

UM 28

Installation Manual



TriMark®

DOOR SYSTEMS

Access to Excellence

540-0125 e-PAD Power Keypad

40490-01 Power Keypad Horizontal

40490-02 Power Keypad Vertical



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TriMark makes every attempt to assure that information contained in the User Manual is correct and accurate; however, changes in design, dimension and specifications may occur at any time and without notice. TriMark’s website will always have the latest revision.

Note: Product photos and illustrations may vary from your specific part numbers.

Introduction

This manual provides the necessary information for the proper installation and use of TriMark's **540-0125 e-PAD Power Keypad**.

This stand-alone keypad has recently been redesigned for improved water/dust resistance and solid-state circuit drivers replacing relays capable of driving a 15 Amp momentary output for simple power door lock/unlock or unlatch control. The keypad provides increased security and convenience to minimize system and installation cost. This product is intended to mount on the exterior surface of commercial vehicles and has passed rigorous pressure washing, salt spray, thermal conditioning, ESD, Load dump, EMC/EMI and other environmental and electrical validation tests.

Standard Keypad Configuration: Operation and Features

Locking

Press and hold the 1/2 button on the keypad. The resulting action is that the Green wire =+12V, Blue wire=Ground for a half second. The unlatching version on this keypad has this feature disabled.

Unlocking

Type in the five-digit entry code. The keypad will confirm a correct entry code was entered with 2 short beeps. The resulting action is that the Blue wire= +12V, Green wire =Ground for a half second.

The keypad can store one authority code and five entry codes.
ALL TRIMARK KEYPADS USE 5-DIGIT CODES, NO more, NO less.

- The authority code is used to create entry codes
- The entry codes are used to unlock the vehicle



Unlatching Keypad: Operation and Features

Unlatching

Type in the five-digit entry code. The keypad will confirm a correct entry code was entered with 2 short beeps. The resulting action is that the Blue wire= +12V, Green wire =Ground for a half second.

Additional Keypad Information

Default codes

	Digit 1	Digit 2	Digit 3	Digit 4	Digit 5
Authority	7/8	7/8	7/8	7/8	7/8
Entry	1/2	3/4	5/6	7/8	9/0

It is strongly recommended that you change all default codes to codes that you choose. Default codes are commonly known.

Note: If a code has been changed and you don't know what it is, please go to the [Teaching Keypad New Authority / Entry Codes](#) section.

Keypads Can Store Multiple Entry Codes

This allows for the owner to have one code and make separate codes for someone else.

- Entry codes can be stored as one Entry code per numbered.
- These Entry codes do not allow different functions they only allow for multiple users

Doorbell Keypad	Numbered Button	Entry Code Position
5 Possible Entry Codes	1/2	1
	3/4	2
	5/6	3
	7/8	4
	9/0	5

Keypad Backlighting

When the keypad is first powered, the backlighting stays on half-brightness until the Keypad goes to sleep, or a button is pressed. Keypad buttons are lit full brightness when pressed and turn off 30 seconds after the last button is pressed. In programming mode, the backlighting continuously blinks between half and full brightness to signify programming mode.

Lockout Mode

If no Correct ENTRY CODE is entered in 20 button presses the keypad is disabled for 60 seconds. Upon entering lockout mode, the Keypad backlighting blinks on/off for 5 seconds then backlighting turns off. During this 60 second Lockout, the keypad will not beep or respond when buttons are pressed. This feature helps prevent random button attacks.

Keypad Buzzer Feedback

- In normal code entry mode, the keypad will emit 1 short 20mS beep per button press every time
- When the ENTRY CODE is properly entered the keypad will emit two short beeps
- During code *reprogramming* mode the keypad will emit two short beeps per button press
 - This will be covered in depth in the section “Programming the Authority Code”
- On normal power up and keypad reset the keypad will emit a longer 1 second beep
- Three, longer 1-second beeps indicate brownout

Teaching Keypad New Authority / Entry Codes

All codes are exactly 5 digits. You may reuse numbers. Changing the Authority Code erases all Entry Codes. It is highly recommended that you change your Authority Code from the default authority code.

Programming the Authority Code

Note: There is a video of how to do this (it will not play on Apple tablets)

<https://www.trimarkcorp.com/en/media/Videos/eask/All%20Keypads/index.html>

The yellow wire may be tucked into the sheathing, or the yellow wire may be tied to a switch that provides grounding by your specific vehicle manufacturer. Grounding the yellow wire for a minimum of 5 seconds then releasing ground initiates Authority Code programming mode.

Programming the Authority Code

1. With the keypad still plugged in providing power and ground, short the yellow wire to the black wire (GND) for a minimum of 5 seconds. This causes the keypad to beep for three seconds.
2. Enter the desired New 5-digit Authority Code, the keypad will beep twice per button press and three times after the 5th digit is entered to indicated receipt of the 5 digit code.
3. Enter the 5-digit Authority Code again. The keypad will beep twice per button press.
 - a. If the Authority Code is entered twice correctly the keypad will beep 4 times.
 - b. If the Authority Code is entered incorrectly, or mistakes are made the keypad

Does a long beep indicate a failure to change the code.

4. After programming the system immediately exits Authority Code learn mode.
5. If you are looking for simple, and only need 1 access code, **you can be done at this point and the Authority Code and Entry Code are the same 5-digit code.** This is not recommended, but you only need to remember 1 code. You can test by entering your 5-digit code followed by the desired output button. (1), for example will unlock the entry door. **For greater security, we recommend you use an authority and one or more entry codes.**

Note: We recommend changing the Entry Code when you purchase your vehicle. The system automatically clears all Entry Codes and stores an Entry Code the same as your Authority Code in location button 1 any time the Authority Code is changed.

Programming Entry Codes

All codes are exactly 5 digits. You may reuse numbers. Have a number chosen.

1. Press and hold button 3, for 5 seconds. The keypad beeps again and begins flashing when it is held long enough.
2. Enter the 5-digit Authority Code.
3. If you enter the **correct** Authority Code, you will hear a constant beep – continue to step 3.
 - a. If you enter the incorrect Authority Code, you will hear a 1 second beep. Please double check the Authority Code. You then need to step back to step 1.
4. Choose a location to store this code by pressing a location button once.

Button 1 = Location 1	Button 2 = Location 2	
Button 3 = Location 3	Button 4 = Location 4	Button 5 = Location 5

(Constant beep will end when a location selected)
5. Enter the desired 5-digit Entry Code. The keypad will beep twice per button press.
6. Enter the desired 5-digit Entry Code again. The keypad will beep twice per button press.
 - a. If the Entry Code is entered twice correctly the keypad will beep 4 times.
 - b. If the Entry Code is entered incorrectly, or mistakes are made the keypad does a **long beep to indicate a failure to program an entry code.**
7. Test your Entry Code by entering the 5-digit code followed by button 1 and the entry door unlock will unlock.

Note: You may store up to 4 codes in the system. You may write over a location by simply programming an entry code over that location.

The next page can be printed to record your own Codes.

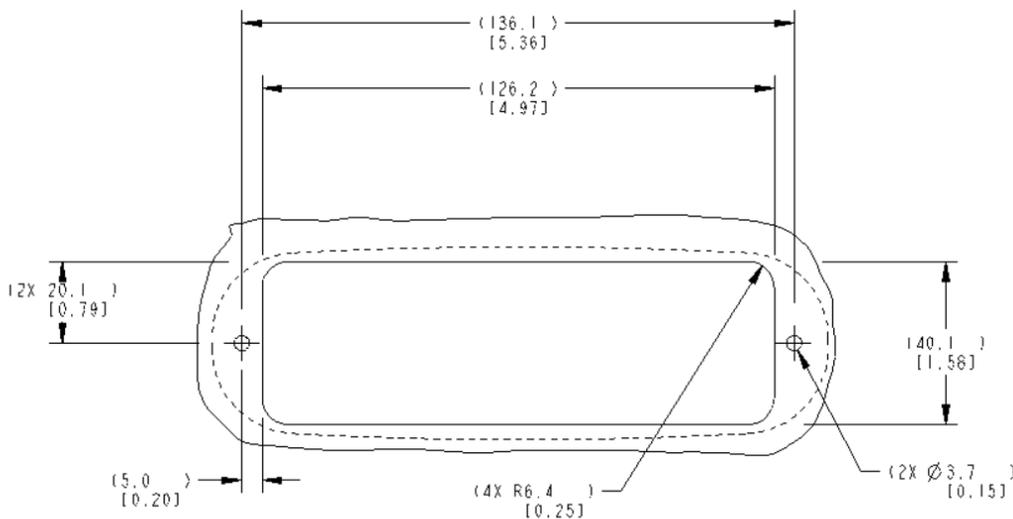
	Digit 1	Digit 2	Digit 3	Digit 4	Digit 5
Default Authority	7/8	7/8	7/8	7/8	7/8
Default Entry	1	2	3	4	5
Your Authority Code					
Your Entry Code 1					
Your Entry Code 2					
Your Entry Code 3					
Your Entry Code 4					
Your Entry Code 5					

Appendix A: Wiring Details

WIRE COLOR	OUTPUT	WIRE GA	TERMINAL
RED	SYSTEM POWER, +12V	20	BLUNT CUT
BLACK	SYSTEM GND		FEMALE BULLET 4 MM. INSULATED
GREEN	LOCK		
BLUE	UNLOCK		
YELLOW	LEARN MODE (ACTIVE GND)		BLUNT CUT

Appendix B: Installing Components

Keypad cut-out and mounting information.



Install with 2 #8 or M4 flat head screws. Do not exceed 13.6 in-lbs torque when installing screws.

42221-01
RECOMMENDED KEYPAD CLEARANCE CUTOUT DETAIL

Appendix C: Warranty

TriMark warrants that the products manufactured and sold shall be in accordance with specifications and free from defects in materials and workmanship for a period up to 18 (eighteen) months following the date of delivery to TriMark's customer or 12 (twelve) months from the original O.E.M. sale (in-service) date. Where TriMark does not have design control regarding customer supplied products, materials or specifications, the warranty is limited to non-conforming products.

This warranty is expressly limited to persons who purchase TriMark's products for the purpose of resale or use in the ordinary course of the buyer's business. This warranty does not cover any product that if TriMark Corporation determines (in its sole discretion) that a product's failure or malfunction is due to one or more of the following conditions, such failure or malfunction is EXCLUDED from the warranty provided hereunder: (1) used in a manner that exceeds published engineering specifications; (2) has been abused, misused, disassembled/opened, altered/modified, or improperly installed; (3) is used in an application not previously approved by TriMark; (4) is used in a manner inconsistent with any instructions and good industry practices regarding its use; (5) wear or deterioration due to environmental conditions; (6) unusual mechanical, physical or electrical stress or (7) is destroyed/damaged by fire, lightning or an act of God. In addition to the above, TriMark will not warrant any electrical/electronic products with (8) burned or broken traces on the printed circuit board; (9) burned or damaged components; (10) dirt or water residue on the printed circuit board or inside the case; (11) motor failure due to thermal failure; (12) or dead batteries.

This warranty is exclusive, and TriMark makes no other warranty of any kind whatsoever, expressed, or implied, with respect to the products manufactured and sold by it, whether as to merchantability, fitness for a particular purpose or any other matter. Without prior written authorization from the Board of Directors, no agent, employee, or representative of TriMark has any authority to bind TriMark to any affirmation, representation or warranty concerning TriMark products or parts, except as stated herein.

If any product supplied by TriMark is found to be defective by TriMark in its sole discretion, TriMark reserves the right to replace, rework, repair, or give credit for defective product. Upon confirmation of the defective condition of the subject part either with return of subject part and/or proper documentation, TriMark will replace such defective product exclusive of any labor, shipping, transportation, or delivery cost associated with the replacement. TriMark will not be responsible for the cost of removal of a defective product. This remedy shall be the exclusive remedy available for any defects in the products manufactured and sold by TriMark or for damages resulting from any other cause whatsoever, including without limitation, TriMark's negligence.

The purpose of this exclusive remedy shall be to provide the buyer with replacement of products or parts sold by TriMark found to be defective in materials or workmanship or negligently manufactured. This exclusive remedy shall not be deemed to have failed in its essential purpose so long as TriMark is willing and able to replace said defective products or parts in the prescribed manner.

WITHOUT LIMITING THE FOREGOING, TRIMARK SHALL NOT BE LIABLE FOR CONSEQUENTIAL OR INDIRECT DAMAGES, ECONOMIC LOSSES, LOSS OF USE, LOST PROFITS, DOWN TIME, OR DAMAGES DUE TO DELAY, WHETHER BY REASON OF BREACH OF WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE.

This product has been manufactured with methods to ensure high quality and to meet the high expectations of our customers. TriMark warrants this product to be free from workmanship defects and will remedy issues per TriMark's warranty policy.

Remote transmitter fobs, batteries, and other equipment subject to normal wear and deterioration may need to be replaced periodically by dealer and/or end user and are not covered by this warranty. TriMark will not be liable for indirect, special, incidental, or consequential damages.

Appendix D: Trademark Statement

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