

6160RFPL2 Keypad/Transceiver

# Installation and Setup Guide

#### **GENERAL INFORMATION**

The 6160RFPL2 keypad/transceiver is a combination unit that combines the functions of the following devices:

- 6160PL2 Alphanumeric Addressable Keypad
- 5881H RF Receiver
- 5800TM Transmitter Module

The 6160RFPL2 Keypad/Transceiver may be used on any control panel that supports alphanumeric keypads and 5800 Series wireless devices.

## FUNCTION KEYS (refer to Figure 1)

The A, B, and C keys are designed for use as "panic" keys (e.g., fire, police, personal emergency, etc.) or other special functions on certain control panels. The D key may be used as a "macro" key or other special functions with control panels that support this feature. This allows a single key to execute a preprogrammed series of system functions (e.g., bypassing zones, arming, etc.)

The A, B, C, and D keys must be pressed and held down for at least two seconds to activate their programmed panic functions.

#### **FEATURES**

- Supports wireless key transmitters (e.g., (5804) and bi-directional transmitters (e.g., 5804BDV, 5828/5828V).
- Supports wireless keys with high-security (encryption) capability (e.g., 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.
- Capable of sending status signals (Armed, Ready, etc.) to bi-directional units such as 5804BDV, and 5828/5828V.
- The 6160RFPL2 automatically times out the backlighting of all keypad keys.

The following 5800 series transmitters are not intended for use in UL installations: 5802, 5804, 5804BD, 5804BDV, 5804E, 5814, 5816TEMP, 5819, 5819BRS, 5819WHS, 5828/5828V and 5850.

## **INSTALLING THE 6160RFPL2**

Locate the 6160RFPL2 in an area and at a height where it is convenient for user operation. The 6160RFPL2 must be at least ten feet from the control panel to ensure proper operation of the RF receiver.

## **Mounting And Wiring**

The 6160RFPL2 has terminal blocks for connection to power and data wires. Removing the keypad's case back provides access to the terminal blocks.

The 6160RFPL2 can be surface mounted directly to a drywall, or to a single- or double-gang electrical box.

1. 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.

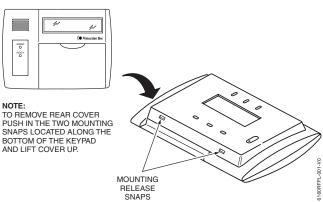


Figure 1. Removing the Case Back

- 2. Route wiring from the control panel through the large opening in the case back.
  - a. If surface wiring is being used, wiring may be routed through the top or the bottom left-side breakout in the case back. The breakouts must be punched out using a screwdriver before mounting the case back.
  - b. 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 electrical box.
- 4. Use the wiring table on the next page when connecting the keypad. Wire directly from the keypad's terminal block to the terminal block on the control's PC board. Wire functions are marked next to terminals. See the control panel's Installation Instructions for more complete details.

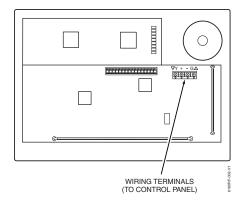


Figure 2. 6160RFPL2 Wiring Details (back cover removed)

5. Reattach the keypad to its 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.

## APPLICATION GUIDELINES FOR THE 6160RFPL2

Use the following guidelines when planning an installation:

lf	And	Then
This is the only transceiver on the system,	You want to use both the receiver and transmitter function on a single-partition system,	<ul> <li>Set the keypad to a device address assigned to the desired partition.*</li> <li>Enable the receiver.</li> <li>Program a system House ID in the control panel (this will enable the transmitter function).**</li> <li>Set the wireless devices that will communicate with this 6160RFPL2 to the same system House ID.</li> </ul>
There is another receiver or transceiver on the system,	You want to use only the transmitter function on a second partition,	<ul> <li>Set the keypad to a device address assigned to the desired partition.*</li> <li>Disable the receiver.</li> <li>Program a DIFFERENT House ID in the 6160RFPL2 than is programmed in the control panel.*/ **</li> <li>Set the wireless devices that will communicate with this 6160RFPL2 to the same House ID as the 6160RFPL2.</li> </ul>
	You want to use only the transmitter function on a single- partition system,	<ul> <li>Set the keypad to a device address assigned to the Partition 1.</li> <li>Disable the receiver.</li> <li>Program a House ID in the 6160RFPL2 that matches the system House ID programmed in the control panel.*</li> <li>Set the wireless devices that will communicate with this 6160RFPL2 to the same House ID.</li> </ul>

#### Notes:

\* On VISTA-40 panels and above, wireless keypads (e.g., 5828V) can only be used on a single partition. This partition is programmed in field 1\*48, and must match the partition assigned to the 6160RFPL2. Wireless keys can be used on more than one partition, using a House ID programmed in the 6160RFPL2 and the devices. In this case, the wireless keys must be assigned to the same partition as the 6160RFPL2.

\*\* On VISTA-20P panels, the 6160RFPL2 will use the House ID programmed in the panel for the partition to which it is assigned. Wireless keypads can only be used on Partition 1.

## PROGRAMMING THE 6160RFPL2

Refer to the following procedure to program the 6160RFPL2:

STEP	DESCRIPTION	DISPLAY	CHOICES
1.	Enter the program mode by pressing the [1] and [3] keys simultaneously for a few seconds within 60 seconds after applying power.		
2.	(Keypad Address) Enter the two-digit keypad address. Press the [*] key to continue.	Conaddress = XX	00-31
	Notes: (1) Refer to the control panel's installation instructions for the acceptable keypad addresses.		
	(2) On the VISTA-40 and above the 6160RFPL2's partition assignment must match the RF keypad partition assignment programmed in field (1*48).		
3.	(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 and no other receivers are enabled. Press the [*] key to continue.	Receiver on (o= off)	1= ON 0 = OFF
4.	(Receiver Address) If receiver is enabled, enter the two-digit receiver address. (01-30).	REC ADDRESS = XX	00-30
	Note: Refer to the control panel's installation instructions for the acceptable receiver addresses.		

#### Table 1 - Wiring Table

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

Press the [ <b>*</b> ] key to continue.	

STEP	DESCRIPTION	DISPLAY	CHOICES
5.	(House ID) This prompt will only appear if the receiver is disabled. If the receiver is enabled the 6160RFPL2 will use the House ID programmed in the panel.	HOUSE ID = XX	00-31
	Refer to the Application Guidelines on the previous page when selecting a House ID.		
	To program a House ID: Enter 01-31.		
	To disable the transmitter: Enter 00		
	Note: All devices that you want to receive status from the 6160RFPL2 must be set to the same House ID as the 6160RFPL2 (refer to Applications Guidelines section).		
	Press the [*] key to continue.		
6.	(Enable High Security Mode) Enter [1] to select High Security Mode.	HIGH SECURITY	1 = Enable
	Note: If this mode is enabled, the 6160RFPL2 will only recognize encrypted devices. If this mode is disabled, the 6160RFPL2 will recognize both encrypted and non-encrypted devices. Press the [*] key to continue.	OFF [] = 0N]	0 = Disable
7.	(Disable High Security Devices) Press the [*] key to skip this prompt and exit Program Mode.	DISABLE HS DEV? NO [] = YES]	1= YES 0 = NO
	Note: If you need to disable encrypted devices, refer to the Disabling High Security Devices section.		

When operating the system in High-Security mode, the non-encrypted wireless keys will still function. If you want the system to recognize only encrypted wireless devices, program only encrypted devices in the system.

## **ACTIVATING HIGH SECURITY DEVICES**

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

STEP	DESCRIPTION
1.	Follow the normal procedure for programming the device into the control panel (refer to the Installation Instructions for the device that you are programming). Exit out of Programming Mode.
2.	Put the control panel in Go/ No Go Test mode. (See the Installation Guide for the panel being installed.)
3.	Follow the instructions supplied with each wireless device to enroll the device in High-security mode. The 6160RFPL2 will momentarily display the serial number of the device.

## **DISABLING HIGH SECURITY DEVICES**

This mode gives you the ability to disable high security on all wireless keys that have been enrolled in the 6160RFPL2. This is particularly useful if a user loses a wireless key.



Once high-security (encrypted) devices have been disabled, they will only operate if the 6160RFPL2 is set to listen to both encrypted and non-encrypted devices (programming step 6, above). To completely disable the devices, they must be deleted from the control panel.

STEP	DESCRIPTION	DISPLAY	CHOICES
1.	After the keypad has been powered for at least 60 seconds hold down the [1] and [3] keys at the same time for 3 seconds. The current keypad address will be displayed. (You cannot change the keypad's address at this point.) Press the <b>[*</b> ] key to continue.		00-31
2.	(Delete High Security Devices) Press the [1] key to remove all high- security (encrypted) devices. Press the [ <b>*</b> ] key to continue.	DISABLE HS DEV? NO [V9ES]	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 [ <b>*</b> ] key to exit the programming mode.	rre you sure? No (1/9es)	1= YES 0 = NO

## TROUBLESHOOTING

The error messages listed in the following table causes the 6160RFPL2 to produce a single ding tone. The table describes the error messages and the corrective actions.

Display	Probable Cause	Corrective Action	
Low Bat (with zone number)	Low battery in a wireless key.	<ol> <li>Replace the battery in the wireless key.</li> <li>Replace the transmitter if the wireless key does not have a replaceable battery.</li> </ol>	
Open Ckt	No data is being received from the control panel.	Verify that the keypad $\bigstar Y$ (yellow) wire is connected properly.	
Check 100	<ol> <li>The control panel does not see the 6160RF Receiver, or the Receiver is not functioning.</li> <li>Another device on the keypad terminals is not communicating to the control panel.</li> </ol>	<ul> <li>1a. Verify that the keypad ▲Y (yellow) and G▼ (green) wires are connected properly.</li> <li>1b. Verify that the control's receiver address is correct.</li> <li>2. Verify the wiring connections between the control and all other devices.</li> </ul>	

#### SPECIFICATIONS

Physical:	5-3/8" H x 7-3/8" W x 1-1/4" D (137mm x 187mm x 32mm)	Current:	Standby	50mA
Wiring:	Refer to Table 1		Backlighting on and Sounder on	150mA
Range:	200 ft (60.9 m) nominal	Display:	2 x 16 alphanumeric supe	rtwist LCD, backlit
Frequency:	345 MHz	Sounder:	Tone Generator Integrate	d Circuit. (fire alarm is loud pulsing
Voltage:	12VDC		tone; burglary/audible par	nic 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

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.

#### LIMITED WARRANTY

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K0903-4V1 6/06 Rev. B

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