GTO Digital Keypad – 25 Code Installation Guide

GTO Digital Keypad – 25 Code

Thank you for purchasing the GTO Digital Keypad. Be sure to read the directions carefully and completely. Before permanently mounting the keypad, please program the keypad and test its range.

IMPORTANT: Your keypad may need to be hard wired due to the fact that it must accept interference according to FCC regulations listed below. For example, applications that are relativity close to cell towers or airports may

receive intermittent interference and require hard-wiring.

The GTO Digital Keypad is a multipurpose keypad that can work with other applications in addition to GTO gate openers and locks. As a wired keypad it can operate garage door openers and gate openers, that require 24 volts or less and accept normally open contacts.
As a wireless keypad it can be used with any gate or garage door opener that receives a 318 MHz RF signal. The keypad must be used in conjunction with the GTO garage door receiver kit (part # RB709) on any other garage door.

SAFETY NOTE: Never install the keypad where a person can reach through the gate to activate it, or where a person can touch the gate while activating the keypad. The recommended minimum distance between the gate and keypad is 10 ft.

FCC ***WARNING:*** *Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.*
NOTE: *This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.*

However, there is no guarantee that interference will not occur in particular installations. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- *Reorient or replace the receiver antenna.*
- *Increase the separation between the equipment and the receiver.*
- *Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.*
- *Consult the dealer or an experienced radio/TV technician for help.*

Contents

Features of the Keypad

You may program up to 25 different personal entry codes, allowing you to give different entry codes to different users. For example, you can give a delivery person their own entry code, which you can easily change after they have made the delivery. This will prevent them from being able to regain access, while still allowing those to whom you gave other entry codes full access.

After entering a valid code, pressing any key while the gate is opening will stop the gate; pressing any key while

the gate is stopped and the gate will reverse direction. The keypad will not affect the auto-close setting of your gate opener system.

The keypad face will light up and beeper will beep at the press of any key. The keypad memory will recognize your entry code in a string of up to 20 digits; if it finds the correct sequence it will activate the gate opener. As a security feature, the keypad will shut down for 40 seconds if it does not find the correct code sequence within a 20 digit string. This will discourage an unauthorized person from trying to use random numbers to access your property.

Your entry codes will remain stored in memory even when the batteries go dead. The keypad will remember your entry codes as long as you don't press the RESET button.

Keypad Description

Keypad – Front

PROGRAM button:
Used to program access codes.

STATUS Light:
This led will blink once when any key is pressed and provides visual feedback during access code programming.

Keypad – Inside

DIP Switches:
Match these switches to your remote transmitter to program the keypad.

Power Input:
Used to connect power supply (8-24 Vac/dc) when using outside power source.

Relay output:
Used to connect Keypad to gate opener in hard-wired applications.

RESET button:
Pressing this button for 2 seconds will reprogram key pad to factory settings. All codes are deleted. Default master code is 1234.

Battery Holder:
Use 3 AA batteries if hard-wired power supply is not used. If external power source is used the 3 AA batteries will provide a back-up power source.

Installing Batteries

NOTE: 3 AA batteries are required to power the keypad unless an external power supply such as the gate openers power source is used. Low voltage wire from the external power source must be connected to the POWER IN terminals on the keypad control board, if batteries are not installed.

Step 1: Remove the two screws from the bottom of the keypad and separate the keypad from its housing.

Step 2: Install 3 AA batteries (not included).
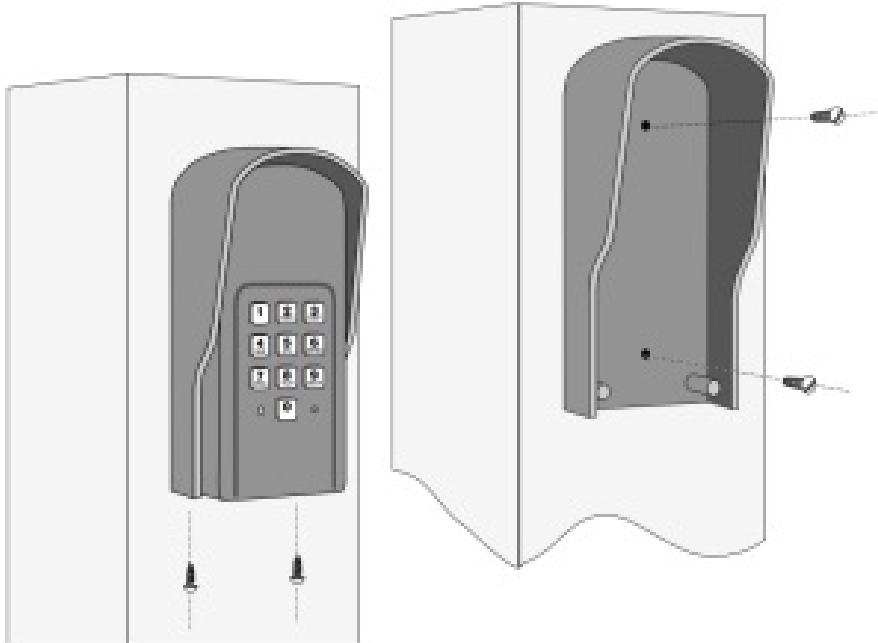
Wireless Installation of the Keypad

NOTE: For wireless applications, the distance from the keypad to the opener's receiver should not exceed 50 ft. Always test the keypad range before permanently mounting it.

Step 1: Mount the keypad cover using the screws provided. Set the keypad DIP switches to match your entry transmitter's DIP switch settings.
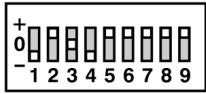
NOTE: If you have not changed your opener's transmitter code from the factory setting, see the "Setting Your Personal Transmitter Code" section in the gate openers manual then set the keypad DIP switches to match the new transmitter DIP switch setting.

Step 2: Slide the keypad into the cover and secure with the small screws provided.


Wired Installation of the Keypad

NOTE: If you also plan to power the keypad with the gate opener's power source, run two pairs of wires as described below. One pair to hard-wire the keypad and the other pair to connect the keypad to the gate opener's battery.

Step 1: Turn the gate opener's power switch **OFF**. Use 16 gauge, stranded, direct burial low voltage wire (part no. RB509) to connect the keypad to the opener control board. Run wire through PVC pipe from the ground to keypad and from the ground to the opener control board to protect the wire from lawn mowers or grazing animals.

Determine how the wire will enter the keypad (i.e. from the back through a hole drilled in the mounting post or running the wire on the surface of the post). Remove the small rectangular knock-out on the back of the keypad cover and pull the wire into the cover. Then mount the cover to the post using the screws provided.

Knock-out
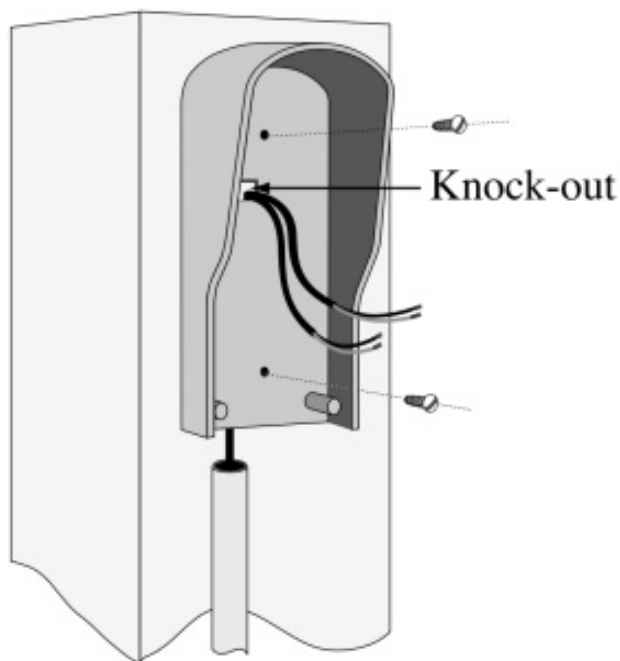
Step 2: To hard-wire the keypad – strip the wires back 3/16" and attach the wires to the terminal block marked RELAY OUTPUT on the keypad control board as shown to the right. Connect the other end to the opener's control board as shown in Control Board Connections section below.

To wire the power supply to the keypad attach the wires to the AC/DC POWER IN terminal on the keypad control board as shown to the right. Connect the other end to the opener's battery – one end to the POSITIVE pole and the other to the NEGATIVE pole.

NOTE: For a hard-wired application the jumper between the two terminals on the keypad control board must be connected (ON) as shown. This will disable the 318 MHz RF transmitter.


Hard-wire from Gate Opener
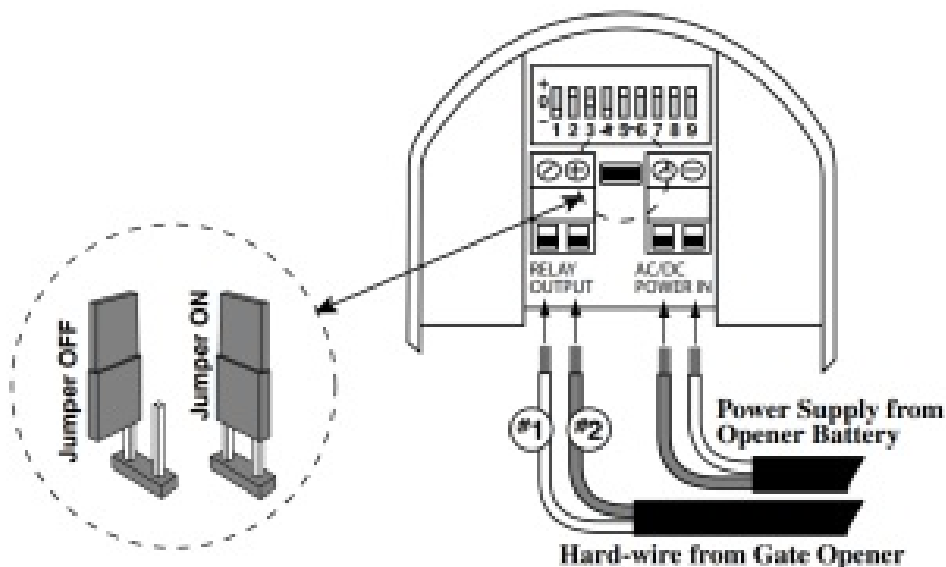
Step 3: Slide the keypad into the cover and secure with the small screws provided.

Step 4: With the power to the opener turned OFF.
Remove opener control board cover and feed enough of the low voltage keypad wire through a strain relief to reach the gate opener control board terminals.

Step 5: Attach the wires from the keypad to the opener control board terminal blocks as shown below.

Step 6: Replace the control board cover and turn the power switch ON. Test the keypad by entering 1 2 3 4.

Step 7: Program your 'Personal Master Code' and any additional entry codes (for a total of 25 entry codes) you wish. See Programming the Keypad section.
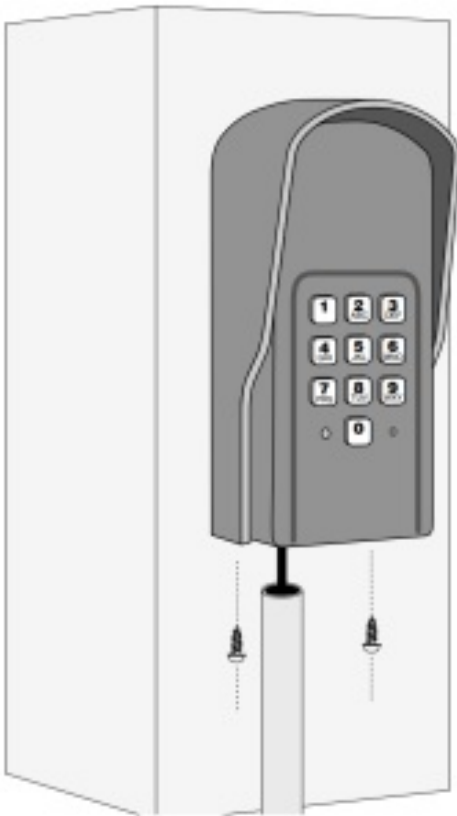
Control Board Connections

NOTE: If your control board doesn't look like any of these diagrams, please call GTO Technical Service at 1-800-543-1236 or 850-575-4144 for additional support.
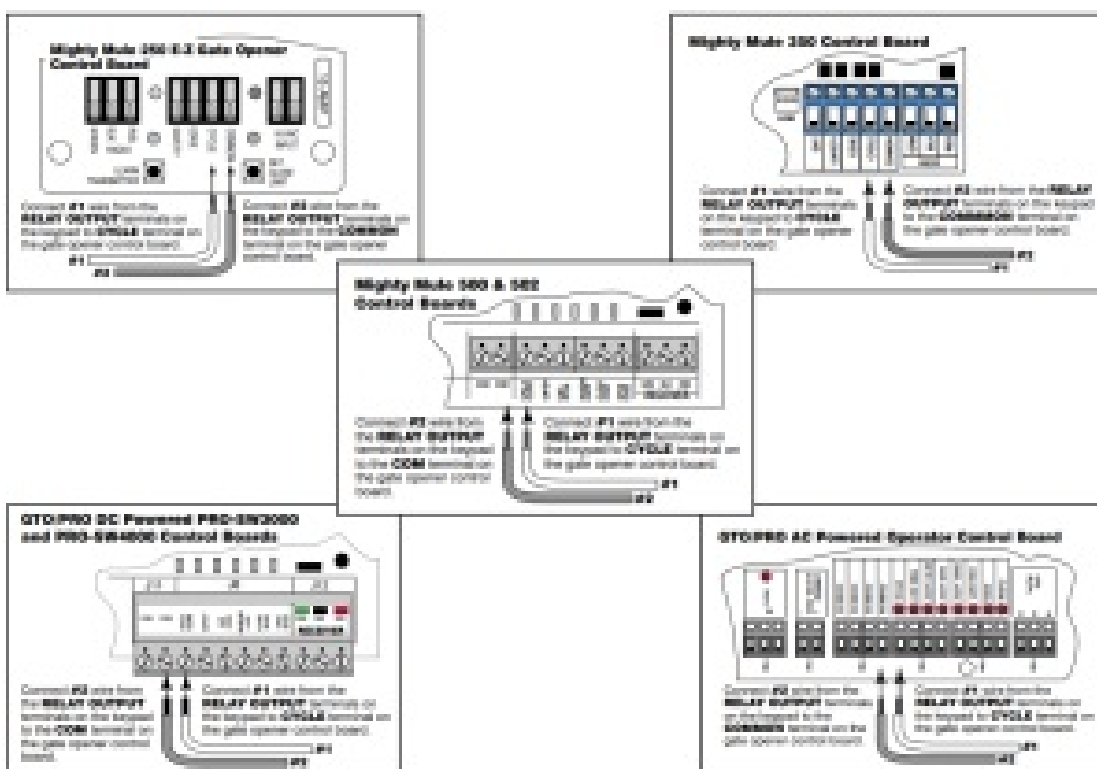
Programming the Keypad

Programming Interface:

- All codes are four (4) digits in length.
- Entry code is a four (4) digit code needed to activate the gate.
- Master Code is needed to add, remove or reset entry codes.
- Master Code also functions as the entry code under normal operation.
- Factory default Master Code is 1234.
- STATUS light should blink and beeper should beep (once) whenever any button is pressed.
- If more than 10 seconds elapsed between key presses the unit returns to normal (idle) operating mode.
- Keypad can only enter program mode from sleep mode (keypad is turned OFF).
- Keypad will beep three times before going into sleep mode.

Program New Master Code:

- Press and release PROGRAM button.
- Enter the old Master Code then press and release PROGRAM button.
- Enter 0, 6 then press and release PROGRAM button
- Enter the new Master Code then press and release PROGRAM button.
- Enter the new Master Code then press and release PROGRAM button again for confirmation.
- Beeper beeps 3 times to confirm that the new Master Code is accepted.

NOTE: If the Master Code is not a matched pair or error occurs (i.e. if the entry code is NOT a 4-digit code) the STATUS light will flash rapidly and the beeper will sound for 2 seconds before returning to normal operation with old Master Code.

Example: Key press sequence to change old Master Code from 1 2 3 4 to 3 1 2 1

◉ 1 2 3 4 ◉ 0 6 ◉ 3 1 2 1 ◉ 3 1 2 1 ◉

The round black dot is the 'PROGRAM' button
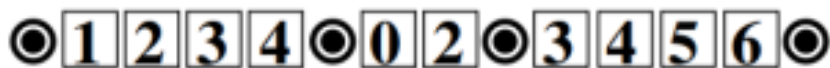
Program (Add) New Entry Code:

- Press and release PROGRAM button.
- Enter the Master Code then press and release PROGRAM button.
- Enter 0, 2 then press and release PROGRAM button.
  NOTE: If memory is full (all 25 locations are already programmed) the STATUS light will flash rapidly and the beeper will sound for 2 seconds before returning to normal operation, without saving.
- Enter the new Entry Code then press and release PROGRAM button.
- Beeper beeps 3 times to confirm that the new Entry Code is accepted.

NOTE: If the code is NOT 4-digits in length or an error condition has occurred, the STATUS light will flash rapidly and the beeper will sound for 2 seconds before returning to normal operation, without saving.

Example: Key press sequence to add '3456' as a new entry code. (1234 is the Master Code)

◉①②③④◉⓪②◉③④⑤⑥◉

The round black dot is the 'PROGRAM' button.
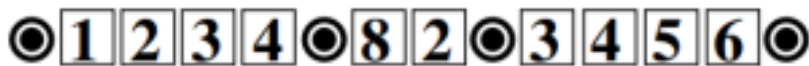
Program (Add) New Temporary Entry Code:

- Press and release PROGRAM button.
- Enter the Master Code then press and release PROGRAM button.
- Enter 8, and any number between 1 thru 7 then press and release the PROGRAM button. The second number indicates the number of days after which the code will be automatically removed from memory
  NOTE: If memory is full (all 25 locations are already programmed) or an invalid entry is detected then an error condition has occurred, the STATUS light will flash rapidly and the beeper will sound for 2 seconds before returning to normal operation, without saving.
- Enter the new Entry Code then press and release PROGRAM button.
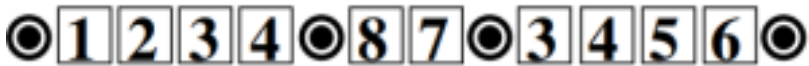- Beeper beeps 3 times to confirm that the new Entry Code is accepted.

NOTE: If the code is NOT 4-digit in length or an error condition has occurred, the STATUS light will flash rapidly and the beeper will sound for 2 seconds before returning to normal operation, without saving.

Example: Key press sequence to add "3456" as a new entry code that will remain valid for 2-days only. (1234 is the Master Code)

◉①②③④◉⑧②◉③④⑤⑥◉

The round black dot is the 'PROGRAM' button.

Example: Key press sequence to add "3456" as a new entry code that will remain valid for 7-days only. (1234 is the Master Code)
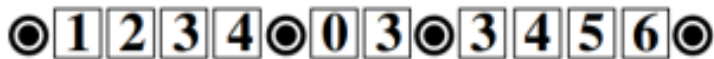
◉①②③④◉⑧⑦◉③④⑤⑥◉

The round black dot is the 'PROGRAM' button.

Delete An Entry Code:

- Press and release PROGRAM button.
- Enter the Master Code then press and release PROGRAM button.
- Enter 0, 3 then press and release PROGRAM button.
- Enter the Entry Code to be deleted then press and release PROGRAM button.
- Beeper beeps 3 times to confirm that the new Entry Code is deleted.

NOTE: If no matching code is found or the code is NOT 4-digit in length then an error condition has occurred, the STATUS light will flash rapidly and the beeper will sound for 2 seconds before returning to normal operation, without saving.

Example: Key press sequence to delete entry code '3456' from memory. (1234 is the Master Code)

◉①②③④◉⓪③◉③④⑤⑥◉

The round black dot is the 'PROGRAM' button.

Delete ALL Entry Codes:

- Press and release PROGRAM button.
- Enter the Master Code then press and release PROGRAM button.
- Enter 0, 7 then press and release PROGRAM button.
- Beeper beeps 3 times to confirm that the All Entry Codes are deleted.

Example: Key press sequence to delete all entry codes from memory. (for example if 3121 is the Master Code)

◉ 3 1 2 1 ◉ 0 7 ◉

The round black dot is the 'PROGRAM' button

Normal Keypad Operation:

- If the user enters a 4-digit code that is matched to one of the 25 stored codes. The STATUS light should blink twice and the beeper should beep twice to confirm that a matched code is entered.
- No more than 20 key presses are allowed to obtain the 4-digit entry code.

Example:
1234 is one of the codes stored in one of the memory location.

The user can enter 'x1234' or 'xxxxxxxxxxxxxxxx1234' and the gate should be activated (x is any key). If more than 20 key presses is entered without matching one of the codes then the unit's STATUS light should be flashing rapidly and no entry will be accepted for the next 40 seconds. The user must not enter any code for at least 40 seconds before the unit returns to normal operation; otherwise it remains in this 'lock-down' mode.
Once the user enters a matched code, any subsequent key press within the next 40 seconds will re-activate the keypad.

Keying Indication Summary:

	Keying Error Alert Indication	Keying accepted confirmation Indication
Master Code Setting	Speaker: continuous Beep for 2 seconds STATUS light: rapid flashing	Speaker: Beep – Beep – Beep STATUS light: no light, no flashing
Permanent Entry Code	**Speaker:** continuous Beep for 2 seconds STATUS light: rapid flashing	Speaker: Beep – Beep – Beep STATUS light: no light, no flashing
Temporary Entry Code Setting	Speaker: continuous Beep for 2 seconds STATUS light: rapid flashing	Speaker: Beep – Beep – Beep STATUS light: no light, no flashing
Entry Code Matching	Speaker: continuous Beep for 2 seconds STATUS light: rapid flashing	Speaker: Beep – Beep – Beep (after non-matching 20 keying) STATUS light: no light, no flashing

If you have any questions or concerns, please contact our Technical Service Department at 1-800-543-1236 or 850-575-4144.

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Documents / Resources

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