K6206V1 6/06 Rev. B

Honeywell

ADEMCO 6151 KEYPAD

With Built-in Single-Zone Expander

INSTALLATION AND SETUP GUIDE

GENERAL INFORMATION

The 6151 is a general-purpose keypad that provides one 2K EOLR zone. The general features of the 6151 can be used with any Honeywell control panel that supports the 6150 keypad. To utilize the zone feature of the 6151, the control panel must be capable of supporting the 4219 ECP zone expander module. Depending on the keypad option selected, the zone can either be configured as EOLR or double-balanced supervised zone. Check the control panel's Installation Guide for the supervision type(s) supported.

KEYPAD DISPLAYS AND LEDS

The 6151 has the following features:

- Large backlit, fixed word LCD.
- 16 large telephone-style backlit keys.

The following table shows the LEDs and their functions:

LED	Function
ARMED (Red)	Lights when the system is armed in any mode.
READY (Green)	Lights when the system is ready to be armed.

FUNCTION KEYS AND LABELS

The keypad also features four function keys. These keys may be programmed for panic alarms or other special functions such as single button arming, macros, device activations, etc. See the control's instructions for details.

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

A set of adhesive labels with typical panic symbols is provided. Place the appropriate label in the indented area on each key, so that the user can easily identify each key's function.

BUILT-IN SOUNDER

The built-in sounder has the following functions:

- Produces warning sounds during alarm and trouble conditions, and also during entry/exit delay periods.
- Provides acknowledgment tones when keys are pressed, and confirmation tones for successful command entries.

ZONE–INPUTS

The 2K EOLR zone has a 300mS response. A local programming option allows selecting conventional EOLR type or double-balanced type. The double-balanced zone type supports up to 10 sensors.

CASE TAMPER

UL For UL (and ETL) installations, the front case tamper must be disabled.

An on-board tamper switch detects removal of case front from case back, and removal of the case back from its mounting surface. A local programming option allows you to disable the detection of a tamper condition.

The factory default for this feature is disabled.

For tamper protection, an additional mounting screw must be used in the case back, as shown in Figure 2.

When the 6151 is used in the addressable mode, it will report a tamper condition to the control panel as a 4219 case tamper when the zone feature is enabled, or as a general keypad tamper when the zone feature is disabled. This feature should be enabled for a more secure installation or when the on-board zone is used.

On newer control panels (e.g., Vista-20P and Vista-12/48 series) the tamper will be reported using the ECP address assigned to the Zone Expander. Note that the tamper feature will function only if the zone expander has been enabled; Zone 96 can then be used as a keypad panic.

The 6151 will not support general keypad tamper reporting when set to the non-addressable mode (keypad address 31). In the non-addressable mode, tamper will be reported as if it were a "C" function key/zone 96. Program this zone as a Type 5 Day/Night (trouble by day/alarm by night) zone for proper reporting. Also, not all control panels support general keypad tamper reporting. Check with the control panel's instructions.

MOUNTING AND WIRING

The 6151 has terminal blocks for connection to keypad power, data wires and sensor/contact zone wires. Removing the keypad's case back allows access to these terminal blocks.

The 6151 can be surface mounted directly to walls, or to a single- or double-gang U.S. style electrical box. Follow these steps to mount and wire the keypad:

1. Detach the case back as follows:

Push the two case release snaps at the bottom of the keypad with the blade of a medium screwdriver (this will push in the release snap), then pull that side of the case back away. Insert the screw-driver in the side of the keypad

(between the front and back case) and gently twist to release the side locking tab. Repeat for the other side. Refer to Figure 1 for location of the case back release snaps and locking tabs.

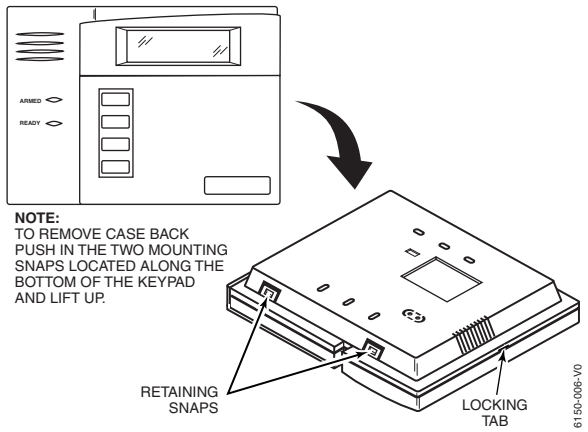

Figure 1. Removing the Case Back

2. Mount the case back to a wall or to an electrical box using the 25mm-long self-tapping screws supplied (anchors for drywall are not supplied).

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).

3. Pass the four power/data wires and zone wires through the opening in the case back. 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).

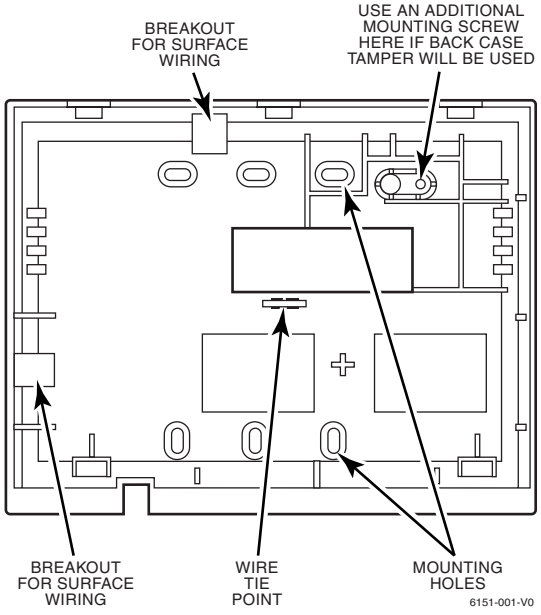

Figure 2. Wiring Entry (Case Back)

4. Connect the power/data wires to the four screw terminals on the keypad's PC board marked as shown in Figure 3 and as follows:

Wiring Table

Keypad		Control Panel	Color
G▼	Data Out	Data In	Green
–	GND	– Aux Pwr	Black
+	+12VDC	+ Aux Pwr	Red
▲Y	Data In	Data Out	Yellow

5. Connect the wires for the 2K EOLR zone to the screw terminals on keypad PC board as shown in Figure 3 and as follows:

Keypad	Wired Zone
ZN1	+ Zone 1
⬇	- Zone 1 return

LEGEND
⬇ = -

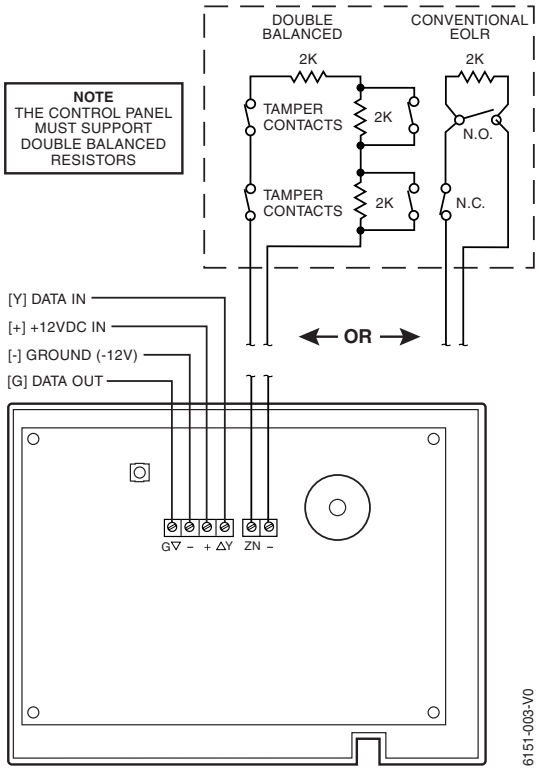

Figure 3. Wiring Details

6. Reattach 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.

SETTING THE KEYPAD OPTIONS

UL For UL (and ETL) commercial burglary installations, the zone must be programmed as a 24-hour audible zone type.

The 6151 allows seven items to be programmed via local keypad programming mode:

- Keypad address
- Zone expander enable
- Zone expander address
- Zone type
- Tamper enable
- Display option
- Sound option

These settings are maintained even when keypad power is removed.

The keypad options may only be programmed within 60 seconds of applying power. After that, they are not accessible for editing or viewing. The Address can still be viewed by holding down the 1 and 3 keys for approximately three (3) seconds. To re-enter programming mode, remove and reapply power and proceed as follows:

Perform the following steps to change the keypad options. You must enter all options in order for the entries to be saved. Use the [*] key to advance through the options.

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 following will be displayed:

   `31`

2. The current keypad address will be displayed with the cursor under the "tens" digit. If the current keypad address setting is acceptable (the default = 31), press the [*] key to advance to the Zone Expander Enable field and go to step 3.

   To change the current keypad address, first reset the current address to "00" as follows: press [0] to clear the "tens" digits. The cursor will move to the "ones" digit position. Press [0] again to clear the "ones" digit. The cursor will move back to the "tens" digit position. Now set the desired keypad address as follows:

   Enter the proper "tens" digit for the keypad's address. The cursor will move to the "ones" digit. Enter the proper "ones" digit for the keypad's address.

   If you connect more than one keypad, on control panels that support addressable keypads (i.e., VISTA-10P/15P/20P), you must ensure that a unique address has been programmed for each keypad.

   Press the [*] key to store the displayed address and to advance to the Zone Expander Enable field. The following will be displayed:

   `E0`

3. By pressing the [1] or [0] key, you can toggle the Zone Expander Enable option (default = OFF, O).

   a. To use the zone contacts, set the option to ON [1]. Use the [*] key to advance to the next option. The Zone Expander Address field will appear. Go to step 4.

   b. To use the 6151as a regular keypad set the option to OFF [0]. Use the [*] key to advance to the next option. The Tamper field will appear. Go to step 6.

In order to use the built-in zone, you must enable a 4219 zone expander in the panel. Each expander address takes up eight zones (i.e., if using two 6151 s, zone 9 would be on module address 07, and zone 17 would be on module address 08). Unused module zones can still be used for wireless devices.

`107`

4. Set the Expander device address in the same way as the keypad address (Default = 07).

   Consult the control panel's installation guide to select the correct address. Use the [*] key to advance to the Zone Supervision type option. The following will be displayed:

   `A1`

5. By pressing the [1] or [0] key, you can toggle the zone supervision type option. Either conventional EOL resistor supervised zone or double-balanced zones (see Figure 3) may be selected. Enter [1] to select EOLR or [0] to select double balanced (default = conventional EOLR, 1). Consult the panel's installation guide for proper zone type selection. Use the [*] key to advance to the Tamper option. The following will be displayed:

   `b0`

6. Enter [1] to enable the tamper feature or enter [0] to disable the feature (default = 0 - disabled).

   Use the [*] key to advance to the LCD display option. The following will be displayed:

   `c 1`

7. By pressing either the [1], [2], or [3] keys you can select the LCD display option (default = 1).

   Option 1: The display is always active (default = 1).

   Option 2: The display and LEDs are blanked until a key is pressed, then displays for 45 seconds after the last key was pressed.

   Option 3: The display and LEDs are blanked 45 seconds after the panel is armed and remains blanked until the panel is disarmed (default = 1).

   Use the [*] key to advance to the Sounds option.

   `d 1`

8. By pressing the [1] key, you can toggle the Sounds option (default = 1).

   Option 1: To produce all sounds set the option to ALL SOUNDS (default = 1).

   Option 2: To produce only key click and alarm sounds set the option to ALARM.

SPECIFICATIONS

Dimensions:

4-7/8"H x 6-1/4"W x 1"D

Wiring

Terminals:	**Description**
G▼	Data In to Control Panel
–	– Ground (12 VDC –)
+	+ 12 VDC Power Input
▲Y	Data Out from Control Panel
ZN1	+ Wired Zone 1
⬇	- Wired Zone 1

LEGEND

⬇ = -

Note: The keypad will display "OC" and beep periodically when there is a fault that prevents data from reaching the keypad.

Display:

Fixed word LCD, backlit.

Sounder:

Piezo (fire alarm sound is loud, temporal pattern pulsed tone; burglary alarm sound is loud, continuous, dual tone).

Voltage:

+12 VDC

Current:

Alarm rating: 80mA (LCD backlight on, sounder on)

Standby rating: 50mA (LCD backlight on, sounder off); 35mA (LCD backlight off, sounder off)

The control panel determines whether LCD backlighting is on or off. When determining the capacity of the control panel's backup battery, use the following chart:

If Backlighting is . . .	**Then . . .**
On steadily	Use the 50mA current rating
Off when keypad is inactive	Use the 35mA current rating.

REFER TO THE INSTALLATION INSTRUCTIONS FOR THE CONTROL PANEL WITH WHICH THIS DEVICE IS USED FOR WARRANTY INFORMATION AND FOR LIMITATIONS OF THE ENTIRE ALARM SYSTEM.

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