

# e-ASK

electronic **A**ccess **S**ecurity **K**eyless-entry

## Keypad With On-Board Relays

(UM28 ~ 540-0200)



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## Introduction

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

The Relay **e-PAD** Keypad includes:

- **e-PAD** (keypad user interface) - Keypad integrated grab handle. **Clean acrylic rod with mild soap and water only.**
- Mounting gasket

This device is designed to directly control the power actuation of one door's lock or latch. The output of the keypad is internally regulated, but still requires a 5-Amp or 7.5-Amp fuse protecting the branch of the circuit dedicated solely to this keypad.

Currently Available as Horizontal Only



## **Standard Mode e-PAD Operation and Features**

This mode is primarily intended for controlling an actuator that will lock or unlock a door's security feature (cam lock, deadbolt, etc.)

The **e-PAD** is shipped with default *Authority* and *Access Codes*. If the OEM or dealer has not changed default codes, the *Authority* and *Access Codes* are:

*Access code:*

| Digit 1 | Digit 2 | Digit 3 | Digit 4 | Digit 5 |
|---------|---------|---------|---------|---------|
| 1 / 2   | 3 / 4   | 5 / 6   | 7 / 8   | 9 / 0   |

*Authority code:*

| Digit 1 | Digit 2 | Digit 3 | Digit 4 | Digit 5 |
|---------|---------|---------|---------|---------|
| 7 / 8   | 7 / 8   | 7 / 8   | 7 / 8   | 7 / 8   |

### **Lock Door With Keypad**

Press and hold down the (1 / 2) button for 1-2 seconds. An access code is not needed to lock the door.

### **Unlock Door With Keypad**

Entering a valid 5-digit access code provides a double beep and unlocks the door.

#### **Notes:**

- The authority code does not unlock the door. It is only used to assign access codes (see page 5 for information on setting authority and access codes).
- If keypad does not provide double beep and does not unlock, a valid access code has not been entered.

## **AutoLatch Mode e-PAD Operation and Features**

This mode is available in the 29810-05 version of the keypad only. It is primarily intended for unlatching operations for a cabinet or door, where activation of the keypad physically releases the door from the closed and latched position.

The **e-PAD** is shipped with default *Authority* and *Access Codes*. If the OEM or dealer has not changed default codes, the *Authority* and *Access Codes* are:

*Access code:*

| Digit 1 | Digit 2 | Digit 3 | Digit 4 | Digit 5 |
|---------|---------|---------|---------|---------|
| 1 / 2   | 3 / 4   | 5 / 6   | 7 / 8   | 9 / 0   |

*Authority code:*

| Digit 1 | Digit 2 | Digit 3 | Digit 4 | Digit 5 |
|---------|---------|---------|---------|---------|
| 7 / 8   | 7 / 8   | 7 / 8   | 7 / 8   | 7 / 8   |

### **Release Catch with Keypad**

In AutoLatch mode, this function is not usually needed. However, this function has been left in place in the event it is occasionally needed. Press and hold down the (1 / 2) button for 1-2 seconds. An access code is not needed to release a latch. This will not unlatch a door, it will move the actuator so that the catch can allow the door to securely close. Normally, this happens automatically in this mode.

### **Unlatch Door with Keypad**

Entering a valid 5-digit access code provides a double beep and unlatches the door. After about 5 seconds, the keypad automatically activates again, releasing the catch and allowing the door to securely close.

#### **Notes:**

- The authority code does not unlatch the door. It is only used to assign access codes (see page 5 for information on setting authority and access codes).
- If keypad does not provide double beep and does not unlatch, a valid access code has not been entered.

## **More e-PAD Features**

### **Protective Deactivating Security Feature**

If a correct code is not entered after 20 button presses, the keypad enters an inactive mode that disables button recognition for 1 minute. This helps prevent unauthorized access by entering random codes. There is no button feedback while the system is disabled.

### **Buzzer Operation**

The keypad buzzer chirps once and for each key press during regular use. When an authorized access code is entered, the system chirps twice to indicate code acceptance and output activation.

The keypad chirps twice for each button press while in learn mode. When a new access code is defined, the system chirps 3 times. If an incorrect or mismatched code is entered during learn mode, there is a 1-2 second chirp.

### **Backlighting (optional feature)**

The keypad buttons have lights that come on for one minute when any button on the keypad is pressed.

### **Low Voltage Warning**

When the keypad power supply is at a voltage less than 9.0V, the keypad provides a short beep 0.5 seconds after either a lock or unlock attempt. The lock output is deactivated to prevent unintentional lock-out. Only an unlock command works.

### **Set Operation Mode**

The keypad operation can be set to either standard mode or auto-latch mode by following this process:

1. Press the (5 / 6) button for 5 seconds until the keypad beeps.
2. Enter the 5-digit Authority Code (keypad starts a continuous beep).
3. Hold (9 / 0) button for 5 seconds, keypad will beep 5 times.
4. Press a button to select mode.
  - a. (1 / 2) button for standard mode.
  - b. (3 / 4) button for auto-lock mode.
5. One short beep sounds for standard mode or 2 beeps for auto-lock mode.

## Teaching Keypad New Authority / Access Codes

**IMPORTANT:** READ ALL INSTRUCTIONS FOR EACH OPTION AND ALL NOTES **BEFORE BEGINNING** TO KNOW WHAT TO EXPECT DURING THE PROGRAMMING PROCESS.

The *Authority Code* has only one purpose; it grants the owner the ability to set new *Access Codes*. The *Authority Code* must be **EXACTLY 5** digits long. There are two ways to set the *Authority Code* with the TriMark Full Feature System. Changing the *Authority Code* erases all previous *Access Codes* and sets a new *Access Code* in memory bank 1 that is the same as the new *Authority Code*.

**Important:** *Authority* and *Access Codes* should be different for the greatest security.

### Program New Authority Code

#### Preparation:

1. Find the wiring harness coming out of the back of the keypad. Sometimes there is an access panel to the back of the keypad inside the vehicle. If not, you will need to remove the keypad from the vehicle.

#### Programming:

1. With the keypad still powered (this may require that the door be shut), short the yellow wire to ground for about 5 seconds, or until the keypad begins to beep.
2. The keypad will beep for 3 seconds; *remove the short before the keypad stops beeping*. The keypad is now in "Learn Mode."
3. Enter a new 5-digit *Authority Code* (double chirps after each button press). The keypad chirps 3 times after the 5<sup>th</sup> digit's entry.
4. Re-enter the new *Authority Code* for confirmation. The keypad will chirp FOUR times for successful confirmation. **A long beep indicates a failure to change the code.**
5. Test the new code to confirm it.

The following area can be used to document the new *Authority Code*:

| Authority Code |         |         |         |         |
|----------------|---------|---------|---------|---------|
| Digit 1        | Digit 2 | Digit 3 | Digit 4 | Digit 5 |
|                |         |         |         |         |

## Assign New Access Codes

The *Access Codes* are used to unlock or unlatch the door. The *Access Codes* must be **EXACTLY 5** digits long. With a valid *Authority Code*, an *Access Code* can be programmed with the following instructions:

1. Press the (5 / 6) button for 5 seconds until the keypad beeps. The backlighting of the keypad will flash (if equipped) indicating the keypad is in "Learn Mode."
2. Enter the 5-digit *Authority Code* (see page 5 for the code).
  - If you enter an **INCORRECT** *Authority Code*, the keypad will beep for 1 second, and leave "Learn Mode."
  - If you enter a **CORRECT** *Authority Code*, the keypad will provide a very short beep, indicating that you must define a **memory bank** to store the new *Access Code*.
3. Press and release the button that corresponds to the **memory bank**. For example, press (1 / 2) button for Memory #1 and press (3 / 4) button for Memory #2. During this step, you are choosing 1 of 5 memory banks.
4. Enter a new 5-digit *Access Code*. The keypad chirps 3 times after the 5<sup>th</sup> digit's entry.
5. Re-enter the new *Access Code* for confirmation. The keypad will chirp 3 times after a successful confirmation. A long beep indicates a failure to change the code.
6. Test the new code to confirm a successful change.

*Repeat process to assign additional **Access Codes**.*

### Notes:

- Up to 5 different *Access Codes* can be assigned at any time. As additional *Access Codes* are defined, pre-existing *Access Codes* are overwritten. For example, if a new *Access Code* is assigned to Memory #3, the previous *Access Code* in Memory #3 is no longer valid.
- If an error is made at any point, or if time runs out, the keypad will exit "Learn Mode," provide a 1-2 second beep, and not change anything.

The following area can be used to document the new *Access Code* assignments:

| Memory # | User Name | Digit 1 | Digit 2 | Digit 3 | Digit 4 | Digit 5 |
|----------|-----------|---------|---------|---------|---------|---------|
| 1/2      |           |         |         |         |         |         |
| 3/4      |           |         |         |         |         |         |
| 5/6      |           |         |         |         |         |         |
| 7/8      |           |         |         |         |         |         |
| 9/0      |           |         |         |         |         |         |



# Troubleshooting

| Problem Description  | Possible Solution  |
|--|--|
| <b>e-PAD Hints</b>   |  |
| No response when buttons are pressed (no power).   | Check the contacts in the door frame (if keypad is installed in door). Dirt and corrosion will hinder power from reaching the keypad. Clean with a scouring pad and mild solution.   |
|  | Check for a blown fuse protecting the keypad's circuit. If a new fuse blows immediately, take your vehicle in for service, <b>DO NOT BYPASS THE FUSE OR USE ONE GREATER THAN 7.5A.</b>   |
|  | Power supply depleted. Replace or recharge batteries supplying power to the keypad.  |
| Access code is not recognized  | Verify that code has not been changed. Reassign keypad with instructions on page 5.  |
|  | Confirm use of an access code, not the authority code.   |
| Keypad powers off once code is entered, or attempting to lock. Does not power on for several minutes.  | The circuit is shorted. The actuator, keypad, or wiring may have been damaged by corrosion or impact, and the internal protection is controlling the problem. Take your vehicle in for service, and discontinue use of the keypad. |
| Entrance door does not respond to lock/unlock commands   | Door is misaligned to the catch in the frame. Adjust the door.   |
|  | Actuator in door may be jammed. Check actuator and connecting rod for ease of motion, lubricate rod connections, and replace actuator if it is stiff or extremely difficult to move.   |
| <b>For additional troubleshooting</b> service, assistance, and/or warranty information on OEM-installed systems, please contact the OEM of your vehicle. |  |

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.

This system complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference and
- (2) This device must accept any interference received including interference that may cause undesired operation.

Note: The manufacturer is not responsible for any radio or television interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

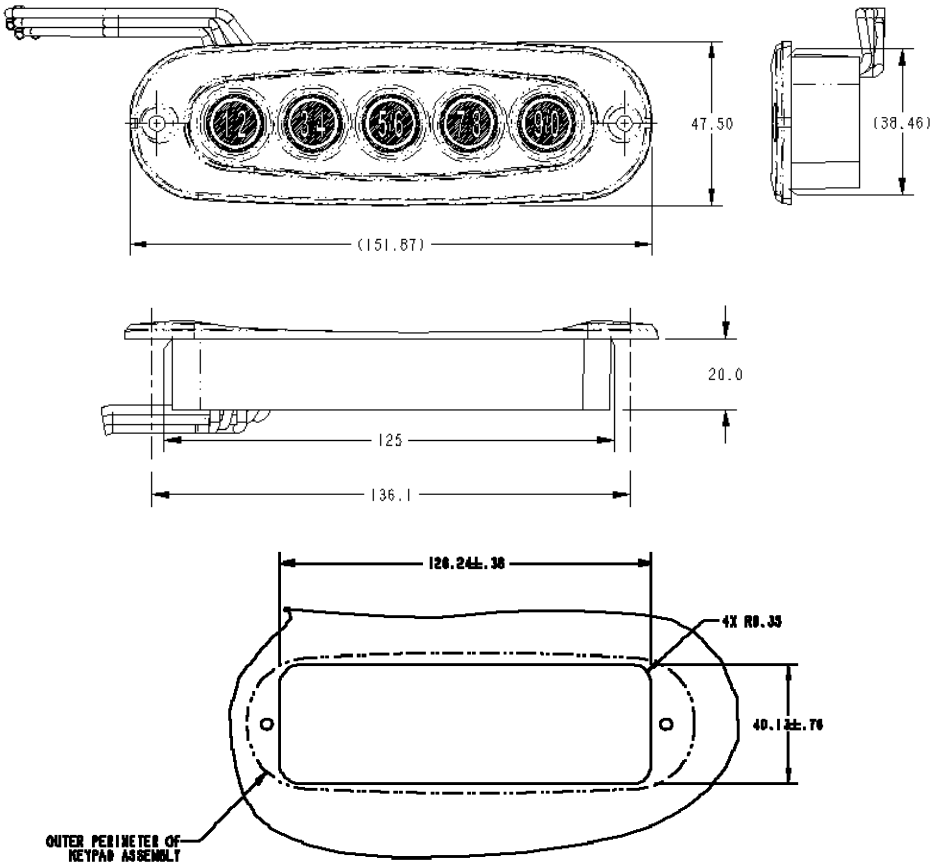
# Appendix: Installation and Mounting e-PAD

## Wiring

- Red—12V power
- Black—Ground
- Green—Unlock output (12V pulse)
- Blue—Lock output (12V pulse)
- Yellow—Authority learn wire (disconnected unless programming)

Power wires = female 1/4" spade terminal with one meter wires.  
Output wires = female 4mm bullet terminal with 200mm wires.

## Mounting Information (units in metric)



RECOMMENDED KEYPAD  
CLEARANCE CUTOUT





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