ADT SAFEWATCH EZ™
SW-BOLT-TRANS
INSTALLATION INSTRUCTIONS

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GENERAL DESCRIPTION

The SW-BOLT-TRANS wireless transmitter is designed for use with the SW-EZ-WL Touchpad wireless receiver, which is wired to the SW-EZ9P Panel. The SW-BOLT-TRANS is used with the SW-BOLT-SENSOR and a N/C door contact, sending the status of the deadbolt (locked/unlocked) and the associated door (open/closed) to the receiver in the SW-EZ-WL Touchpad.

The SW-BOLT-TRANS is powered by a 3-volt Type DL123A lithium battery, which will power the transmitter for up to 5 years. When battery voltage drops below normal, a low-battery report will be sent to the receiver.
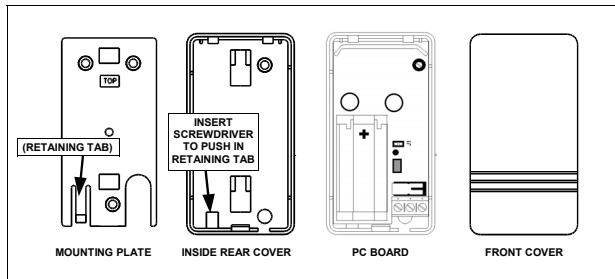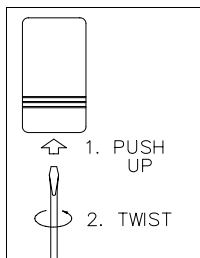

Fig. 1. SW-Bolt-Trans Component Parts
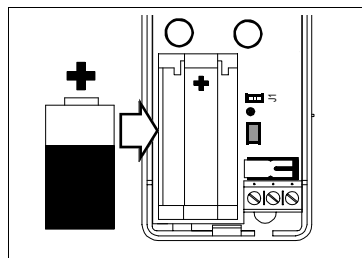

Fig. 2. Opening the case

Fig. 3. Installing the battery

Each transmitter has a unique factory-programmed code that distinguishes itself to the receiver.

TRANSMITTER AND RECEIVER OPERATION

When learning transmitters into the SW-EZ-WL Touchpad receiver, it is necessary to keep the Touchpad faceplate open in order to examine the receiver LED and operate the Mode button (with a pen tip). There are three receiver Modes: **Learn Mode**, **Replace Mode**, and **Clear Mode**.

Learn Mode

Learn Mode allows the learning of the first transmitter detected by the receiver. To make learning transmitters as easy as possible, when power is first applied to the SW-EZ-WL Touchpad, the receiver LED flashes rapidly, indicating the Touchpad receiver is in Learn Mode. The LED *not* flashing upon power-up indicates the presence of a previously learned transmitter within the Touchpad receiver. *In Learn Mode, you cannot re-learn a transmitter that has previously been learned.* You will either need to clear ALL data from the receiver, or add a second transmitter to the receiver.

- To clear all data, refer to the Clear Mode section below.
- To learn a Secondary transmitter, press the Mode Button to re-start Learn Mode (the LED will begin to flash rapidly) and a Secondary transmitter can be learned. See page 5, step 17 for this procedure.

Learn Mode is used when installing new systems, or adding a new Secondary transmitter to an existing system.

Replace Mode

Replace Mode is used when an *existing* transmitter within an *existing* system must be replaced. Replace Mode allows a new transmitter to replace (overwrite) existing transmitter data. To enter Replace Mode, start in Learn Mode (rapid flashing), then press the Mode Button again (with a pen tip) and the receiver will slowly flash. This slowly flashing LED indicates the receiver is in Learn Mode. The receiver will overwrite either the Primary or Secondary transmitter data, depending on the state of the transmitter shunt connector (if the shunt connector is removed from the address jumper, the Primary transmitter will be overwritten; if the shunt connector is placed on the address jumper, the Secondary transmitter will be overwritten).

Clear Mode

You can erase ALL pre-existing transmitter data from the receiver Touchpad at any time. Simply press and hold the Mode Button (about 6 seconds--use a pen tip) until the LED turns on steady. (While holding the Mode Button, the LED will flash rapidly--after about 6 seconds the LED will then turn on steady). Release the button and the LED will resume flashing rapidly, indicating the receiver is once again in Learn Mode with all pre-existing data erased.

INSTALLING A SECOND SW-BOLT-TRANS

The wireless EZ system can include up to two SW-EZ-WL Touchpads, and each wireless Touchpad can include up to two SW-Bolt-Trans transmitters supervising two doors.

IMPORTANT: With a single SW-EZ-WL Touchpad installation with two doors protected by two transmitters, one transmitter must be configured as a Primary (NO shunt connector installed into the address jumper) and the other transmitter must be configured as a Secondary (with the shunt connector installed). The Primary transmitter should always be installed to protect the door most often used to ARM the system and EXIT the premises. The Secondary transmitter should be used to protect a second door that will be used only for ENTRY (or to disarm when armed Stay).

Although the Secondary door can, in theory, be used as an exit door, to do so you must always be certain the Primary door deadbolt is locked before arming, thus defeating the foolproof nature of the EZ system. The Ready light will NOT indicate the status of the Primary door deadbolt (the Ready light will ONLY indicate the status of the Secondary door deadbolt). Therefore, *pressing Away and exiting through the Secondary door (with the Primary door deadbolt remaining unlocked) will result in the system automatically reverting to an unarmed state after the exit delay expires.* As a result, the homeowner should be instructed to use the door protected by the Secondary transmitter FOR ENTRY ONLY (or to disarm when armed Stay).

Similarly, with a single SW-EZ-WL Touchpad installation with one exit door protected by one transmitter, the Ready light will always be on regardless of the position of the protected deadbolt. This is designed to allow the arming of the system with the exit door open.

Furthermore, because the Touchpad integral PIR may not always be able to supervise the Secondary transmitter, care must be taken to ensure an intruder can not disarm the system by turning the deadbolt latch at the Secondary transmitter. Using an additional PIR to generate an alarm before the intruder can turn the deadbolt latch may not be sufficient (standard PIR's false alarm features may cause it to take too long to detect an intruder). Additional perimeter and/or interior intruder detection devises, such as window foil, glass breaks or additional PIR's, may be required to ensure the intruder will be detected by the system before the deadbolt latch at the Secondary transmitter can be thrown. **Note:** If the Secondary transmitter deadbolt is unlocked, the READY light will be out; if the READY light is out when attempting to arm the system, all monitored deadbolts (except at the primary door) **must** be examined and locked before the system can be armed.

Test the Secondary Transmitter

The Secondary transmitter should always be tested prior to installation, as follows: After installing and learning the Primary transmitter, place the Secondary transmitter in the selected mounting location and remove the cover. Remove the SW-EZ-WL Touchpad from its backplate and have someone observe the receiver LED as the Secondary transmitter tamper switch is pressed and released. The receiver LED should flicker several times. If it does not, try another mounting location. If a location cannot be found, a second SW-EZ-WL or SW-EZ Touchpad must be used.

MOUNT AND WIRE THE SW-BOLT-SENSOR AND WIRE THE DOOR SENSOR TO THE SW-BOLT-TRANS

1 **Do not use an EZ Bolt-Cup for this installation.** Use only an **SW-Bolt-Sensor** as shown below.

EZ Bolt-Cup
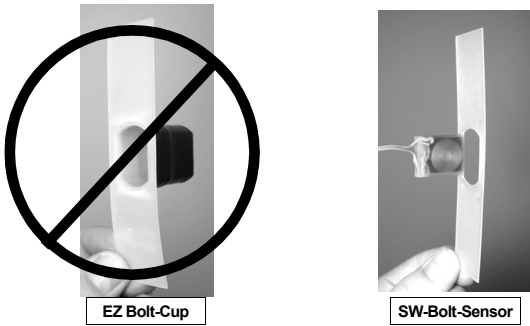
SW-Bolt-Sensor

2 **Remove the strike plate** Remove the two screws securing the deadbolt strike plate to the door frame. If there is a dust cup installed, it must be re-moved.

Screws

Strike Plate

Door Frame

Molding
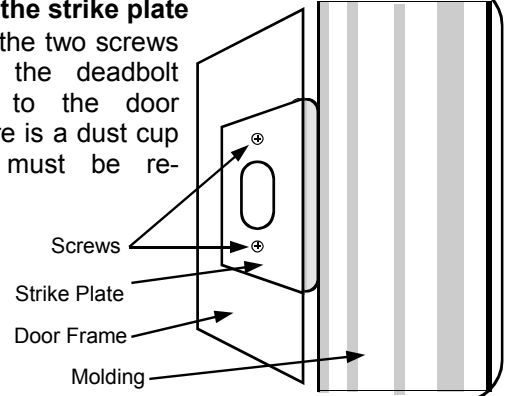
3 **Test fit the SW-Bolt-Sensor** into the deadbolt strike hole. For increased kick-in protection, place the sensor "tab" closer to the inside (protected) side of the premises. Determine if the deadbolt hole will need enlarging. The SW-Bolt-Sensor requires a depth of approximately 1". In addition, one side of the deadbolt hole must be enlarged to accommodate the sensor "tab".

Place "tab" closer to the inside (protected) side of the premises. The "tab" side of the deadbolt hole must be enlarged if necessary.
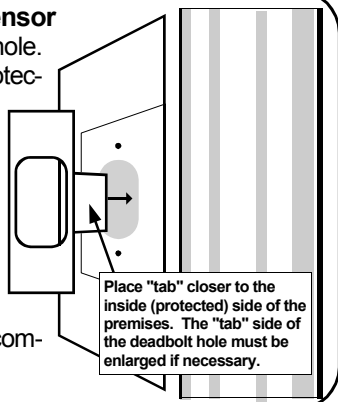
4 **Enlarge the deadbolt hole** using the supplied drilling guide. Secure the steel drilling guide to the bolt hole using the strike plate screws. With a ¼" bit, hold the drill level and drill through the (2) holes of the guide matching the location of the sensor "tab" to a depth of approximately 1½".

Remove the drill guide when done.

The template is used as a guide for enlarging the existing deadbolt hole.
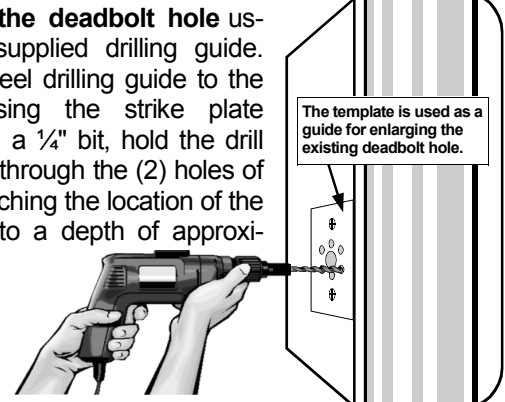
5 **To increase the *depth* of the dead-bolt hole,** use a 1" spade bit (shown).

Remove the remaining wood from the deadbolt hole opening using a rotary wood rasp. The opening must not obstruct the installed SW-Bolt-Sensor or the closed deadbolt.

Rotary Wood Rasp
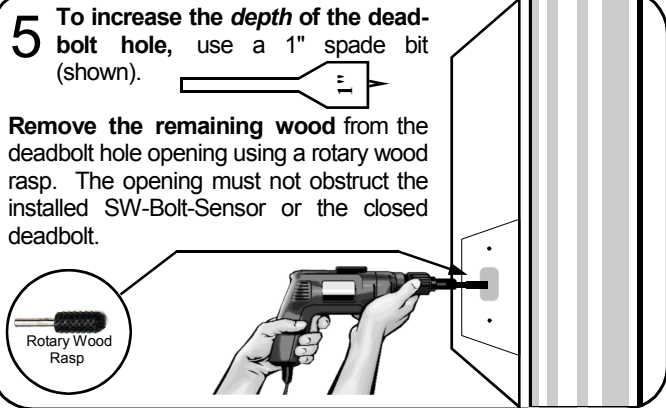
6 **Locate the SW-Bolt-Trans:** Mount the SW-Bolt-Trans inside a drop ceiling, above the door frame, or in any location suitable for the installation (see illustration for possible locations). Using its mounting base as a template, mark the mounting holes and wire access hole (leaving at least ¾" from the edge of the door molding to allow for the greater width of the SW-Bolt-Trans case). Drill the wire access hole as necessary.

Possible mounting locations
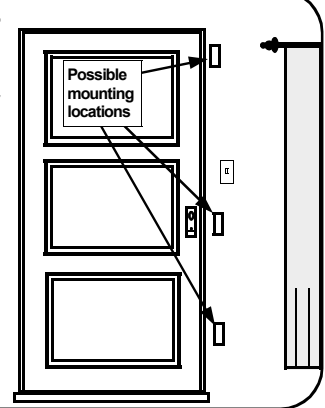
7 **Drill access hole for SW-Bolt-Sensor** Drill a 3/8" hole in the deadbolt hole (A) for a two conductor wire to be run from the SW-Bolt-Sensor to the edge of the door jamb. From this point, the wire can emerge from the wall and be placed next to the door jamb or can continue through the wall to the SW-Bolt-Trans, as necessary.

A
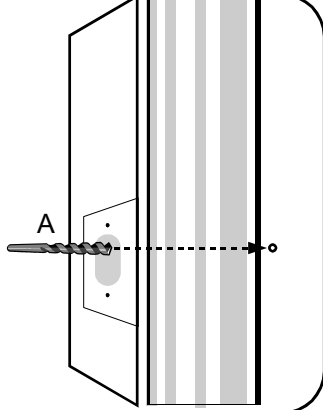
8 **Drill Door Contact Hole** Drill a hole (B) for a 3/8" recessed door contact sensor. To maintain Door Kick-in Protection, the sensor must be placed on the "latch side" of the inside door frame or the top of the door frame (header). Install the door contact magnet into the door. When the door is closed, the magnet must be adjacent to the sensor. **Warning:** When drilling through door frame, always stay clear of high voltage wiring which may be present in the wall cavity.

B
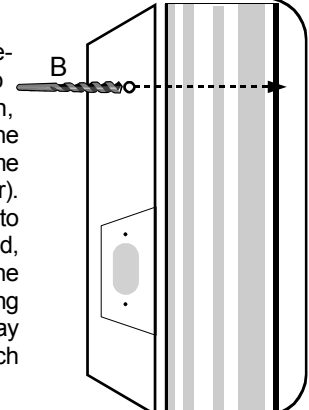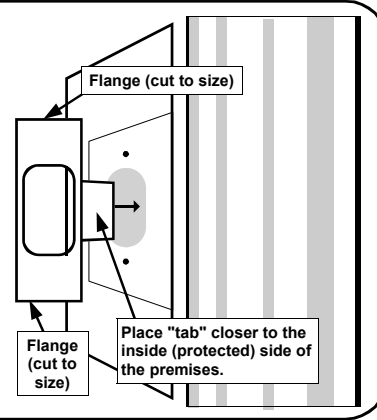
9 Install Recessed Door Contact

The door contact sensor wires must be connected to the SW-Bolt-Trans.

Insert wire snake into the SW-Bolt-Trans wire access hole and out through the door contact sensor hole in the door frame. Connect the end of the sensor wires to the wire snake and pull wires into door frame and out the SW-Bolt-Trans wire access hole in wall.
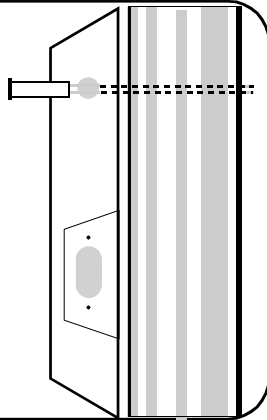
10 Install SW-Bolt-Sensor

Using a wire snake, pull wire from the deadbolt strike hole and into the SW-Bolt-Trans wire access hole in wall. Place the SW-Bolt-Sensor into deadbolt hole. If the plastic SW-Bolt-Sensor flanges protrude past the area covered by the strike plate, it may be trimmed with a knife (see image).

Flange (cut to size)

Flange (cut to size)

Place "tab" closer to the inside (protected) side of the premises.

11 Install strike plate

Place strike plate over the SW-Bolt-Sensor. Align properly over screw holes and punch through the plastic flange of the SW-Bolt-Sensor with an awl or other sharp tool. Replace the 2 screws to secure the strike plate. Ensure that the SW-Bolt-Sensor hole is centered in the strike plate opening.
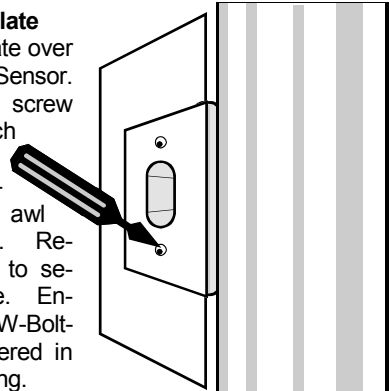
12 Install the SW-Bolt-Trans

(**Note:** Do NOT install battery until wiring is complete). Mount the Transmitter base (screws provided) with all wires from the wall hidden under the Transmitter. Wire the SW-Bolt-Trans as follows:

- Twist together one wire from the SW-Bolt-Sensor and one from the door contact and screw into center terminal.
- Insert the remaining SW-Bolt-Sensor wire into the left terminal and secure.
- Insert the remaining door contact wire into the right terminal and secure.
 Do NOT install the Transmitter cover.

BATT.   BOLT   COM   DOOR

SW-BOLT SENSOR

N/C DOOR SENSOR
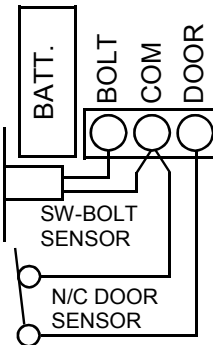
## LEARN TRANSMITTERS AND TEST SYSTEM

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13 Multiple Transmitters--Notes

The Primary transmitter that is located in the same room as the Touchpad is designated as "Transmitter #1", *and its jumper must NOT be installed*.

If there is a Secondary transmitter installed ("Transmitter #2"), it MUST have a shunt on the Address jumper. See page 2 for more information. **Remove all transmitter covers before proceeding.**

Jumper not installed

Jumper installed
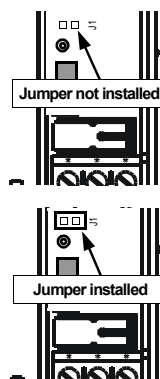
14 Prepare Receiver to Learn Transmitters

With all wiring in place, apply power to the control panel. (the Touchpad receiver will power up) To ensure that the receiver is cleared of all data, use a pen tip to push and hold the button in the center of the Touchpad (see illustration) until the LED is on steady, then release the button. The LED will start flashing, indicating the receiver is in Learn Mode and ready to learn new transmitters.
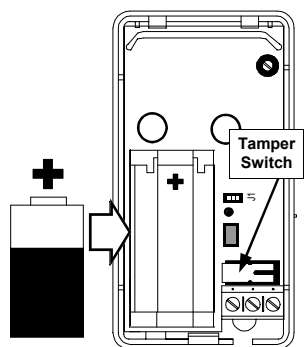
LED

Push Button (use pen tip)   Antenna
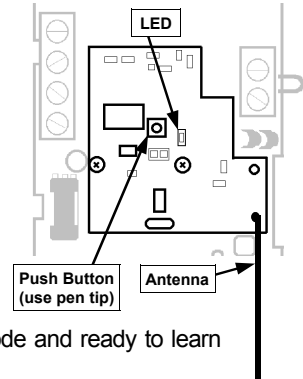
15 Test SW-Bolt-Trans

Note: Transmitters CANNOT be programmed with their covers on. Remove all transmitter covers.

**Unlock and open door**. While pressing and holding the tamper switch, insert battery (as shown), then release the tamper switch.

Tamper Switch

16 (Cont'd)

For a few seconds, the transmitter will begin a self-diagnostic process, then the LED inside the SW-Bolt-Trans will flicker, indicating the SW-Bolt-Trans is transmitting a signal to the receiver.

The Touchpad LED will stop flickering and a chime will sound-- indicating that the transmitter is successfully programmed into the Touchpad memory.

LED
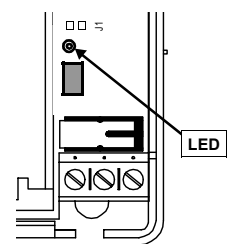
17 Test Transmitters

1. Close the door. The Touchpad cover should indicate "Ready".
2. Press **STAY** (the STAY light flashes).
3. Engage the deadbolt. Both the ARMED and STAY lights on the Touchpad should turn on (the system armed STAY).
4. Disengage the deadbolt and the system should disarm and turn back off (READY light turns on).
5. Open the door. The Touchpad should sound a chime.

If there is a problem, see Troubleshooting on page 9.

To learn a second transmitter, start again at step 13.

18 Test Transmitter Signal Level

Test the transmitter to confirm signal strength. Press and release the tamper switch. The receiver LED should flicker in unison with the transmitter LED; if not, there is a problem with the installation (see Troubleshooting on page 9).

Close the Transmitter Case
Snap the front of the Transmitter cover onto the base by inserting the 2 slots in the top onto the corresponding tabs on the base and then snapping the bottom into place.

19 IMPORTANT: Seal access holes

First create a service loop of wires that is long enough to allow the receiver button to be pressed and the LED to be observed.
Then seal the access holes with putty (supplied) to ensure EZ Touchpad is air tight. This important step is necessary to prevent air drafts from entering the EZ Touchpad from the wall cavity.

TOP UP
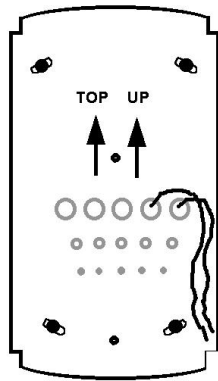
20 Install the EZ Touchpad Face

Double-check all connections to the EZ Touchpad using the wiring diagram as a guide. The antenna must be carefully pushed through the hole in the case and dangle down the inside of the wall (see step 3). Snap the front of the EZ Touchpad onto the base by first inserting the 2 slots in the top onto the corresponding tabs on the base and then snapping the bottom into place.

EZ Touchpad Wiring Diagram

JP1 Configuration Jumper

ADDR
PIR≠
AUX2
JP

NOTE: Cut JP3 if AUX ZONE is used.

To EZ9 Panel Terminals

T 16	①	(+)PWR
T 17	②	(-)GND
T 18	③	DATA
T 14	④	(+)

REM BUS

AUX ZN(+) ⑧
COM(-) ⑨

AUX. ZONE (N/C)

Mode Button
LED
Antenna

SW-EZ-WL Receiver Circuit Board (Inside Touchpad)
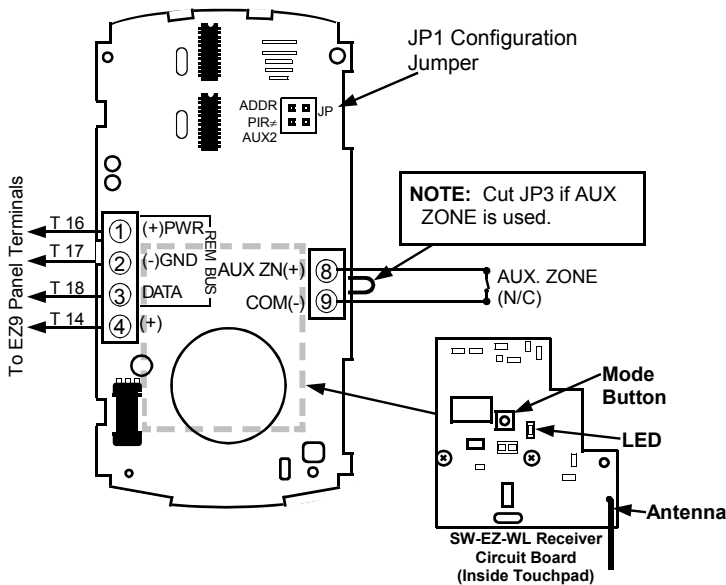
EZ Touchpad Configuration Jumper JP1

JP1

EZ Touchpad Address

EZ Touchpad Zone 2 Configuration

EZ Touchpad Address # 1	off
EZ Touchpad Address # 2	**ON**

EZ Touchpad PIR and AUX Zone enabled as Zone 2*	off
Only EZ Touchpad AUX Zone enabled as Zone 2*	**ON**
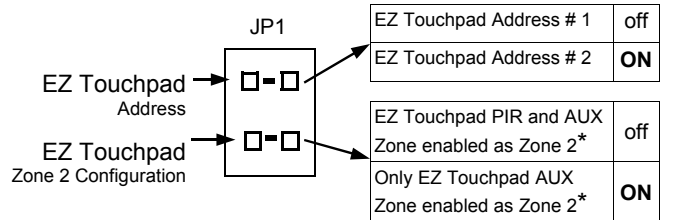
* If AUX ZONE is used, cut Jumper 3 (JP3).