OFF position.

DIP switch 1 – Enables the *Erasing All RF Transmitters Mode*. Refer to Erasing All RF Transmitters Section.

DIP switch 2 – Enables the *Enrolling RF Transmitters Mode*. Refer to Enrolling RF Transmitters Section.

DIP switch 3 – Used during *Enrolling RF Transmitters Mode*. Refer to Enrolling RF Transmitters section.

DIP switch 4 – 6 Used during *Erasing All RF Transmitters*



## ENROLLING RF TRANSMITTERS

### Notes:

- To exit the Transmitter Enrollment Mode at any time, set DIP switch 2 to the OFF position.
- Unless otherwise noted, the 5843 will automatically exit the Transmitter Enrollment Mode if each step is not accomplished within one minute of the other.
- If during the enrollment procedure excessive RF interference is noted as indicated by the RF Interference Indicator LED, it is advised that enrollment be exited until free of RF interference. This will prevent inadvertent enrollment of an outside wireless transmitter device.

- Set all DIP switches to the OFF position.
  - Place DIP switch 2 in the ON position.
  - Disconnect/reconnect power to the 5843.
- Immediately after power is applied the following will occur:

- The green LED will turn on and remain on.
- If the EEPROM is not full, the red LED will flash on and off once for each transmitter that can still be enrolled and *then* lights steady.
- If the EEPROM is full (8 wireless keys enrolled), the red LED will remain on, indicating that no more transmitters can be enrolled.

- If enrolling... Do this...

|                                                       |                                                                                           |
|-------------------------------------------------------|-------------------------------------------------------------------------------------------|
| An encrypted transmitter (i.e. 5804E and 5804WATCH)   | Press and hold all 4 buttons at the same time. Verify that the red LED turns off.         |
| A bi-directional encrypted transmitter (i.e. 5804BDV) | Press and hold the B, C, & D buttons at the same time. Verify that the red LED turns off. |
| A non-encrypted transmitter (i.e., 5804, 5804BD)      | Press the button to be enrolled twice. Verify that the red LED turns off.                 |

- Place DIP switch 3 in the ON position.
- Press and release the button that will be used to operate the switch. Verify the red LED flashes 3 times.

**Note:** If an incorrect wireless transmitter is enrolled, set DIP switch 3 to OFF and repeat the enrollment procedure from step 4.

- To add an additional button on the same key, repeat step 6 for that button.
- Place DIP switch 3 in the OFF position to accept the button(s) enrolled.
- Repeat steps 4 through 8 to enroll additional wireless transmitters.
- When all devices are enrolled, place DIP switch 2 in the OFF position.

## ERASING ALL RF TRANSMITTERS

### Notes:

- To exit this procedure at any time, set DIP switch 1 to the OFF position and wait 5 seconds before restarting procedure.
- Unless otherwise noted, the 5843 will automatically exit the *Erasing All RF Transmitters Mode* if each step is not accomplished within one minute of the previous step.

- Place DIP switch 1 in the ON position.
- Disconnect/reconnect power to the 5843.

Immediately after power is applied the following will occur:

- The green LED will turn on and remain on.
- If the EEPROM is not full, the red LED will flash on and off once for each transmitter that can still be enrolled and *then* lights steady.
- If the EEPROM is full (8 wireless keys enrolled), the red LED remain on, indicating no more transmitters can be enrolled.
- Place all DIP switches opposite to their current position within one minute of applying power in step 2. (All DIP switches must be switched opposite to their current position within 5 seconds of each other to avoid exiting this procedure.)
- Return all DIP switches to their original positions and verify the red LED turns off.

When the red LED turns off, all transmitters have been erased.

## SPECIFICATIONS

### Dimensions:

2-3/4" W x 4-15/16" H x 1-1/16" D.  
(70mm x 125mm x 27mm)

### Voltage:

12VDC OR  
9VAC, 15VA (use ADEMCO 1332 or equivalent)

### Current:

60mA

### Relay:

One relay, with choice of normally open or normally closed operation.

Contact Ratings: 2 Amps at 28VDC.

### Operating Temperature:

32° - 122°F (0° - 50°C)

**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**

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful 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:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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.

**For the latest warranty information, please go to:**

<http://www.security.honeywell.com/hsc/resources/wa/index.html>

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