INSTALLATION AND SETUP GUIDE

INTRODUCTION

The 5883H RF Transceiver Module:

- contains an RF receiver and a transmitter,
- is intended for use with 5800 series RF transmitters, including bi-directional wireless units,
- receives alarm, status, and control messages from 5800 transmitters, and passes these messages to the control panel via wired connections, which then responds accordingly (arm/disarm the system, initiate an alarm, etc.),
- transmits system status and other conditions to bi-directional devices,
- emulates the functions of a 5800TM module,
- features a Spatial Diversity system that virtually eliminates the possibility of "Nulls" and "Dead Spots" within the coverage area,
- incorporates new high-security encryption technology, and
- supports the number of zones shown in the chart at right.

RF Zones Supported

5883H	Depends on the control with which it is used. See the control panel's instructions for specific details.

If "SET UP ERROR" (alpha keypads) or "E4 or "E8"" (fixed-word keypads) is displayed on the system's keypad, it indicates that more than the permitted number of wireless zones have been programmed, and none of the zones will be protected.
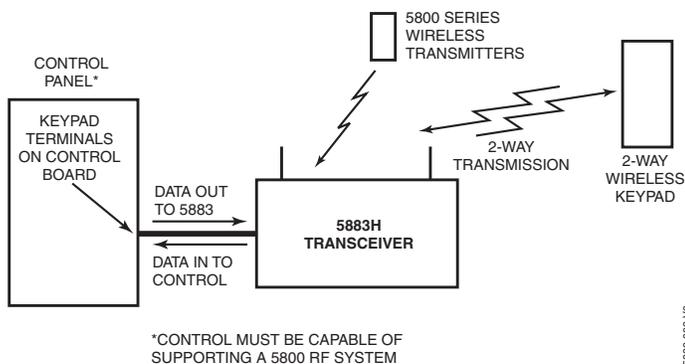

*CONTROL MUST BE CAPABLE OF SUPPORTING A 5800 RF SYSTEM
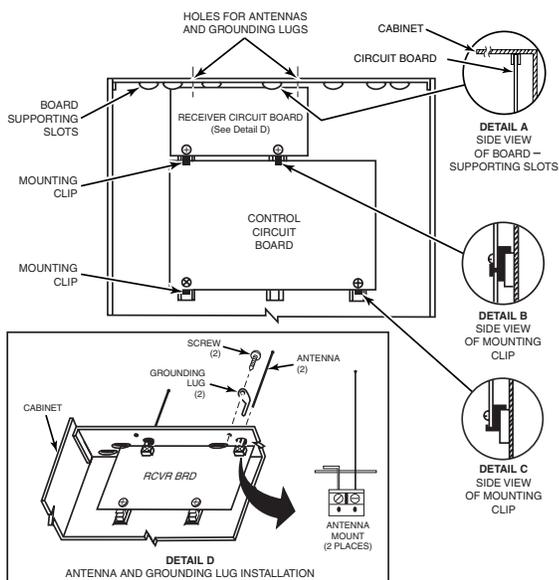
Figure 1. Block Diagram

Figure 2. Installing the 5883H Board in the Control's Cabinet
(Check the control's Installation Instructions for applicability.)

MOUNT THE MODULE OR PC BOARD

5883H can be mounted remotely, or, with some controls, can be mounted inside the control's cabinet.   *When mounting, make sure the antennas do not touch metal surfaces.*

First, Check for RF Interference: Before mounting permanently, use the red RF Interference LED to check for strong local radio frequency interference at the intended mounting location. If this LED is continuously lit, the 5883H module should be relocated.

Removing the Cover

Remove 5883H's cover by inserting a screwdriver blade in the slot at the center of the cover's lower edge to release the locking tab.
Replace the cover when installation is complete if unit is not mounted within controls cabinet and secure with screw through bottom locking tab.

Mounting inside the control's cabinet (refer to Fig. 2):

1. Remove the 5883H's circuit board from its base by bending back the two flexible plastic tabs that hold the board's lower edge. Discard the 5883H's unused plastic cover and base.
2. In the control's cabinet, unfasten and move the control circuit board downward (if already installed).
3. Hang two short (black) mounting clips (provided) on the raised cabinet tabs in the cabinet, as shown in Detail B of Figure 2.
4. Insert the top of the 5883H's board into the supporting slots at the top of the cabinet (Detail A). Swing the bottom of the board into the two short (black) mounting clips installed in step 3, and secure it to the cabinet with the accompanying screws.
5. Insert the top of the control's board into the slot in the black clips holding the lower edge of the 5883H board (see Detail B); position two long (red) clips at the lower edge of the board (see Detail C).
6. Swing the lower edge of the control board into place, and secure with two additional screws.
7. Insert the grounding lugs (provided) through the top of the cabinet and into the left-hand terminals of the antenna blocks (at the upper edge of the 5883H's circuit board. Secure it to the cabinet with the two screws provided, see Detail D.
8. Insert the 5883H's two antennas through the two openings in the top of the cabinet, one into each block's right-hand terminal, and tighten the screws to secure them.
9. Affix the 5883H's Summary of Connections label to the inside of the control's cabinet door.

UL	• All power-limited wiring must be separated from non-power limited and high-voltage wiring by 1/4" (6.4 mm). • All circuits are supervised. • Only one wire per terminal is permitted. If daisy-chained configuration is required, pig-tail wires together so that only a single wire is terminated under the screw.

Mounting the 5883H remotely

NOTE: If mounting 5883H in its own enclosure, the supplied PCB mounting clips, grounding lugs, and screws are not needed.

1. All wiring between the 5883H and the control panel must be located in a conduit.
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 key slot holes and two round holes) in the plastic base. (Refer to Detail D in Figure 2 above.)
4. Install each antenna in the respective right-hand terminal of the two terminal blocks at the upper edge of the 5883H's circuit board, and tighten the screws to secure them.
5. Affix the 5883H's Summary of Connections label to the inside of the housing cover

SET THE DIP SWITCHES

Use the DIP switches to set the 5883H's device address, to enable the built-in transmitter, and to check or delete encrypted keys.

Addresses: The 5883H Transceiver has two device addresses: one for the receiver (addresses 1-7) and one for the transmitter (addresses 27-30, similar to the 5800TM device addresses; see notes 5 and 6 below). First, select a pair of addresses from the table below, making sure that neither address is currently being used in the alarm system, then use DIP switches 2-4 to set the address pair. The addresses should then be programmed in the control. Do not program the transmitter's address in the control if the 5883H is not being used with 5800TM compatible devices.

DIP Switch Functions

Sw.	Function								
1	Check/deactivate high-security keys (see High-Security Keys paragraph)								
	Device Address Settings								
	Transmitter:	Non-Addr.*	28	29	30	27	28	29	30
	Receiver:		1	2	3	4	5	6	7
2		OFF	OFF	OFF	OFF	ON	ON	ON	ON
3		OFF	OFF	ON	ON	OFF	OFF	ON	ON
4		OFF	ON	OFF	ON	OFF	ON	OFF	ON
5	Reserved - must be OFF								
6	ON = enable transmitter (if using 5800TM compatible devices) NOTE: If using more than one 5883H in a system, enable the transmitter in only one 5883H. OFF = disable transmitter								
7	Not used; leave in OFF position								
8	Used when removing RF keypads (see Removing RF Keypads paragraph); otherwise leave OFF								

- also address "0." See VISTA-15P/20P note at right.

NOTES:

- DIP switches 2–4 select both an RF receiver and an RF transmitter device address.
- When used with 5800TM compatible (bi-directional) devices, the transmitter address must be enabled as a "keypad" in the control and DIP switch 6 must be set to "ON."
- If 5883H is not being used with 5800TM compatible devices, the RF transmitter address should be ignored and DIP switch 6 should be set to OFF.
- If programming the control to supervise 5883H, program only the receiver address for supervision. Do not program the transmitter address for supervision.
- 5883H does not support the 5827BD Wireless Keypad.

Special Notes When Used With Certain Controls

VISTA-40: When using bi-directional devices, use device address setting 1/28 or 5/28 for devices used in partition 1; use device address setting 2/29 or 6/29 for devices used in partition 2 (this is necessary because the VISTA-40 automatically assigns address 28 or 29 depending on the programming in field 1*48, wireless keypad partition assignment).

VISTA 32FB, VISTA-50P and higher: When using bi-directional devices, the Wireless Keypad Partition Assignment field (typically 1*48) must be set to the partition in which the devices are used (cannot be used on Fire Partitions).

VISTA-15P/20P Series, FA130C/FA148C/FA168CP Series: Use device address setting of "non-addressable," which is address 0 (sets the receiver address; the transmitter address (for bi-directional devices) is automatically set for 28).

CONNECT THE WIRING FROM THE CONTROL

1. Insert the wiring plug (with 5 flying leads) into the mating socket on the 5883H (see Figure 5 for socket location).
2. Connect the 4 wires to the control's corresponding remote keypad connection points as follows:

|	
RED	12VDC input (+) Aux Power
GREEN:	Data to Control (control's data IN)
YELLOW:	Data from Control (control's data OUT)
BLACK:	Ground (–)

LED FUNCTIONS (refer to Figure 5)

Red RF Interference LED: Lit Indicates local RF interference.

Green LED: Flickering indicates reception of messages (decoded and/or non-decoded).

Yellow LED: Occasional blinks occur under normal operation.

Red LED: Blinks indicate available space for high security keys; Steady ON indicates ready to deactivate high security keys or remove wireless (RF) keypads. See High Security Keys and Wireless Keypads section.
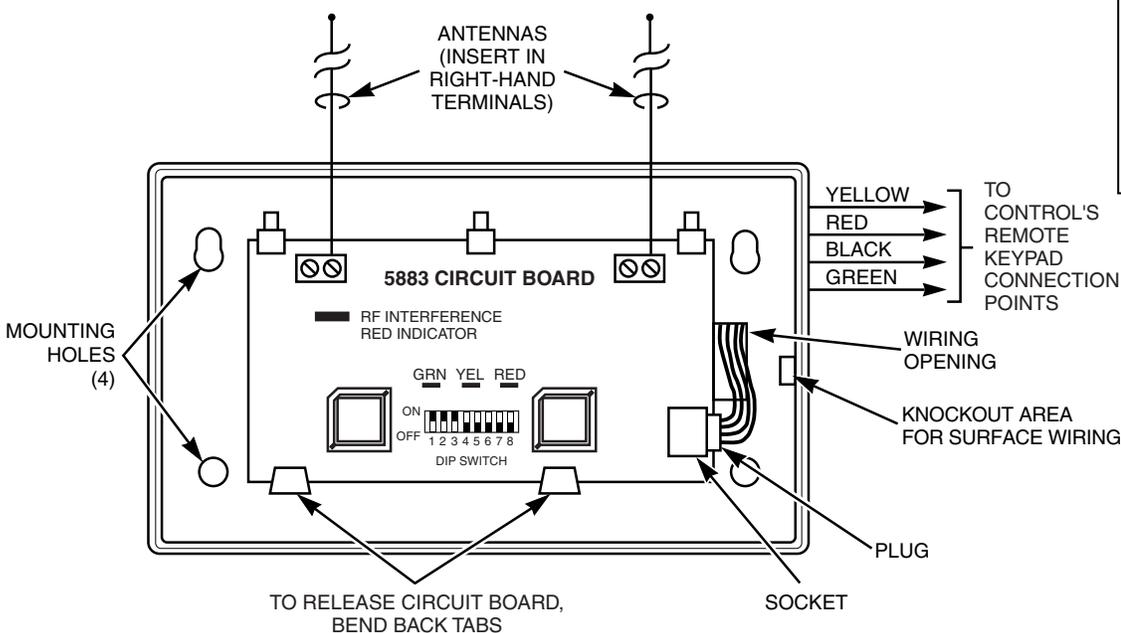
IMPORTANT: Take precautions against static discharge when handling the 5883 PCB. A static discharge can damage the module's EEPROM and/or cause unpredictable changes in its factory programming.

5883-002-V0

Figure 5. 5883H RF Transceiver

PROGRAM CONTROL FOR RF OPERATION

Proceed with any control panel programming that may be necessary for RF operation and the instructions of the system's wireless transmitters, as described in the control's installation instructions. In addition, note the following:

- Enable the appropriate control data field for RF usage.
- Enroll the wireless keypad address(es), if used (see instructions provided with keypad).
- Wireless key buttons must first be enrolled in the control panel via zone programming, and, where applicable, assigned to a user number. Enroll each wireless key in 5883H by pressing the appropriate buttons according to the instructions provided with the key.
- Upon the successful enrollment of an encrypted key, the red LED blinks the number of available spaces remaining for additional encrypted key enrollment (see Checking Available Space For High Security Keys paragraph).
- If more than one receiver is being used and you are using encrypted wireless keys, we recommend that you:
  a. Enter the GO/NO GO mode.
  b. Disconnect one receiver.
  c. Enroll all encrypted keys into the connected receiver.
  d. Reconnect the disconnected receiver.
  e. Exit the GO/NO GO mode.
  f. Repeat steps a-e for the receiver that was disconnected.

HIGH SECURITY KEYS & WIRELESS KEYPADS

Depending on the control panel used, the 5883H can support up to 16 high-security (encrypted) wireless keys and up to 16 wireless keypads. The following paragraphs describe how to:
- Check available space for high-security keys
- How to deactivate all keys
- How to remove all wireless keypads.

See the Control's instructions and the appropriate device instructions for procedures on enrolling high security keys and wireless keypads.

Checking Available Space for High Security Keys

The RED LED (above the DIP switch) shows (by blinking) how many high-security keys may be enrolled into the transceiver.

1. Remove power from the transceiver and set DIP switches:
   DIP 1 = ON
   DIP 8 = OFF
2. Apply power and observe one of the following RED LED indications:
   a. Blinks, indicating the number of available spaces for additional high-security key enrollment, and then lights steady ON.
   b. Immediate Steady ON (no blinks), indicating that high-security key enrollment is full.
   c. Off, indicating that no encrypted keys are enrolled.
3. Set DIP switch 1 back to the OFF position to return to normal receiver operation (leave DIP 8 in OFF position).

Deactivating High-Security keys

This procedure deactivates all enrolled high-security keys and is required only if previously enrolled high-security keys are being replaced and there is not enough available space left for them in the receiver. Once this procedure is performed, all desired high-security keys must be re-enrolled to activate high-security operation.

1. Perform steps 1 and 2 in Checking Available Space procedure above.
2. Wait until the RED LED lights steady ON then:
   a. Record the positions of DIP switches 1 through 8.
   b. Set DIP switches 1 through 8 to the opposite positions of their current settings and wait a few moments.
   c. Set DIP switches 1 through 8 back to their original positions as recorded in step a. All enrolled high-security keys will be deactivated.
3. Set DIP switch 1 back to the OFF position to return to normal receiver operation (leave DIP 8 in OFF position).

Removing All Wireless Keypads

This procedure removes all wireless keypads from the transceiver.

1. Remove power from the transceiver and set DIP switches:
   DIP 1 = OFF
   DIP 8 = ON
2. Apply power and observe the RED LED lights steady ON, then:
   a. Record the positions of DIP switches 1 through 8.
   b. Set DIP switches 1 through 8 to the opposite positions of their current settings and wait a few moments.
   c. Set DIP switches 1 through 8 back to their original positions as recorded in step a. All enrolled wireless keypads will be removed from the transceiver.
3. Set DIP switch 8 back to the OFF position to return to normal receiver operation (leave DIP 1 in OFF position).

NOTE: If unsure that correct RF keypad addresses are enabled in the receiver, you should perform the RF keypad delete procedure, then enable RF keypad addresses as described in the instructions included with the RF keypad. Otherwise, erroneous ECP device "check" messages may occur.

SPECIFICATIONS

Dimensions:

5883H: 7-3/8" W x 4-3/8" (10-7/8" w/antenna) H x 1-7/16" D
188mm W x 112mm H (277mm w/antenna) x 37mm D

Input Voltage: 12VDC (from control's remote keypad terminals)

Current: 80mA typical

Range: 200ft (60m) nominal indoors from wireless devices (actual range is determined with the control in TEST mode)

Receiver Sensitivity & Noise Rejection:

Receiver sensitivity and noise rejection are dynamically adjusted to match ambient conditions. Unacceptably high noise levels or low signal levels are indicated at the control panel. For test procedure, refer to the Installation & Setup Guide for the control panel with which this device is used.

TO THE INSTALLER

Regular maintenance and inspection (at least annually) by the installer and frequent testing by the user are vital to continuous satisfactory operation of any alarm system. The installer should assume the responsibility of developing and offering a regular maintenance program to the user, as well as acquainting the user with the proper operation and limitations of the alarm system and its component parts. Recommendations must be included for a specific program of frequent testing (at least weekly) to insure the system's operation at all times.

FEDERAL COMMUNICATIONS COMMISSION STATEMENTS

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 (IC) STATEMENTS

This device complies with Part 15 of the FCC Rules and RSS210 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' interferences nuisibles. (2) Cet appareil doit accepter toute interference reçue y compris les interferences causant une reception indésirable.

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.

FOR LIMITATIONS OF THE ENTIRE ALARM SYSTEM, REFER TO THE INSTALLATION INSTRUCTIONS FOR THE CONTROL WITH WHICH THIS DEVICE IS USED.

For the latest warranty information, please go to:
http://www.security.honeywell.com/hsc/resources/wa/index.html

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