### **KEYLESS ENTRY SECURITY SYSTEM:**

1. TriMark Brain Box module, with programming button and LED (will be seen from exterior of unit through the front windshield, center of dash), fuse and holder is located under black inlay on dash in front of the passenger seat.



2. The black inlay in front of the passenger seat will lift out to access the components below.



3. Opening under black inlay with TriMark module exposed.



4. Programming Button for use in the steps of programming the FOBs and various codes.





# TriMark Full-Feature Control System

The TriMark Full Feature system is currently installed on Entegra Class A coaches.

### **Teaching Keyfob Transmitters**





#### PREPARATION:

- 1. Make sure the included *Indicator LED Harness* is plugged into C6 and the *Programming Button Harness* is plugged into C7
- 2. Ensure ignition is **OFF** and alarm is disarmed.

### PROGRAMMING:

- 1. Press and release the *Programming Button* 3 times. The *Indicator LED* will turn on after 3 seconds. The system is now in "Learn Mode."
- 2. Press and release the **LOCK** button of each FOB transmitter once. The *Indicator LED* will flash and the horn and siren (if connected in the harness) will sound once. Up to 60 FOB transmitters may be learned at the same time.

- If you place the system in "Learn Mode" and teach nothing, the system will return to normal in 10 seconds.
- When the system learns new transmitters, all old transmitters are forgotten.
- Learned transmitters will not be forgotten if power is removed.
- The system is back to normal mode when the Indicator LED turns off.
- Ignition sensor wire C1.2 (Yellow) registers ignition as **ON** when +12V is applied to it, and **OFF** when it is an open circuit.
- A walkthrough video is available on our website at http://www.trimarkcorp.com/en/easkum.aspx





#### **ALARM MANUAL OVERIDE**

To manually override the alarm:

- 1. Turn the ignition **ON**
- 2. Press and hold the *Programming Button* for 3 seconds
- 3. Release the button and turn the ignition **OFF**.

### **Teaching New Codes to the Keypad**

### The Authority Code

The *authority code* has only one purpose: it grants the owner the ability to set new *access codes*. The *authority code* is **EXACTLY** 5 digits long. There are two ways to set the *authority code* with the TriMark Full Feature System. Method 1 requires access to the controller; method 2 requires access to the wiring harness:

#### **METHOD 1 - PREPARATION:**

- 1. Make sure the Programming Button Harness is plugged into C7
- 2. Ensure the alarm is disarmed, and turn the ignition ON



- 1. Press and release the *Programming Button* 3 times. After 3 seconds, the keypad will beep for 5 seconds. The keypad is now in "Learn Mode."
- 2. Enter a **NEW** 5-digit *Authority Code*. Each button press will chirp with a double-beep. The 5<sup>th</sup> button press will be a triple-beep, indicating that the 5-digit code has been entered once.
- 3. Re-Enter the new 5-digit *Authority Code*. Each button press will chirp with a double-beep. The 5<sup>th</sup> button press will be a 4-chirp rapid beep if the *authority code* was successfully changed. If the *authority code* was not changed, a 1-second beep sounds.



#### METHOD 2 - PREPARATION:

- 1. Ensure ignition is **OFF** and alarm is disarmed.
- 2. Find the YELLOW "Learn" wire and the BLACK ground wire in the keypad harness. This can be found at the back of the keypad.

#### METHOD 2 - PROGRAMMING:

- 1. With the keypad still plugged in, create a jumper between the YELLOW wire and the BLACK wire using a paperclip or scrap wire. Keep it grounded until the keypad begins to beep, and then remove the jumper.
- 2. When the keypad is in "learn mode," the backlights of the buttons will flash.
- Enter a NEW 5-digit Authority Code. Each button press will chirp with a double-beep. The 5<sup>th</sup> button press will be a triplebeep, indicating that the 5-digit code has been entered once.



Re-Enter the new 5-digit Authority Code. Each button press will chirp with a double-beep. The 5<sup>th</sup> button press will be a 4-chirp rapid beep when the authority code was successfully changed. If the authority code was not changed, a 1-second beep sounds.

- The factory default *authority code* is 7-7-7-7.
- The user is given 2 minutes to complete this procedure from the time the keypad enters "learn mode"
- If an error is made at any point during the procedure, or if the time runs out, the system will exit learn mode and make a long beep to indicate the *authority code* was not successfully changed.
- Successfully resetting the *authority code* removes all previous *access codes* from memory and sets a new *access code* in the first memory bank that is the same as the new *authority code*.
- The keypad automatically exits "Learn Mode" when the new authority code is successfully set.
- The *authority code* is to be controlled by individuals (owners of vehicle, fleet manager, etc.) who manage the distribution of *access codes* to vehicle users
- The *authority code* should be changed when the vehicle is sold.
- The *authority code* does not enable secure functions, such as unlocking doors, it **ONLY** assigns *access codes*.



New Hampton, Iowa 50659 Tel: 641-394-3188 Fax: 641-394-2392 www.trimarkcorp.com

- Removing power from the keypad will not reset *authority codes* or *access codes* to factory default. The codes must be changed intentionally.
- Ignition sensor wire C1.2 (Yellow) registers ignition as **ON** when +12V is applied to it, and **OFF** when it is an open circuit.
- A walkthrough video is available at http://www.trimarkcorp.com/en/easkum.aspx

### **The Access Codes**

To set new *access codes*, you must know the *authority code*. A keypad can store up to 5 unique *access codes* for multiple users. *Access codes* are changed using only the buttons on the keypad. The *access code* is **EXACTLY** 5 digits long.

Tri*Mark* also provides a keypad with the last button dedicated to a doorbell. These keypads can store up to only 4 unique *access codes* and the buttons are numbered individually 1, 2, 3, 4 and Door Bell instead of the dual-numbering 1/2, 3/4, 5/6, 7/8, and 9/0. Instruction differences for the doorbell button style are shown in parenthesis.

### PROGRAMMING:

- 1. Press and hold the 5/6 (or 3) button for 5 seconds until the keypad beeps. The backlighting will begin flashing to indicate the keypad is now in "Learn Mode."
- Enter the 5-Digit *authority code*. An incorrect code results in a 1-second "error" beep and the keypad leaves "Learn Mode." With a correct *authority code*, the keypad will beep non-stop until the next step is complete.
- Choose a memory bank to store the new access code. 1/2, 3/4, 5/6, 7/8, and 9/0 (or 1, 2, 3, and 4) are valid memory bank buttons. Once the memory bank is chosen, the button's confirmation beep stops.
- 4. Enter the new 5-digit *access code*. The keypad double-beeps for each button pressed, and a triple-beep with the 5<sup>th</sup> button press.
- Re-Enter the same new 5-digit access code. The keypad double-beeps for each button pressed, and a 4-chirp rapid beep if the access code is accepted. The keypad automatically leaves "Learn Mode" when the new access code is set successfully. If the access code was not changed, a 1-second beep sounds.



500 Bailey Avenue P.O. Box 350

Standard Keypad



Doorbell Keypad



- The factory default access code is 1-3-5-7-9 (or 1-2-3-4-4).
- If an error is made at any point during the procedure, or if the time runs out, the system will exit learn mode and make a long beep to indicate the *access code* was not successfully changed.
- The *access code* should be changed when the vehicle is sold.
- The access code enables secure functions, such as unlocking doors.
- Removing power from the keypad will not reset *authority codes* or *access codes* to factory default. The codes must be changed intentionally.
- A walkthrough video is available at http://www.trimarkcorp.com/en/easkum.aspx



# Tri*Mark* Relay Keypad

The Tri*Mark* Relay Keypads are currently installed on 5<sup>th</sup> wheel trailers and other towable RVs.

### Teaching new codes to the Keypad

### The Authority Code

The *authority code* has only one purpose: it grants the owner the ability to set new *access codes*. The *authority code* is **EXACTLY** 5 digits long. Changing the *authority code* requires access to the wiring harness

#### **PREPARATION:**

Find access to the YELLOW "Learn" wire in the keypad harness. This can be found at the back of the keypad.

#### PROGRAMMING:

- 1. With the keypad still powered, touch the end of the yellow "learn" wire to a ground. Hold the wire grounded for 5 seconds, or until the keypad begins to beep.
- 2. Enter the new 5-digit *Authority Code*. Each button press will chirp with a double-beep. The 5<sup>th</sup> button press will be a triple-beep, indicating that the 5-digit code has been entered once.
- Re-Enter the same new 5-digit Authority Code. Each button press will chirp with a double-beep. The 5<sup>th</sup> button press will be a 4-chirp rapid beep if the authority code was successfully changed. If the authority code was not changed, a 1-second beep sounds.

- The factory default *authority code* is 7-7-7-7.
- The user is given 2 minutes to complete this procedure from the time the keypad enters "learn mode"
- If an error is made at any point during the procedure, or if the time runs out, the system will exit learn mode and make a long beep to indicate the *authority code* was not successfully changed.
- Successfully resetting the *authority code* removes all previous *access codes* from memory and sets a new *access code* in the first memory bank that is the same as the new *authority code*.
- The keypad automatically exits "Learn Mode" when the new authority code is successfully set.
- The *authority code* is to be controlled by individuals (owners of vehicle, fleet manager, etc.) who manage the distribution of *access codes* to vehicle users
- The *authority code* should be changed when the vehicle is sold.



- The *authority code* does not enable secure functions, such as unlocking doors, it ONLY assigns *access codes*.
- Removing power from the keypad will not reset *authority codes* or *access codes* to factory default. The codes must be changed intentionally.
- A walkthrough video is available at *http://www.trimarkcorp.com/en/easkum.aspx*

### The Access Codes

To set new *access codes*, you must know the *authority code*. A keypad can store up to 5 unique *access codes* for multiple users. *Access codes* are changed using only the buttons on the keypad. The *access code* is **EXACTLY** 5 digits long.

### PROGRAMMING:

- 1. Press and hold the 5/6 button for 5 seconds until the keypad beeps. The keypad is now in "Learn Mode."
- 2. Enter the 5-Digit *authority code*. An incorrect code results in a 1-second "error" beep and the keypad leaves "Learn Mode." With a correct *authority code*, the keypad will beep non-stop until the next step is complete.
- 3. Choose a memory bank to store the new *access code*. 1/2, 3/4, 5/6, 7/8, and 9/0 are valid memory bank buttons. Once the memory bank is chosen, the button's confirmation beep ends the non-stop beep.
- 4. Enter a **NEW** 5-digit *access code*. The keypad double-beeps for each button pressed, and a triple-beep with the 5<sup>th</sup> button press.
- 5. Re-Enter the new 5-digit *access code*. The keypad double-beeps for each button pressed, and a 4-chirp rapid beep if the access code is accepted. The keypad automatically leaves "Learn Mode" when the new *access code* is set successfully. If the *access code* was not changed, a 1-second beep sounds.

- The factory default *access code* is 1-3-5-7-9.
- If an error is made at any point during the procedure, or if the time runs out, the system will exit learn mode and make a long beep to indicate the *access code* was not successfully changed.
- The *access code* should be changed when the vehicle is sold.
- The *access code* enables secure functions, such as unlocking doors.
- Removing power from the keypad will not reset *authority codes* or *access codes* to factory default. The codes must be changed intentionally.
- A walkthrough video is available at http://www.trimarkcorp.com/en/easkum.aspx



9																																
5	4 AUX I/OF WAY BECEDTACI E HOUSING 1 106537 4	-WAT RECEPTACLE ROUSING 1-100327-4 KET CONTACT 18-22GA 106529-2	CKET CONTACT 16GA 794418-1	B- (GROUND) SECURITY TRIGGER INPUT 3	ARMED OUTPUT	STARTER KILL OUTPUT	LIGHTS OUTPUT	HORN OUTPUT	B- (GROUND) SECURITY TRIGGER INPUT 1	SIREN OUTPUT (AC)	AUX 2 OUTPUT	AUXOUTPUT		אר שגוווה ויהודה		B+ (POSITIVE) SECURITY TRIGGER INPUT 2	SIKEN UUTPUT (AC)		5 "L/UNL OUTPUT"	WAY RECEPTACLE HOUSING 1-106527-0	(ET CONTACT 18-22GA 106529-2	CKET CONTACT 16GA 794418-1	DOOR LOCK (N.C.)		DOME LIGHT OUTPUT	DOME LIGHT (N.O)	DOME LIGHT (N.C.)	DOOR LOCK (N.O.)	LOCK OUTPUT	DOOR UNLOCK (N.C.)	DOOR UNLOCK (N.O.)	UNLOCK OUTPUT
4		SOCK	SOOS	1. 16GA WHT/PPL	2. 16GA ORG	3. 16GA BRN	4. 16GA GRY	5. 16GA BRN/WHT	6. 16GA WHT/BLK	7. 16GA WHTYEL	8. 16GA RED/WHT	9. 16GA BLK/WHT	10. 16GA WHI/ORG	11. 10GA WHI/BLU		13. 16GA WHI/KEU	14. TOGA GRIN			AMP DUAC 10-1	SOCK	SOC	1. 16GA GRN/BLK	2. VACANT	3. 16GA PPL	4. 16GA PNK	5. 16GA PNK/BLK	6. 16GA GRN/WHT	7. 16GA GRN	8. 16GA BLU/BLK	9. 16GA BLU/WHT	10. 16GA BLU
2 3		AWE DUAC 4-WAT RECEPTACLE HOUSING 9-100327-4 SOCKET CONTACT 18-22GA 106529-2	SOCKET CONTACT 16GA 794418-1	1. VACANT	2. 16GA YEL IGNITION B+ INPUT	3. 16GA BLK GROUND INPUT	4. 16GA RED CONSTANT B+ INPUT		2 "KEYPAD"	AMP DUAC 8-WAY RECEPTACLE HOUSING 0-106527-8	SOCKET CONTACT 18-22GA 106529-2	SOCKET CONTACT 16GA 794418-1	1. 16GA BLK SYSTEM GROUND	2. 16GA PPL LIGHTS/DOORBELL OUTPUT	3. 16GA BRN 3/4 (2) SECURE OPERATION	4. 16GA WHT/GRN LOCK ALL	5. 16GA RED SYSTEM POWER B+	6. 16GA YEL LEARN MODE GROUND INPUT	7. VACANT	8. 16GA WHT/RED 1/2 (1) SECURE OPERATION UNLOCK ENTRY		3 "LINI NDHT"	AMP DUAC 2-WAY RECEPTACLE HOUSING 0-106527-2	SOCKET CONTACT 18-22GA 106529-2	SOCKET CONTACT 16GA 794418-1	1 16GA GRN/WHT ILOCK INPUT B- GROUND	2 16GA RI HAWHT HINH OCK INPLIT R. GROUIND					

4

Т

В

Т

С

Ω HIS DRAWING AND INFORMATION CONTAINED HEERIN IS THE POPERTY OF JANDON IK, & KANNOT BE DISCLOSED TO OTHERS WITHOUT WRITTEN AUTHORIZATION OF JANCO. 1.N. SEE DWG. File: 0046095 sheft: 2 of 2 SCHEMATIC,SCTY SYS,ALARM,DR +LK,KE DR BY: JAY Date DR. 11/21/11 scale: NTS cat: NO. 530 DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED ANGULAR  $\pm 1^{\circ}$  FRACTIONAL  $\pm \frac{1}{6}^{\circ}$ P ESCRIPTION: ALL 33 ALL 34 ALL 36 WHERE USED

D

D.N. 0.046.095

### MOV-A-BOLT ADJUSTMENT

- 1) Remove the mov-a-bolt cover from the jamb.
- 2) Remove the striker bolt then the six screws holding the mov-a-bolt assembly to the jamb.
- 3) Remove mov-a-bolt assembly from the jamb to adjust .
- 4) Look at the reference hole position to determine which way to adjust the star cam(see reference diagram below for adjustment).
- 5) Remove pin, rotate star cam to the desired location, the lower the number position pulls the door in tighter, the higher the number position makes the door looser on the seal, reinstall pin.
- 6) Reinstall mov-a-bolt assembly in the jamb and test the door operation, remove and readjust as necessary, re-install mov-a-bolt cover.



### PTL Engineering Entry door installation Instructions Series 3000

- Place door in the opening (the jack screws on the bottom of the jamb should be protruding approximately ¼" before beginning) with a sealant behind the outside flange of the door and the hinged side against the a-pillar and install two sets of 2-#14x2" self drilling and tapping screws through the two holes in each hinge. Make sure the hinge side of the opening is perpendicular to the floor and the opening is square.
- Adjust the remaining jack screws located around the three sides of the perimeter of the door until the door and the jamb have equal spacing and the jamb is square in the opening and the door is flush in the jamb (<u>Do not push the upper or lower</u> corners of the jamb in flush with the coach wall unless you are certain the wall is perfectly flat) Insert the #12x2" self drilling and tapping screws through the jack screws to secure the door to the remaining three sides.(It is critical that the spacing between the door trim and the jamb is consistent before anchoring the door).
- Additional adjustment to the sealing of the door may be made by moving the door seal outboard towards the jamb or inboard towards the door depending on how tight the seal is. You can determine this by slipping a piece of paper behind the seal and closing the door to see if it can be removed and how much force is required to pull it through. (It should be tight enough that in order to pull the paper from between the door and the jamb significant pressure is required).
- After you are certain the door is mounted properly and the door is flush and square in the coach opening you may then proceed to tap the outer flange of the jamb down against the coach wall using a rubber mallet and a nylon block.
- Close the door to determine whether or not the striker bolt is adjusted properly. If the door closes and latches correctly into the primary and secondary latch than no further adjustment is required. If the door does not seal well or the latch will not engage than the striker bolt may have to be adjusted. In order to make this adjustment the striker bolt can be adjusted by re-positioning the striker bolt (see move-a-bolt adjustment instructions).
- Further adjustments can be made to the screen door by loosening the eight screws that hold the screen door to the hinge and manipulating the screen door as necessary. The screen door catch also has minimal adjustment in the catch itself by loosening the screws and moving the latch assembly (see screen door adjustment instructions).

### SCREEN DOOR ADJUSTMENT

- 1) To adjust screen door up or down in the opening loosen 4 bolts on each hinge at the screen.
- 2) Slots in the hinge will allow movement up and down.
- 3) Now latch the screen door to the door with the door open.
- 4) Check to see that screen hinges fit tight to the trim of the door.
- 5) Loosen the allen head screws on the hinges to adjust door, retighten screws.
- 6) Check door pad on inside of door and make sure it lies within the trim of the door, if not within trim you must resize the pad so it doesn't hold the screen door from sealing correctly.

### CHANGING GLASS IN SCREEN DOOR

- 1) Slide both pieces of glass to the hinge side of the screen door.
- 2) On the latch side of the screen door use a screwdriver to pull down the plastic spacer. Pull it all the way out of the track , note the direction of the spacer to reinstall the same way.
- 3) This will allow you to push the glass up and out of the bottom track..
- 4) Install new glass by reversing the procedure.
- 5) Slider glass has a spacer on two corners for centering the glass when closed.

			rubber spacer	~
rubber	spacer			
		COUCH	<u> </u>	$\supset$

Note: If you have questions concerning the door please contact P.T.L. ENGINEERING and we will be glad to assist you. Phone# 248-652-7998 or e-mail support@www.ptlengineerng.com

### MOV-A-BOLT ADJUSTMENT

- 1) Remove the mov-a-bolt cover from the jamb.
- 2) Remove the striker bolt then the six screws holding the mov-a-bolt assembly to the jamb.
- 3) Remove mov-a-bolt assembly from the jamb to adjust .
- 4) Look at the reference hole position to determine which way to adjust the star cam(see reference diagram below for adjustment).
- 5) Remove pin, rotate star cam to the desired location, the lower the number position pulls the door in tighter, the higher the number position makes the door looser on the seal, reinstall pin.
- 6) Reinstall mov-a-bolt assembly in the jamb and test the door operation, remove and readjust as necessary, reinstall mov-a-bolt cover.





### DEAD BOLT ALIGNMENT

- 1) Dead bolt pin must be in the center of striker plate pocket.
- 2) Remove screws from non slotted holes, loosen remaining screws to adjust plate in or out to line up with the dead bolt pin, tighten screws.
- 3) Check the alignment by closing the door, engage dead bolt, see if door opens or is stopped by dead bolt pin.
- 4) If door opens you must reposition striker plate until dead bolt pin engages pocket.
- 5) After adjusted properly reinstall remaining screws.



Note: If you have questions concerning the door please contact P.T.L. ENGINEERING and we will be glad to assist you. Phone# 248-652-7998 or e-mail support@www.ptlengineerng.com

### **ENTRANCE DOORS**

### **Challenger Entrance Door**

1. Air Lock Post on Entrance Door



Challenger Entrance Door (cont)

### 2. Air Lock Mechanism in Door Frame



### **PTL Entrance Door**

1. Air Lock Post and Catch



PTL Entrance Door (cont)

# 2. Air Lock screws to adjust the Air Lock post plate located at the top of the door frame.



PTL Entrance Door (cont)

### 3. Air Lock post and catch for PTL brand entrance door.



### **Miscellaneous Information for Post and Catch**

### Challenger and PTL Door

### PTL Brand

- Has plastic hook on the door for the latch to grip.
- Challenger Door, (Nappanee Door) has a metal post on the door for the latch to grip.
- Fuse (5 amp) in the fender door, pink 16 G wire to a relay in the kick panel at driver's left foot. Yellow insulated three wires to the solenoid on the exterior fire wall marked "Entry door air lock".
- Air lines to the door:
  - PTL attaches to the bottom of the door.
  - Challenger attaches to the mechanism routed through the A pillar.

### Challenger and PTL Entrance Door:

Air noise:

- 1. Check the A pillar between the windshield and the entrance door for insulation.
  - a. Fill as needed.
- 2. Inspect the front edge of the window in the entrance door. This edge may have a gap and require clear silicone sealant to close the gap and diminish air noise.
- 3. If the solid window in the entrance door has weep holes, they should be sealed. They do not need to drain water out of a solid window and this can cause air noise.
- 4. The front seal of the entrance door can sometimes shrink from the top front of the door to the top of the hinge. It will need to run tight at the top to the top of the hinge to diminish air noise.
- 5. The front of the entrance door may need to be sealed to make it more aerodynamic to catch less wind and diminish the wind noise.

### **Air Regulators and Air Valves**

- 1. Air regulator for pocket door stops
- 2. Air regulator for step slide
- 3. 4x4 air assembly (air valve) for doors (entrance and pocket doors).
- 4. 4x4 air assembly (air valve) for step slide.



**NOTE:** The black knob on top of the regulator will adjust the pressure of the component it operates. To increase pressure, lift and turn the knob clockwise and counter clockwise to reduce the pressure to the component.

WARNING: PRESURE FOR STEP SLIDE SHOULD BE NO GREATER THAN HAND HELD. DO NOT OVER ADJUST.

### **AIR NOISE**

### At the entrance door and components near the door.

### Entrance Door Air Noise:

Check gap of the from the top of the hinge to the top of the door



It is important that the door frame is in the proper location to meet and seal at the door. Check to see if the seal is tight at the door. If not, the frame can be pushed out to meet the door (below).



Check the latch for proper location and tension. See the Mov-A-bolt adjustment section.



Check air latch for proper position in the hook on the door. -Roller air latch should be showing 1/8 inch out of the bottom of the door hook.



Pulling the bottom of the door and frame outboard will also move top of the door tighter into the seal of the frame.



Pulling the bottom front corner of the door frame outboard will push the top rear corner of the door in tighter to the frame seal.



When the door is installed at the proper location the metal flange on the perimeter the door frame should be "tapped" back snug to the sidewall of the unit and then sealed.



### DOOR CHECK LATCH:

The check latch is to keep the door in the open position at a right angle to the unit.



If the frame mounting plate located at the top of the door frame is not in the proper location it can hold the door open creating air noise.

Or hit the inside frame making it hard to close.

The plate location too far forward will cause the knuckle to hit the inside of the door frame. The plate to far rearward will cause the knuckle to hit the top of the door seal shown below.

Door mounting plate for the check arm at the top of the entrance door.





### Air Noise at the Entrance Door Awning:



This area must be sealed to prevent air from passing between the front of the awning and the cap. To seal this area foam is added to the back side of the awning before it is mounted, along the top, down the front edge, and filling the inset at the bottom of the awning.



### Air Noise between the Cap and Firewall:



Air noise can occur where the cap and the firewall meet on the passenger side of the unit. You can access this area through the generator door and from under the front unit.

![](_page_45_Picture_0.jpeg)

Below is a view from under the coach looking up at the fiberglass cap and fire wall areas that may need to have expanded foam added. This seals areas that may cause air noise.

![](_page_45_Picture_2.jpeg)

![](_page_46_Picture_1.jpeg)

![](_page_47_Picture_1.jpeg)

\_