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NAPCO FREEDOM 64

Garage Touchpad & Garage Motor Sensor

INSTALLATION INSTRUCTIONS

WI1508A 9/06

GENERAL DESCRIPTION

The NAPCO Freedom 64 Home Protection System, a revolutionary new concept in residential security, combines intuitive interactive arming with a passive disarming scheme, providing a system which is not only effortless to use, but also virtually false alarm resistant during the arming and disarming sequences.

For those who own remote garage door openers and who regularly exit their homes through their garage, the expandable Freedom 64 system allows for the addition of a special F-64TPG "Garage Door" Touchpad, allowing arming and easy exit through the garage door.

The F-64TPG Garage Touchpad system is armed with a simple push of a button (**STAY** or **AWAY**) on the Touchpad control module, followed by the closing of the outside garage door. To disarm, simply open the garage door with the existing remote-control opener.

The microprocessor controlled F-64TPG Garage Touchpad is designed to be connected to the existing automatic garage door opener hardware, using information provided by a garage door magnetic contact (magnet and sensor), a "F-GDMS" Garage Motor Sensor (connected to the garage door opener power cord) and a built-in PIR motion sensor ensuring fool-proof operation.

The garage door magnetic contact, which can be mounted in a variety of locations, senses the state of the outside garage door (closed or open) and sends this information to the microprocessor, where the decision is made to arm or disarm the system.

The F-GDMS Garage Motor Sensor is connected in series with the existing garage door opener power cord, and ensures that the garage door is always opened with the garage door motor—protecting against garage door kick-in. If the garage door magnetic contact detects that the garage door has been opened without the garage door motor being used, the system will initiate an entry delay sequence, and must be disarmed using an I-FOB within the entry delay time.

The F-64TPG Garage Touchpad's integral wide-angle PIR motion sensor acts as an occupancy sensor that provides the microprocessor with activity information which prevents the user from making errors during the critical exit and entry periods. For example, if the user presses the **AWAY** button, opens and closes the garage door but does not leave, the PIR will sense the user's presence in the garage and automatically default to Stay mode arming, preventing a false alarm.

If the system is armed in the Away mode, the F-64TPG Garage Touchpad PIR will generate an alarm if an intruder is detected. After an alarm, the system may only be silenced by inserting the I-FOB digital key into the I-FOB slot on the F-64TPG Garage Touchpad.

By allowing this level of system control without traditional numeric keypad interaction, the Freedom System will provide a significant reduction in false alarms due to user error and also provide comfortable use of the system to those customers whose technophobic tendencies would prevent them from arming and disarming the system using a traditional keypad.

The Freedom 64 System also prevents the arming of the alarm

system if all deadbolts in the home are not engaged, a high security feature normally found only in very elaborate high-end installations.

The F-64TPG Touchpad is one of 4 Touchpad designs within the NAPCO Freedom 64 Home Protection System. The three other Touchpad designs include:

- **F-64TP**: Wireless Touchpad (See WI1499)
- **F-64TP-H***: Hardwired Touchpad (See WI1518)
- **F-64TPBR**: Bedroom Touchpad (See WI1505)

INTEGRAL 4 ZONE EZM

Each Touchpad contains an integral 4 zone EZM, allowing the zone capacity of the F-64 panel to be expanded. With a maximum of four Touchpads allowed per system, a total of 16 zones may be added to the system using Touchpads. Three GEM-K1CA keypads can also be added (each with an integral 4 zone EZM) adding 12 additional zones for a total of 28 zones from Touchpads and keypads. Additional GEM-EZM's and/or GEM-EZM4-8's can be added, thus maximizing the capacity of the F-64 control panel to a grand total of 64 zones within the system.

INSTALLATION

The Freedom system utilizes the home's existing garage door opener and requires only that the F-GDMS Garage Motor Sensor be placed in series with the 110VAC garage door opener electrical cord and the 110VAC outlet. This sensor, used in conjunction with the garage door magnetic contact, enables the system to detect operation of the garage door opener motor and the status of the garage door (open or closed). Simply remove the garage door motor electrical cord from its outlet, plug in the F-GDMS Garage Motor Sensor, secure with a screw (same as a standard transformer) and plug the power cord into the F-GDMS. The garage door magnetic contact is installed on the door and wired to the F-64TPG Garage Touchpad. The Touchpad installs on a 4-wire bus and also includes an integral siren that produces 85 dB (at 10 feet).

The F-64TPG Garage Touchpad includes 2 on-board zone inputs, one for the garage door magnetic contact and one for an auxiliary device such as a motion sensor, glass-break detector or other device. In just about the same time it takes to install a traditional keypad, this comprehensive module comprising of the F-64TPG Garage Touchpad, F-GDMS, garage door magnetic contact, motion sensor and siren can be installed.

NOTE: If protecting a door or window with glass panels or side lights, an acoustic glass-break sensor (connected to the F-64TPG Garage Touchpad Aux. Zone) should be installed to insure system integrity.

POWER

The F-64TPG Garage Touchpad is powered by the keypad bus of the F-64 Panel. Each F-64TPG Garage Touchpad draws 70mA (nominal) at 12V DC and an additional 140mA in alarm. The standby current may be reduced by cutting jumper "W1". Deduct these values from the system standby current, as described in the wiring diagram.



F-64TPG Garage Touchpad

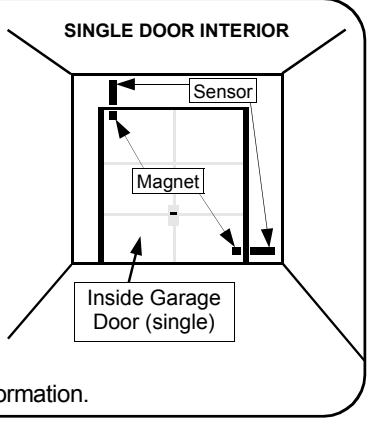
*Not evaluated by UL.

This manual contains the Installation Instructions for the Freedom F-64TPG Garage Touchpad & F-GDMS Garage Door Motor Sensor. It is intended to be used in conjunction with the Freedom F-64 Panel Installation Instructions (WI1501) and Freedom F-64 Panel Programming Instructions (WI1502).

Installing the Freedom F-64TPG Garage Touchpad

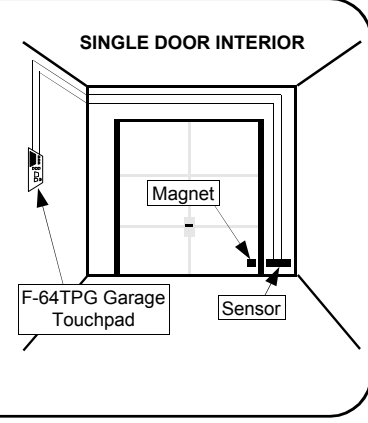
Select a mounting area that provides a proper field of view for the Touchpad PIR sensor. The Touchpad PIR should **not** be placed opposite windows (see page 4 for more information). **Note:** To increase clarity, illustrations do not display door opener motor mechanisms.

1 Install the garage door magnetic contact. Choose a location inside the garage so that when the garage door is closed, a magnet (mounted on the door) will be aligned with the sensor (mounted on a wall).



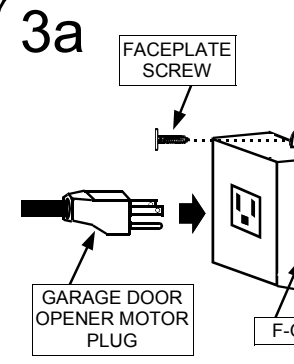
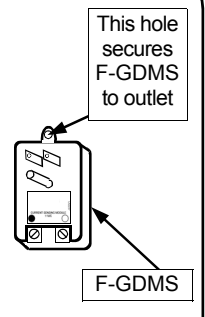
In the diagram at right, the two typical sensor mounting locations are: (1) vertically above the garage door or (2) horizontally near the floor. See step 2 and 3 for more information.

2 Before selecting a location for the garage door magnetic contact, be sure to make allowances for a wire which will run from the sensor to the door input terminals (6 & 7) located inside the F-64TPG Garage Touchpad.

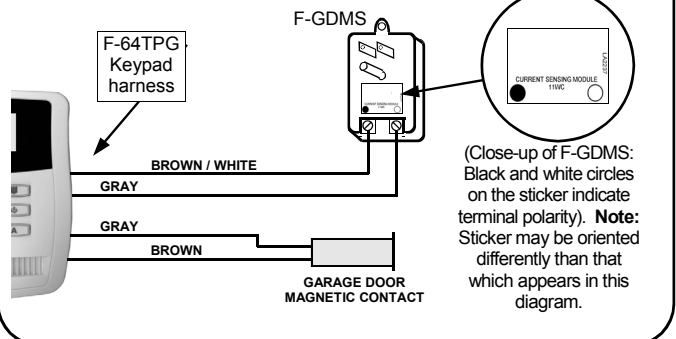


For multiple garage doors, see step 4.

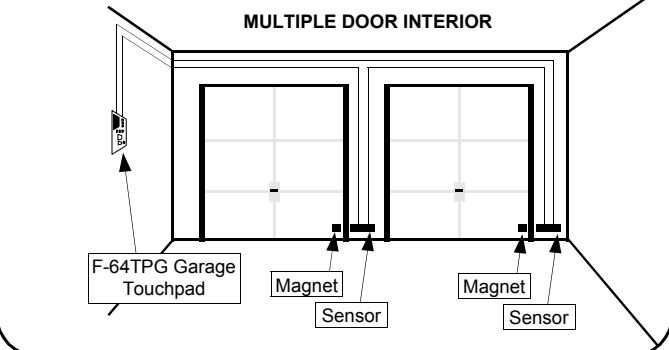
3 Install the F-GDMS. Unplug the existing garage door opener motor electrical cord from its 110VAC outlet. Remove the outlet center faceplate screw. Holding the faceplate in place, plug the F-GDMS into the 110VAC outlet and replace the center faceplate screw through the hole at the top of the F-GDMS, securing the F-GDMS to the outlet. Plug the garage door opener motor power cord into the 3-prong outlet in front of the F-GDMS. See Step 3a for exploded view.



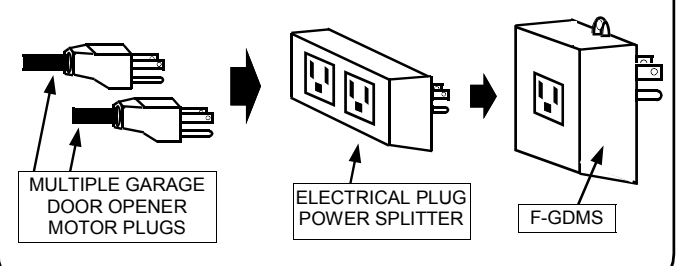
3b For a single garage door, wire the F-GDMS as shown:



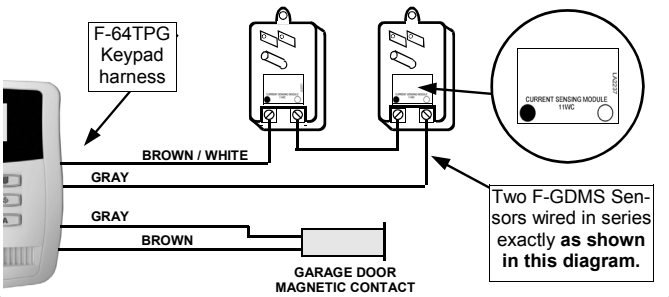
4 FOR MULTIPLE GARAGE DOORS, install the Door Sensor in series:



4a For Multiple Garage Door Openers using one outlet, you must use a simple electrical plug power splitter. (BOTH motors must run through the F-GDMS). For two motors using two outlets, go to step 4b.



4b For Multiple Garage Door Openers using two or more outlets (one for each door motor), you must use two F-GDMS's and they must be wired in series:



(continued)

5 Open the F-64TPG Garage Touchpad.

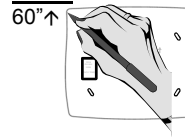
Remove the front of the Touchpad housing by inserting a screwdriver into the (2) slots in the bottom of pad.

Push the screwdriver up and gently twist to unhook the plastic tabs which secure the face of the F-64TPG Garage Touchpad to its base.



6 Mark the holes.

Mount anywhere in a room with a favorable PIR field of view, approximately 60" high (measured from the floor to the top of the F-64TPG Garage Touchpad).

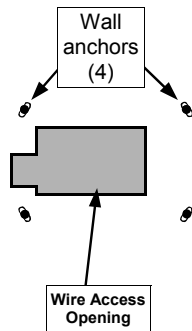


Affix the template (see last page of this manual) to the wall and mark or punch through the 4 oval mounting holes and the wire access opening.

7 Cut access hole.

Install (4) wall anchors and cut access hole in wall. Use template as needed.

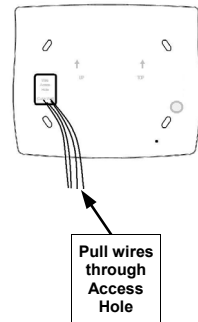
Warning: Use caution when cutting holes. There may be high voltage wiring in wall.



8 Pull wires through access hole.

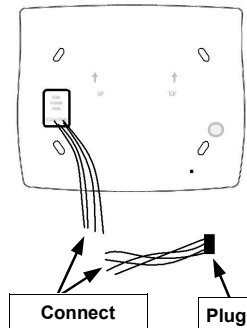
Pull 4 conductor bus wire from F-64 control panel through access hole opening in wall.

Next, be sure to insert wires through hole in the Touchpad base. Then secure the Touchpad base to wall.



9 Make Connections.

With Touchpad base secured to the wall, solder or crimp bus wires to the Touchpad connector plug using the wiring diagram as a guide. **Note:** Before connecting, wires can be cut to a shorter length to allow excess wires to be pushed back into the access hole opening in the wall.



10 Install the Touchpad Face.

Double-check all connections to the Touchpad using the wiring diagram as a guide. Snap the front of the 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.

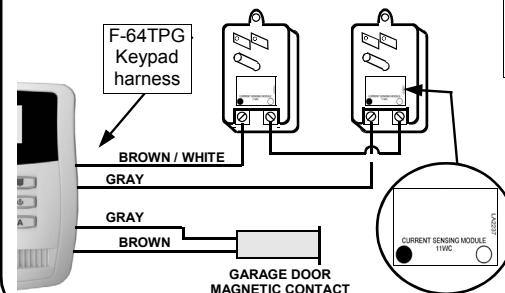


11 TEST THE SYSTEM.

Always test the operation of the F-64TPG Garage Touchpad and the garage door(s) to ensure the system arms and disarms properly.

SPECIAL TEST FOR MULTIPLE GARAGE DOORS: In the special case of two or more garage doors which operate *simultaneously*, (i.e. with one remote control), with separate door motors powered by separate AC outlets, a failure to arm/disarm could be due to an "out of phase" condition. Re-wire by reversing the wires on one F-GDMS as shown in step 12 and re-test the system.

12 Wire as shown below ONLY if you encounter an "out-of phase" condition as detailed in step 11.

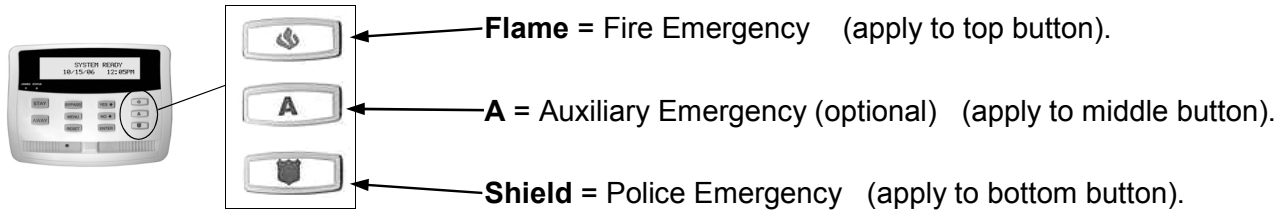


Two F-GDMS Sensors wired as shown if doors fail test in step 11.

NOTE: The black and white circles on the sticker (on the F-GDMS as shown at left) indicate terminal polarity.

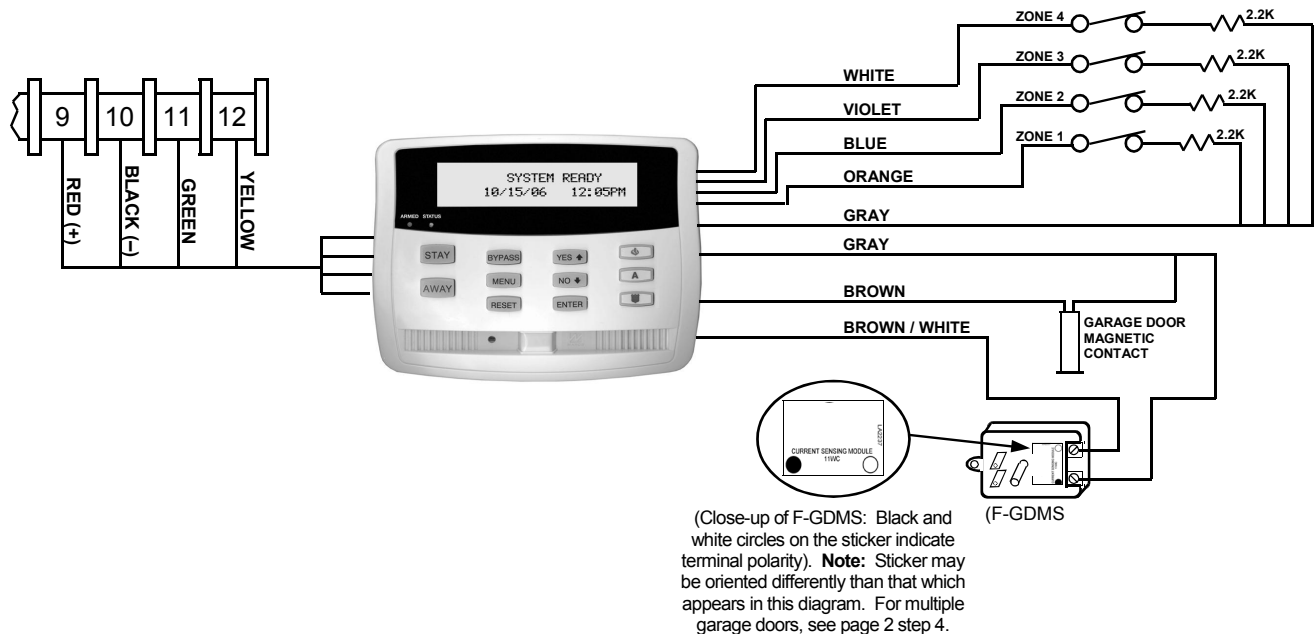
EMERGENCY BUTTON DECALS

Position as follows:



F-64TPG TOUCHPAD WIRING DIAGRAM

Freedom F-64 Panel Terminals and Door Contact / F-GDMS / EZM Harness



INSTALLING MULTIPLE TOUCHPADS

Up to four F-64TPG Garage Touchpads can be installed in one F-64 control panel. Each Touchpad is configured at the factory to be "Touchpad #1"; all additional keypads or Touchpads must have their Touchpad number changed via **Touchpad Configuration Mode** (see W11502 for instructions).

F-64 REMOTE BUS TERMINALS

- Terminal 9** - Red wire, positive 12VDC.
- Terminal 10** - Black Wire, negative (-) GND.
- Terminal 11** - Green Wire (data)
- Terminal 12** - Yellow wire (data)

DOOR CONTACT / F-GDMS / EZM HARNESS

- Garage Door Magnetic Contact** - Brown & Gray wires.
- F-GDMS** - Brown/white & Gray wires
- Zone 1** - Orange & Gray wires
- Zone 2** - Blue & Gray wires
- Zone 3** - Violet & Gray wires
- Zone 4** - White & Gray wires

ADDITIONAL INSTALLATION TASKS

After installing all system hardware with the power off, the following general steps are necessary to get the system powered up and running. See W11499 or W11532 for complete procedures.

1. At the F-64 control panel, place the jumper in Configuration Mode and apply power to the panel.
2. Each Touchpad installed in the system must be configured—enter Touchpad Configuration Mode (with "OUT OF SYSTEM" in the LCD window, press and hold **MENU** for 2 seconds). Enroll the F-LTRANS wireless transmitters, if applicable.
3. Temporarily replace the primary Touchpad with an F-64PROG programming keypad, and program the panel using the Easy Menu Driven Program Mode (or use PCD-Windows Quickloader Download software).
4. Enter *User Program Mode* and create a Master I-FOB for the system.
5. Insert the newly created Master I-FOB into the Touchpad and enter the Touchpad Menu Mode by pressing **MENU**. Press **NO** until "ACTIVATE PIR TEST" appears in the LCD window and perform a test of each Touchpad PIR.
6. Test the system.

TOUCHPAD PIR

The F-64TPG GARAGE TOUCHPAD includes an integral PIR sensor which provides the following system functions:

Activity Sensor

The PIR is always gathering activity information which provides the system with data that is used to insure proper use of the system and prevent user errors. For example, if the user presses the AWAY button, opens and closes the garage door but does not leave, the PIR will sense the user's presence in the garage and automatically default to STAY mode arming, preventing a false alarm. If additional PIR sensors are installed, the activity of these sensors will also be included in these decision making processes.

Intrusion Protection Device

When the system is armed AWAY, the PIR provides intrusion protection with a range of 25' at a 90° pattern of protection. An intruder detected in this protected area will cause a Zone 2 alarm (or Zone 8 alarm for TP #2) with a corresponding central station report and audible alarm. **NOTE:** If Touchpad PIR Intrusion Protection is not desired, it may be disabled by installing configuration jumper JP1.2.

Pet Protection

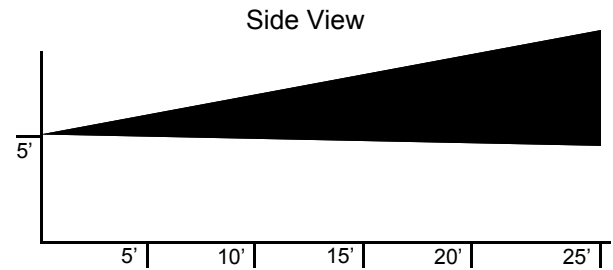
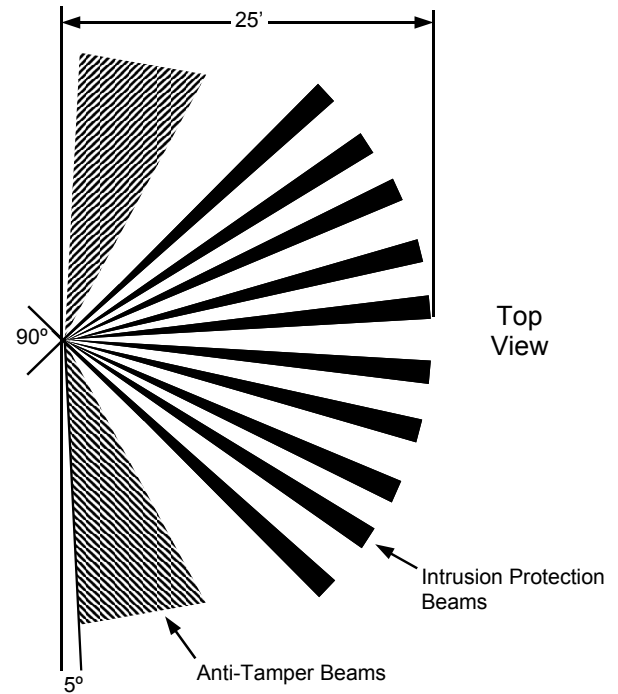
The F-64TPG Garage Touchpad is provided with a Pet Alley Lens installed, creating a low-sensitivity zone close to the ground that will not detect pets under 24" in height. **Note:** For installations with pets, additional perimeter and/or interior protection may be required to ensure system integrity.

Anti-Tamper Protection

The Touchpad PIR also includes 2 side beams which provide tamper protection. These side beams provide a 170° pattern of protection, which is intended to prevent an intruder from walking along the wall towards the Touchpad. If an intruder is detected in the Anti-Tamper zone, the system will be put into a lockout state for a period of several minutes, during which the system may only be disarmed with an I-FOB. In cases where an extremely large signal is generated in the Anti-Tamper zone, an actual Zone 2 alarm (or zone 8 alarm for TP #2) may occur.

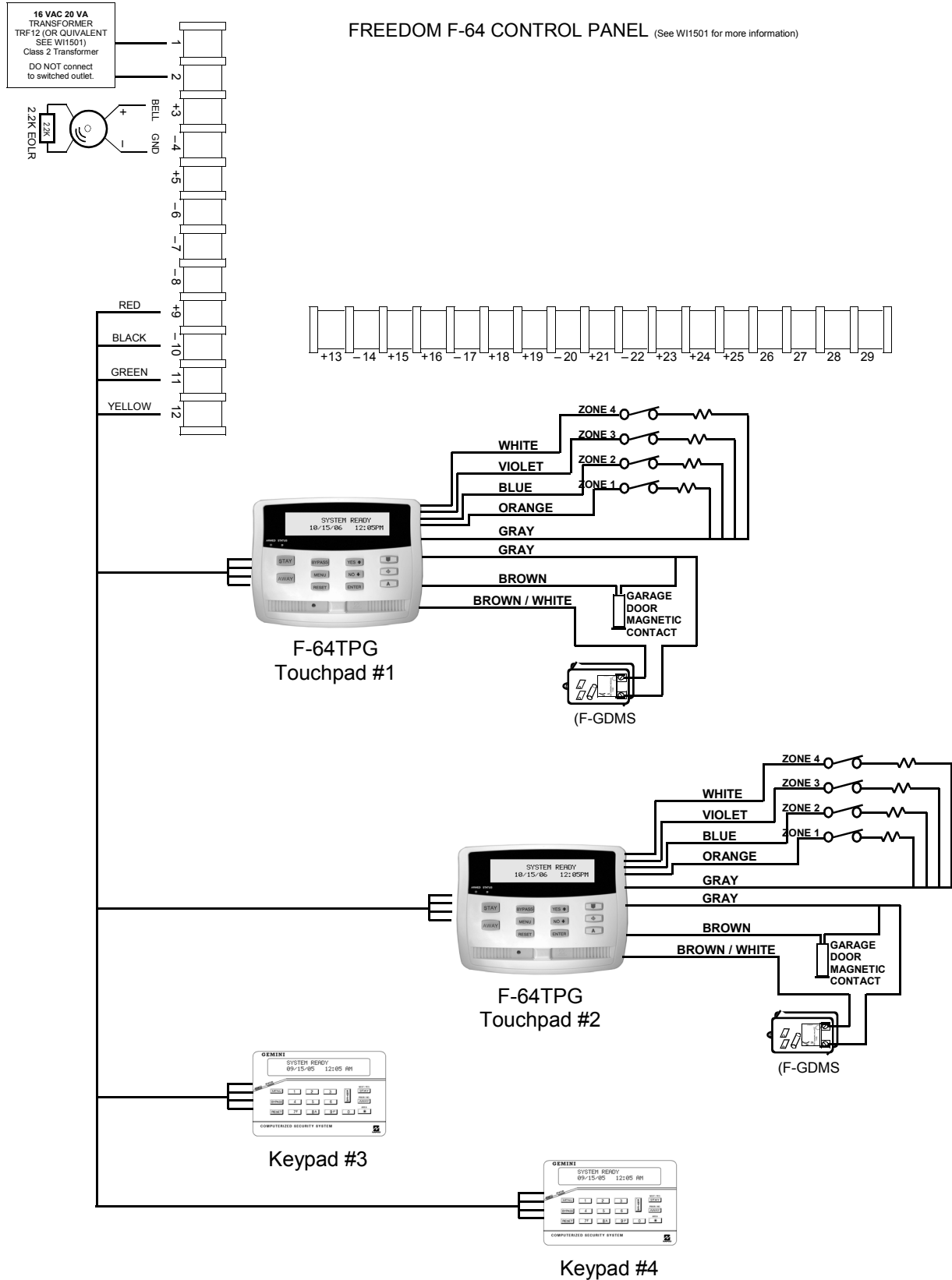
NOTE: If there are windows on the wall on which the Touchpad is mounted, they should remain closed while system is armed in order to prevent a draft from causing an Anti-Tamper condition.

- If the garage door opener can be accessed from an area that is not covered by the pattern of protection provided by the Touchpad PIR, then additional protection is required. This may include protecting other doors and windows or additional space protection.
- If the Touchpad is installed adjacent to a door with glass panels or side lights, a glass-break sensor (connected to the F-64TPG Garage Touchpad Aux. Zone) should be installed to insure the integrity of the system.



SYSTEM OVERVIEW

FREEDOM F-64 CONTROL PANEL (See W11501 for more information)



* Multiple Touchpads and keypads must be added contiguously, without gaps. For example, if adding a second Touchpad with two additional keypads, the second Touchpad must be added as Touchpad number 2, with keypads added as numbers 3 and 4. Adding a keypad into slot number 2, with a Touchpad in slot number 3 is not allowed.

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MOUNTING TEMPLATE

