# **ADEMCO**

## 6160RF KEYPAD/TRANSCEIVER

## **INSTALLATION GUIDE**

### **GENERAL INFORMATION**

The 6160RF keypad/transceiver is a is a combination unit that contains the following:

- A 6160 Alphanumeric Addressable Keypad
- A 5881M RF Receiver
- A 5800TM Transmitter Module

The 6160RF Keypad/Transceiver may be used on any control panel that supports the 6160 Keypad (e.g., VISTA-10SE, VISTA-15, VISTA-20SE, VISTA-40, VISTA-50P).

#### **FEATURES**

### **Wireless Features**

- Supports wireless key transmitters (5804, 5804BD).
- Supports wireless keys with Signal Sentry (highsecurity) (5804E).
- Provides a nominal range of 200' for the RF transmitters (some transmitters have a shorter range).
- Supports RF jam detection when the receiver is enabled.

 $U_L$ 

The following transmitters are not intended for use in UL installations: 5804, 5804BD, 5804BDV, 5804E and 5827BD.

### **Programming Features**

- Provides default settings for the functions of the wireless keys.
- Provides a method to enroll up to eight (8) encrypted (high security) devices.

### **Additional Features**

- Provides tamper protection that causes the system to annunciate a trouble condition if the cover is removed. (If supported by the control panel). The tamper switch has not been evaluated for UL installation.
- Capable of sending status signals (Armed, Ready, etc.) to bi-directional units such as 5804BD, 5804BDV and 5827BD.

### **APPLICATION GUIDELINES FOR THE 6160RF**

Use the following guidelines when planning an installation:

- If using bi-directional devices, be sure to enable the transmitter module in the 6160RF.
- If transmitters are programmed into the control panel, be sure to enable the receiver. (Make sure you do not exceed the number of receivers supported by the control panel.)
- You must set the House ID only if you are using RF keypads and/or bi-directional devices; AND the House ID Source is the 6160RF (Local).

Note: If the House ID source is the panel, enter \*99 into keypad.

### 6160RF Application Guide

The guide, provided below, outlines how to program the wireless keys, RF receiver, and the House ID in the 6160RF for your particular installation.

Control Panel	RF keypads and/or Bi-directional devices on more than 1 partition?	Program RF Receiver	House ID Source*** As
VISTA-10SE, VISTA-15, VIA-30PSE	NO	Enable	System
VISTA-20SE	NO	Enable	System
	YES*	Disable	Local
VISTA-40, VISTA-50P	NO**	Enable	System
	YES	Disable	Local

<sup>\*</sup> Two 6160RFs are needed for this application: one connected to partition 1's keypad terminals, and one connected to partition 2's.

<sup>\*\*</sup> If using an RF keypad on only one partition, the 6160RF's partition assignment must match the partition set in field 1\*48.

<sup>\*\*\*</sup> If set for Local on a partition control, the 6160RF's partition assignment must match the one programmed in the BD device.

### **INSTALLING THE 6160RF**

Locate the 6160RF in an area and at a height where it is convenient for user operation. The 6160RF must be at least 10 ft from the control panel to ensure proper operation of the RF receiver.

### **Mounting And Wiring**

The 6160RF has terminal blocks for connection to power and data wires, and relay contact wires. Removing the keypad's case back accesses these terminal blocks.

The 6160RF can be surface mounted directly to walls, or to a single- or double-gang U.S./Italian style electrical box. Follow these steps to mount and wire the keypad:

 Detach the case back by pushing up into one of the two slots at the bottom of the keypad with the blade of a small screwdriver (this will push in the release snap), then pull that side of the case back away. Repeat for the other side. Refer to Figure 1 for location of the case back release snaps.

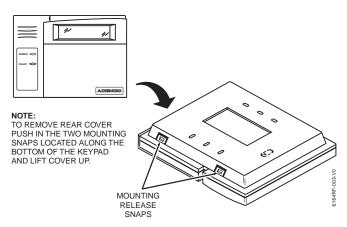


Figure 1. Removing the Case Back

- 2. Pass the wiring from the control panel through the opening in the case back. (see the control panel's instructions for proper run lengths.)
  - a. If surface wiring is being used, wiring may be routed through the top or the bottom left-side breakout in the case back. See Figure 2. The breakouts must be punched out using a screwdriver before mounting the case back.

- If desired, wires may be strain-relieved to the wire tie point on the inside of the case back with a tie wrap (not supplied).
- 3. Mount the case back to a wall or to an electrical box using the 25mm-long self-tapping screws supplied (mollies for drywall are not supplied).

**Note:** If you wish to tamper-protect the keypad for removal from the wall, use an additional mounting screw in the tamper hole in the case back (see Figure 2 for location).

4. Connect the power and data wires from the control panel to the terminals on the 6160RF as indicated Figure 3 and Table 1.

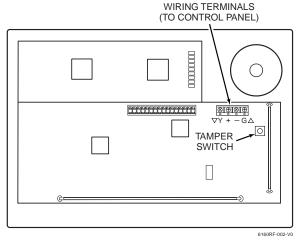


Figure 3 - 6160RF Wiring Details

Table 1 - Wiring Table

Keypad	Control Panel	Wire Color
<b>▲</b> G	Data In	Green
-	-Aux Pwr (GND)	Black
+	+Aux Pwr	Red
▼Y	Data Out	Yellow

- Re-attach the keypad to the mounted case back. Attach the top of the keypad first, and then press the bottom section down until it snaps into place securely.
- 6. Peel off protective film on the LED panel and install the keypad labels as required.

### **6160RF PROGRAMMING**

### **Entering Program Mode**

Press the [1] and [3] keys simultaneously for a few seconds within 30 seconds after applying power or within 30 seconds after removing the case back. The current keypad address **CON ADDRESS = XX** will be displayed. Press the [\*] key.

### **Programming Operations**

Once you have entered the Program mode, you may advance between prompts by pressing the [\*] key. This will also store displayed information.

### Programming the 6160RF

Note: Refer to the control panel's installation instructions for the acceptable keypad and receiver addresses.



- If you are using a wireless key in High-Security mode (e.g.;5804E) in the control panel, it will occupy one of the devices in the 6160RF.
- When operating the system in High-Security mode, only encrypted wireless keys will function.

STEP	DESCRIPTION	DISPLAY	CHOICES
1.	Enter the program mode by pressing the [1] and [3] keys simultaneously for a few seconds within 30 seconds after applying power or within 30 seconds after removing the case back.  (Keypad Address) Enter the two digit keypad address. Press the [*] key to continue.	CONADDRESS = XX	01-31
2.	(Receiver Enable) Enter [1] to enable, or [0] to disable Receiver. Enable the receiver if RF transmitters or wireless keypads are programmed into the control. Press the [*] key to continue.	RECEIVER ON [O= OFF]	1= ON 0 = OFF
3.	If receiver is enabled, enter the two digit receiver address.  (01-30)  Press the [*] key to continue.	REC ADDRESS = XX	01-30
4.	(Transmitter Enable) Enter [1] to enable, or [0] to disable.  Enter [1] if bi-directional devices are being used.  Note: If the House ID source is the System, and more than one 6160RF is used, make sure only one has the Transmitter Module enabled.  Press the [*] key to continue.	TRANSMITTER ON [O= OFF]	1= ON 0 = OFF
5.	(House ID) Enter 99 (System) to use the House ID programmed into the control panel Enter 01-31 (Local) to use the House ID programmed into the 6160RF.  Notes: (1) If the House ID Source is the System, RF Keypads and bi-directional units MUST match the House ID programmed into the panel. (2) If the House ID Source is Local, the RF Keypads and bi-directional units MUST match the House ID programmed into the 6160RF.  Press the [*] key to continue.	HOUSE ID = XX	01-31 = Local 99 = System
6.	(Enable High Security mode) Enter [1] to select High Security Mode  Note: If this mode is enabled, the 6160RF will only recognize encrypted devices.  Press the [*] key to continue.	HIGH SECURITY OFF [1 = ON]	1= Enable 0 = Disable
7.	(Delete High Security Devices) Press the [*] key to skip this prompt and exit Program Mode.  Note: If you need to delete encrypted devices refer to the Deactivating High Security Devices section.	DELETE DEVICES?	1= YES 0 = NO

### **ACTIVATING HIGH SECURITY DEVICES**

This following procedure should be followed if using High-Security (encrypted) devices.

STEP	DESCRIPTION
1.	Put the control panel in Go/ No Go Test mode. (See the Installation Guide for the panel being installed.)
2.	Follow the instruction provided with the wireless device to for installing the High-security (encrypted) device.
3.	The 6160RF will momentarily display the serial number of the device.
4.	Disable the Go/ No Go Test mode and follow the normal procedure for programming the device into the control panel
	(refer to the Installation Instructions for the device that you are programming).

### **DEACTIVATING HIGH SECURITY DEVICES**

This mode gives you the ability to disable all individual wireless keys that have been directly programmed into the 6160RF. This is particularly useful if a user loses a wireless key.

High-Security (encrypted) devices must also be deleted from the panel. Once High-Security (encrypted) devices have been deleted, the devices will no longer function.

STEP	DESCRIPTION	DISPLAY	CHOICES
1.	Enter the keypad's local program mode within 60 seconds of power-up by pressing and holding down the [1] and [3] keys at the same time for 3 seconds. The current keypad address will be displayed with the cursor under the "tens" digit. Press the [*] key to continue.	COMBERESS — AA	01-31
2.	(Delete High Security Devices) Press the [1] key to remove all high- security (encrypted) devices. Press the [★] key to continue.	DELETE DEVICES? NO [1=9ES]	1= YES 0 = NO
3.	If YES was selected in Step 2 the unit will display a confirm request to delete the stored high security device. Press the [1] key to accept, followed by the [*] key to exit the programming mode.	ARE YOU SURE? NO [1=YES]	1= YES 0 = NO

#### **TROUBLESHOOTING**

The error messages listed in the following table cause the 6160RF to produce a single ding tone. The table describes the error messages and the corrective actions.

Display	Probable Cause	Corrective Action
Lb	Low battery in the wireless key	Replace the battery if the wireless key has a replaceable battery.
		2. Replace the transmitter if the wireless key does not have a replaceable battery.
Open Ckt	Open circuit	Verify that the Data Out (DO) wire is connected properly.
Incompat. Con.	Incompatible connection	Verify that the control panel is not a First Alert-type control panel.
Check 09	1. 6160RF Receiver is not communicating.	Verify that the Data In (DI) wire is connected properly.
	Another device on the keypad terminals is not communicating to the control panel.	2. Verify the wiring connections between the control and all other devices.

### **SPECIFICATIONS**

Wiring:

**Physical:** 5-3/8" H x 7-3/8" W x 1-1/4" D **Current:** Standby 50mA

(137mm x 187mm x 32mm) Backlighting on and

Refer to Table 1 Sounder on 150mA

**Range:** 200 ft (60.9 m) nominal **Display:** 2 x 16 alphanumeric supertwist LCD, backlit

**Frequency:** 345 MHz **Sounder:** Tone Generator Integrated Circuit. (fire alarm is loud pulsing

tone; burglary/audible panic alarm is continuous tone)

FOR DETAILS ON THE LIMITATIONS OF THE ENTIRE ALARM SYSTEM, REFER TO THE INSTALLATION INSTRUCTIONS FOR THE CONTROL PANEL BEING INSTALLED IN CONJUCTION WITH THIS DEVICE.

### **FCC STATEMENT**

FCC ID CFS8DL6160RF

This device complies with Part 15 of the FCC rules. 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.

### FEDERAL COMMUNICATIONS COMMISSION (FCC) Part 15 STATEMENT

This device complies with part 15 of the FCC rules. 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.

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.

### **ADEMCO LIMITED WARRANTY**

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