

PROCEED AS FOLLOWS:

Choose Mounting Location. Choose a convenient location that does not interfere with the normal operation of the door, such as on the door jamb or on the wall adjacent to the door (See Figure 1). Note that some doors will swing up: be sure that in operating your Programmable Keyless Entry System, you will not be in the path of the door's travel. You may find that the keypad is too wide for some jambs.

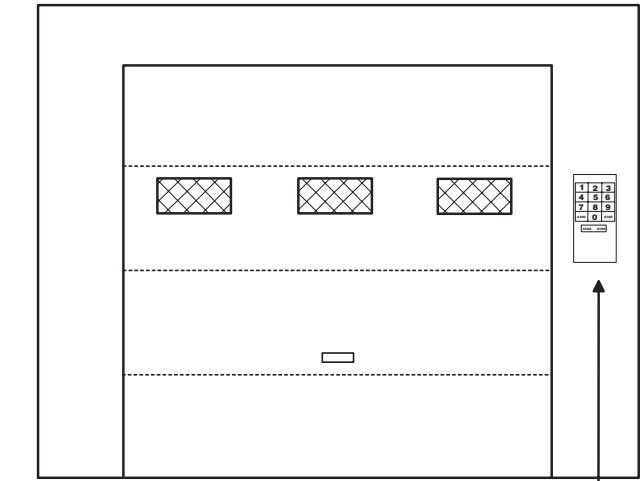


Figure 1

IF YOU ARE MOUNTING YOUR KEYLESS ENTRY SYSTEM TO ALUMINUM SIDING you may find it better to substitute carriage bolts for the mounting screws supplied. Bolts should be long enough to reach into the garage, and be secured with lockwashers and nuts. **IF YOU ARE MOUNTING YOUR KEYLESS ENTRY SYSTEM ONTO BRICK, STONE, OR MORTAR**, suitable anchors must be set into the mortar, and the fasteners screwed into these.

INSTALLATION

See figure 2 for the following steps:

- 1) With the mounting bracket in place, mark the location of the 1/8" pilot holes for the mounting screws. (#10x1" slotted roundhead type)
- 2) Drill two 1/8" pilot holes one inch (1") deep.
- 3) Mount the stainless steel mounting bracket to the surface using the screws provided, or as noted above, in the case of special installations.
- 4) With the 3/8" drill bit, drill through the locating hole on the mounting bracket and through the garage wall.
- 5) Push the metal conduit eyelet through the center hole, into the garage until flat side is flush against mounting bracket.

Models 4100-01 and 4100-15

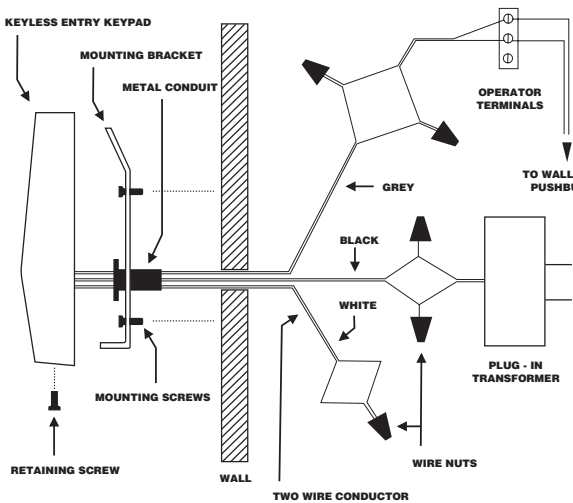


Figure 2

- 6) To mount the Programmable Keyless Entry System, push the wires of the keypad through the metal conduit eyelet. Next, insert the top of the mounting bracket into the slot provided on the top back of the keypad and gently push downward until the bottom edge of the bracket can be inserted into the bottom slot of the keypad. Secure the keypad with the retaining screw provided. (#6x1/2" long)
- 7) Be sure that the metal conduit eyelet is pushed firmly against the back of the keypad. Also, be certain that the wires are pulled tight inside the garage.
- 8) **WITH THE POWER DISCONNECTED**, use the wire nuts supplied to attach the Keyless Entry System as follows:
 - a) Attach 25 foot grey wires coming from the keypad with wire nuts. Pull wire taut, and secure with one of the insulated staples. Be sure to staple on the **OPENER SIDE OF THE WIRE NUTS ONLY**. This procedure will prevent forced access, even if the Keyless Entry keypad is pried from the wall, since the wire will separate inside the garage rather than at the unit. Run the two conductor wire from the keypad to the power head of your opener, being sure to secure the wire with staples provided so that it does not interfere with the operation of the door. Connect this wire to the pushbutton terminals on the back of the opener, where the wall button wire is connected. Firmly secure the two wires with the screw terminals. Do not remove pushbutton wires.
 - b) **For Models 4100-01 and 4100-15** attach Plug-in transformer's two black wires to the black wires coming from the keypad and secure with wire nuts. Pull wire taut and secure with staples so that it does not interfere with the normal operation of the garage door. Plug transformer into a 117 VAC outlet. (See Figure 2).

Model 4100-05

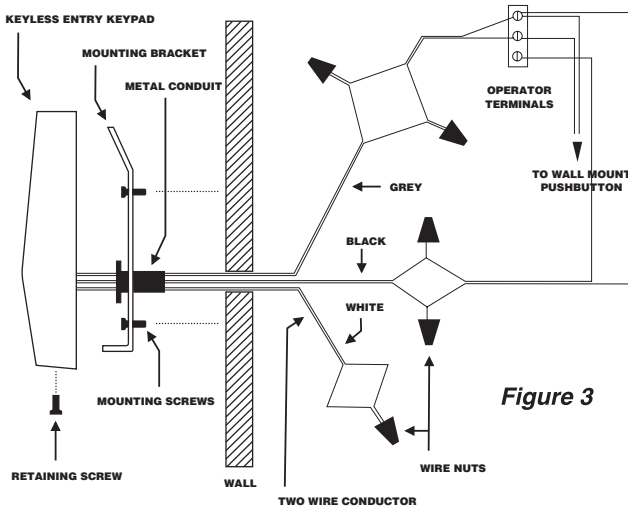


Figure 3

- c) **For Model 4100-05** attach 25 foot black wire to black wires coming from the keypad with wire nuts. Pull wire taut and secure with one of the insulated staples. Be sure to staple on the **OPENER SIDE OF THE WIRE NUTS ONLY**. Run the black wire from the keypad to the powerhead of your opener, being sure to secure the wire with the staples provided so that it does not interfere with the operation of the door. Connect this wire to the 24 VAC operator terminals on the back of the operator. Firmly secure the two wires with the screw terminals. Do not remove pushbutton wire. (See Figure 3).
- d) The two white wires from the keypad are secured to ether inside the garage with a wire nut and stapled to the wall.
 - 9) Reconnect Power to garage door opener. Wait at least ten seconds, then enter the factory code (1, 2, 3, 4,) on the keypad to raise or lower the garage door to check for proper operation. **(NOTE: ANY BUTTON CAN BE USED TO STOP OR REVERSE DOOR FOR 30 SECONDS ONCE THE CORRECT CODE HAS BEEN ENTERED)**. Also notice that the keypad is back lit for night operation. Pushing any button will increase the brightness for easy viewing under low light conditions.

PROGRAMMING

Your Keyless Entry System comes with a preset factory code (1, 2, 3, 4). We urge you to reprogram the unit with your own personal code to prevent tampering. DISCONNECT POWER TO YOUR OPENER BEFORE STARTING PROGRAMMING SEQUENCE. (NOTE: PLUG-IN TRANSFORMER TO PROGRAMMABLE KEYLESS ENTRY SYSTEM MUST BE PLUGGED IN FOR PROGRAMMING).

The marking of the keypad is shown in Figure 4. The Alpha characters, numerals "0-9", the word "Clear" and the "#" symbol are printed in black on a translucent button. The 0-9 buttons are used for the four digit

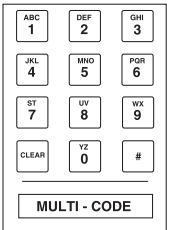


Figure 4

code. You may also use the Alpha characters to create your own personal keyword, so long as the keyword does not exceed four letters. The “Clear” and the “#” buttons are used for programming.

There are two methods which can be used to program the Keyless Entry System. One method is performed when the present four digit code of the unit is known. First press the “#” key twice (this enters the programming mode.) Next enter the present four digit code **(Note: For this time programming, this would be the factory code 1, 2, 3, 4).** Now enter the new four digit code. Finally press the “#” key to end the programming sequence. The new four digit code is stored. If a mistake is made at any time during programming and before the last press of the “#” key, press the “Clear” key. This will abort the programming, which returns the unit to normal operation and restores the present four digit code. To program the unit again start by following the programming sequence, which begins by pressing the “#” key twice.

An alternate method to program the Keyless Entry System can be performed whenever the present four digit code is not known.

First separate the two white programming wires that are “shorted” by the wire nut inside the garage. Next enter the new four digit code. Now press the “#” key. Finally “short” the two white programming wires with the wire nut to end the programming sequence. The new four digit code is stored. If a mistake is made at any time during programming and before the final “shorting” of the white programming wires, press the “Clear” key. This will abort the new code and restore the present code, but the unit is still in the programming code until the two white programming wires are “shorted”. To program the unit repeat the programming sequence above.

During both programming methods the LED’s will brighten when the first key is pressed and will dim when the programming sequence is complete. The user has approximately 30 seconds between each key press to make entries. Any longer than the 30 seconds and the sequence must be cleared and restarted.

The four digit code can be any combination of the numerals 0-9, from 0000-9999.

The four digit code is stored in non-volatile memory. Loss of power to the Programmable Keyless Entry System will not destroy or corrupt the code.

Reconnect power to your opener. Wait at least 10 seconds, then enter your personal code on the keypad to raise or lower garage door. **(NOTE: ANY KEY CAN BE USED TO STOP OR REVERSE GARAGE DOOR FOR 30 SECONDS ONCE YOUR FOUR DIGIT CODE HAS BEEN ENTERED).**

OPERATING HINTS

- 1) Your personal code must be completely entered within 30 seconds of the last number entered. If not the door will not open. If you fail to enter the entire code in the allotted time, or if the wrong code is entered, you must re-enter the entire code. This is a built-in feature to avoid unauthorized tampering.
- 2) Some door openers can be stopped, or reversed (depending on make and model) once the door is in motion. If your door opener allows this type of function this feature is activated by pressing any of the 12 keys a second time once your personal code has been entered. The 12 Programmable Keyless Entry buttons are active as the

operator's push-button for approximately 30 seconds. Programming a new code from the keypad is disabled during this 30 second period.

- 3) Over time smudges may appear on frequently used buttons. To prevent this, it is advisable to keep your keypad clean, and to change your personal code from time to time. **(WE URGE YOU TO DISCONNECT POWER TO YOUR GARAGE DOOR OPENER WHENEVER YOU CHANGE YOUR PERSONAL CODE ON THE PROGRAMMABLE KEYLESS ENTRY SYSTEM).**

TROUBLE SHOOTING

If operator fails to work when the Programmable Keyless Entry System is used, and the wall button is inoperative when power is restored to the operator, check for shorts in the wiring, particularly around the staples and the wire nuts. Check, also, that the terminal screws of the operator are in place and firmly secured. If the two conductor wire does not reach the power head of your operator, an additional length of two conductor wire may be spliced in.

WARRANTY

All Linear Corporation garage door related products carry a eighteen (18) month warranty against defects in workmanship or material. This warranty begins at the date of manufacture, for eighteen months. Linear Corporation warrantee’s our product **only** to our authorized dealers and distributors, and not to the end customer. If you have questions about our warranty, please ask your dealer to determine the nature and scope of his warranty. Linear Corporation does not assume, and is not responsible for, any real or consequential damages for claims against the performance of our product, nor is it liable for any costs related to loss of life, property, or revenue. Further, Linear Corporation is in no way responsible for installation of our product, and will assume no costs related to re-installation or removal.

Linear Corporation’s Warranty is in lieu of all other warrantee’s, expressed, or implied.

Changes or modifications not expressly approved y Linear Corporation may void the user’s authority to operate the equipment.

LINEAR CORPORATION
2055 CORTE DEL NOGAL
CARLSBAD, CA 92009
(760) 438-7000



Installation Instructions

Model 4100 Programmable Digital Keyless Entry System

Congratulations! You have purchased the Multi-Code™ Programmable Digital Keyless Entry System, which we believe to be the finest product of its kind on the market. Please take a moment to review these instructions. They will be very helpful in the proper installation and operation of your new system.

AVAILABLE MODELS

- 4100-05 - 24 VAC without transformer, relay output
- 4100-15 - 24 VAC with transformer, relay output

WE URGE YOU TO DISCONNECT POWER TO YOUR GARAGE DOOR OPENER DURING YOUR INSTALLATION OF THE PROGRAMMABLE DIGITAL KEYLESS ENTRY SYSTEM TO ENSURE SAFETY.

Linear Corporation has included all of the materials you will need to mount your Keyless Entry System.

- | | |
|---|--|
| 1 – The Programmable Keyless Entry Keypad | 5 – Wire Nuts |
| 1 – Stainless Steel Mounting Bracket | 14 – Insulated Staples |
| 2 – Mounting Screws | 1 – Metal Conduit Eyelet |
| 1 – Retaining Screw | 2 – Two Conductor Wire (Model 4100-05 Only) |
| | 1 – Two Conductor Wire } (Models 4100-01 & 4100-15 Only) |
| | 1 – Plug-in Transformer } |

You will need the following TOOLS:

- Drill, with 3/8" and 1/8" Bits
- Flathead Screwdriver
- Hammer
- Scissors or Wire Stripper

OPERATING SPECIFICATIONS

- Switching Voltage - Maximum 30 volts at 1 amp AC or DC
- Input Voltage (Model 4100-01)
12 ± 1 Volt AC at 50 mA Min. (Model 4100-05 & 4100-15)
18 to 33 Volt AC at 75 mA Min.

Remove and identify all material from the box.