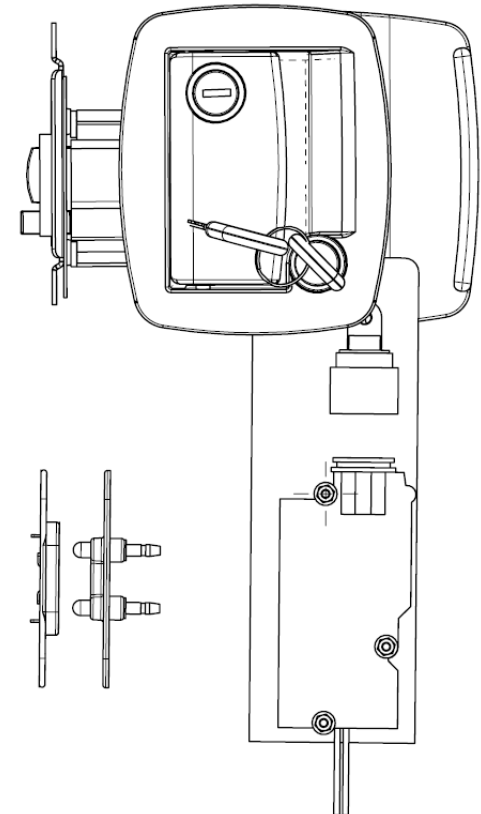


Keyless Entry Door Operation and Service Guide

Summary

- Introduction
- How the System Works
- Key fob transmitter
- Keypad Transmitter
- RF Receiver & Pairing
- Frequently Asked Questions
- System Part Number Listing



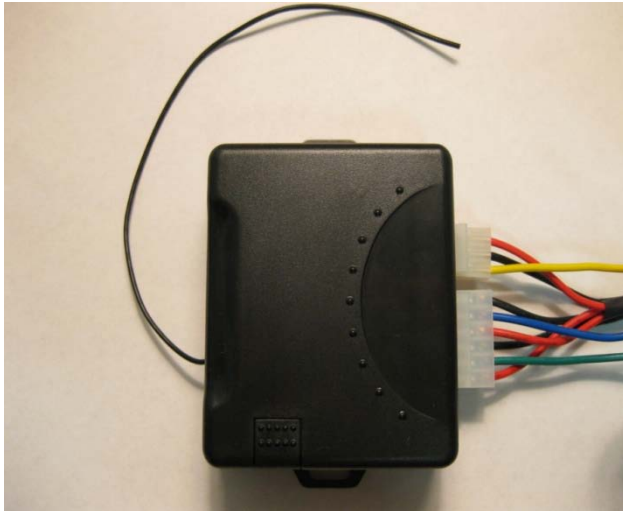
Introduction

- **The entry door latch contains a dead bolt that can be operated either mechanically with a key or electromechanically via the wireless keypad or key fob transmitters.**



How the System Works

- **The RF receiver is located inside the door. This receives the signal from a paired keypad or paired key fob and either locks or unlocks the dead bolt.**



How the System Works

- Located on the side of the door near the threshold (hinge side) is a bridge connector that supplies power (12VDC) to the RF receiver and dead bolt actuator.
- Power is only supplied to the RF receiver and dead bolt actuator when the door is closed.
- The keypad and key fobs are powered by internal batteries.



Key Fob Transmitter

- The key fob transmitter communicates wirelessly to a paired RF receiver.
- The key fob consists of a lock button, an unlock button and a red LED which illuminates when the key fob is transmitting (sending a signal to the RF receiver).
- A signal is sent to lock the dead bolt when the lock button is pressed and a signal is sent to unlock the dead bolt when the unlock button is pressed.



Key Fob Transmitter

- The key fob uses TWO CR2016 batteries.
 - The batteries should last approximately 3 years depending on usage.
 - The batteries can be replaced by opening the key fob enclosure.

Batteries
(2)



- Note: The key fobs are not intended for exposure to water.

Keypad Transmitter

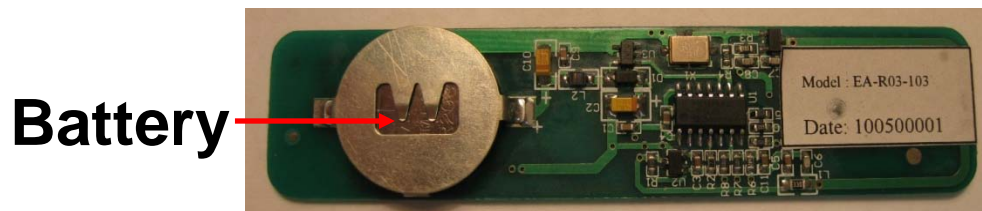
- The keypad transmitter communicates wirelessly to a paired RF receiver.
- The keypad consists of 5 buttons as shown below.



- The keypad is shipped with a default user code of 1234.
- Entering the user code then pressing the:
 - 1-2 Button will send a signal to the RF receiver to UNLOCK the dead bolt.
 - 3-4 Button will send a signal to the RF receiver LOCK the dead bolt.
Note: these buttons are always pressed after the user code to lock or unlock the door. Changing the user code does not change the use of these buttons.
- Example: User code is 5938.
 - Entering 5938 then pressing the 3-4 button will lock the dead bolt.

Keypad Transmitter

- The keypad is adhered to the door or side of the RV with double faced tape that is supplied with each keypad.
- The keypad uses one CR2032 battery.
 - The battery should last approximately 3 years depending on usage.
 - The battery is located on the back of the printed circuit board inside the keypad housing.
 - The battery can be replaced by removing the keypad assembly from the RV and removing the screws on the back of the keypad.



- **Note: Keypads are water-resistant but should not be subjected to submersion in water.**

Keypad Transmitter

Changing User Codes

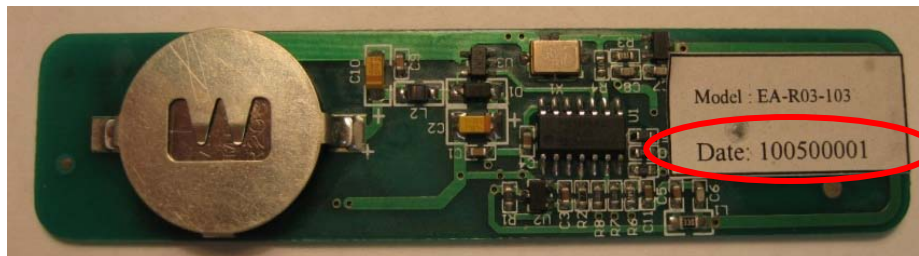


- **The unit is shipped with a default user code of 1234 (or the last 4 digits of the VIN) and can be changed to a 3-7 digit number. To change the user code:**
 - **1. Press the 9-0 button for approximately 3 seconds. Keypad lights should flash twice then stay on.**
 - **2. Enter the current user code. When entering the last digit of the current user code, hold the button for approximately 2 seconds. Keypad lights should flash once then stay on.**
 - **3. Enter the new user code. When entering the last digit of the new user code, hold the button for approximately 2 seconds. Keypad lights should flash once then stay on.**
 - **4. Repeat the new user code. When entering the last digit of the new user code, hold the button for approximately 2 seconds.**
 - **5. Keypad lights should flash once then turn off. The user code has been successfully changed.**
 - **If the keypad lights turn off during Steps 1-4, then programming has been timed out and the process needs to be repeated from Step 1.**

Keypad Transmitter Resetting The User Code



- If the user code is lost or forgotten, each keypad has a unique nine digit date code that along with a master code can be used to reset the device.
- On keypads produced before June 2010:
 - The nine digit date code is only printed on a white label attached to the back of each printed circuit board inside the keypad housing.
 - To access the printed circuit board, the keypad needs to be removed from the RV and the housing screws removed.



Date Code

Keypad Transmitter Resetting The User Code



- **On keypads produced June 2010 and after:**

- The nine digit date code is printed on a label attached to the front of the keypad housing and on a white label attached to the back of each printed circuit board inside the keypad housing.



Date Code

- **This date code can be cross referenced with a master code that will reset the unit back to 1234 (each master code is unique). Contact customer service for details.**
 - **Note: On units produced before June 2010 the label on the front of the keypad listed an eight digit production code. This does not correlate to the date code.**
 - **It is recommended that the RV Owner remove this sticker from their keypad and place it with their RV documentation for future reference.**

RF Receiver Pairing Keypads or Key Fobs



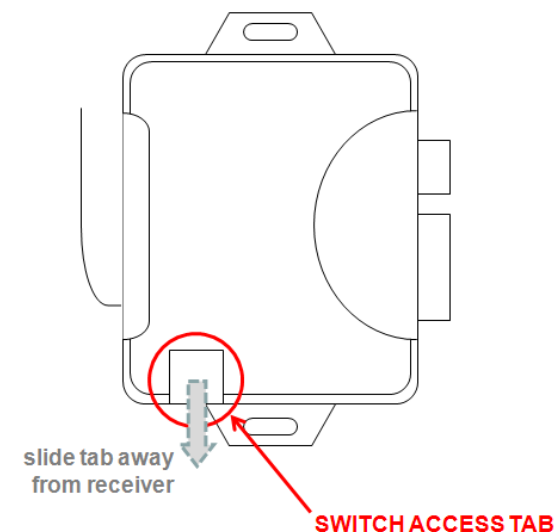
- **RF Receivers, keypads and key fobs are shipped unpaired and sold as individual line items.**
- **The pairing process requires placing the RF Receiver into “learn mode.” The RF Receiver must have power to complete the pairing process.**
- **Each receiver can currently support two transmitters. This will change to four transmitters in the future.**
- **If two transmitters are already paired with the receiver unit (current design), then the older of the two will be deleted if an additional transmitter is paired.**

RF Receiver Pairing Keypads or Key Fobs



- **To pair a keypad or key fob to a RF receiver:**
 - CAUTION: Potentially hazardous voltages are present. Use caution when accessing the printed circuit board.
 - CAUTION: The receiver unit's circuit board is an ESD-sensitive device. Observe ESD best practices when accessing the circuit board to avoid damage to the circuit board.
 - Note: Power must be connected to the RF Receiver to complete the pairing process.

1. **Remove the access tab from the face of the RF controller.**



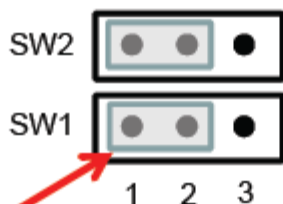
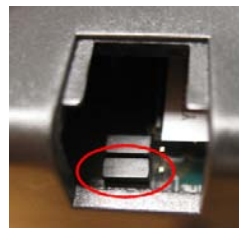
RF Receiver Pairing Keypads or Key Fobs



2. Put the RF Receiver in “learn mode”.

- Note: An improvement was made to the printed circuit board to replace the pins/jumpers (older design) with slide switches (new design).
- Placing the receiver in learn mode requires:
 - A. Removing and reinstalling the “learn” header jumper (SW1) OR
 - B. Moving the “learn” switch (Switch1) from OFF to ON

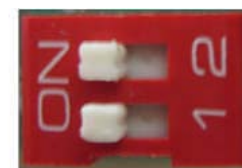
Learn Header with Pins & Jumper



JUMPER

“LEARN” HEADER

Slide Switch



Switch1

(move Switch1 from 'off'
to 'on' position)

Note: Switch 2 sets the pulse duration for the lock and unlock signals to the electronic actuator. This should be set to the ON position (250ms) for use with the R3-EM entry door latch.15

RF Receiver

Pairing Keypads or Key Fobs



3. **To enroll a key fob transmitter:** Within six seconds of reapplying the SW1 jumper or moving Switch1 to the ON position, press either the LOCK or UNLOCK button on the key fob. The auxiliary output will toggle to indicate the transmitter has been enrolled (audible clicks will be heard).
- **To enroll a keypad transmitter:** Within six seconds of reapplying the SW1 jumper or moving Switch1 to the ON position, enter the current user code of the new keypad (e.g. 1 2 3 4), then press the 1-2 button. The auxiliary output will toggle to indicate the transmitter has been enrolled (audible clicks will be heard).
 - **Note:** Enrollment must be completed within 6 seconds of re-installing the jumper / moving the switch to the ON position or you will have to remove and re-install the jumper / slide the switch to the OFF position and back to the ON position and try again.
- **For the slide switch style RF Receiver, move Switch1 from the ON to OFF position after enrollment.**

RF Receiver Pairing Keypads or Key Fobs



4. **Issue a lock or unlock command from the keypad for key fob to verify a successful enrollment.**
 - **If not successful, try again from step 2.**
 - **Confirm the RF Receiver has power.**
 - **Confirm the key fob button or keypad user code (followed by the 1-2 button) was pressed within the six second time window.**
5. **Reinstall the header access tab.**

- **Frequently Asked Questions**
 - **Keypad or System Isn't Working**
 - **Can't Change the User Code**
 - **Key fob does not lock or unlock the door**

1) Keypad or System Isn't Working

- **Are the keypad lights coming on when any button on the keypad is pressed? This is very hard to see in daylight. Recommend covering the keypad or checking when dark.**
 - **If YES, keypad lights are coming on when a button is pressed**
 - Confirm the user code is correct. Make sure door is closed (i.e. power to RF Receiver) and no keypad lights are on before continuing.
 - Enter the current user code (default is 1234), then hit the 3-4 button. This should lock the dead bolt.
 - Confirm they are entering the current user code followed by the 3-4 button.
 - Do the keypad lights stay on for 5 seconds after hitting the 3-4 button?
 - If **YES**, the user code is incorrect.
 - » Try again. Confirm they haven't changed the user code and are entering what they believe to be the current user code.
 - » If the lights stay on for 5 seconds, the date code will be needed to reset the user code back to 1234 (see slide 11 for resetting the user code and contact customer service).

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- Do all the keypad lights go off except the one behind the 9-0 button, which stays on for 2 seconds after entering the current user code and pressing the 3-4 button?
 - If **YES**, user code is correct. Check the following:
 - » Is the RV door closed? Door must be closed to supply power to the RF Receiver and dead bolt actuator.
 - » Is the RV master power switch in the ON position?
 - » Confirm power to the bridge connector.
 - » RF Receiver and keypad may not be paired. Go through the pairing process as described on slides 14-17.

Continued on next slide...

Continued from previous slide....

- **Are the keypad lights coming on when any button on the keypad is pressed? This is very hard to see in daylight. Recommend covering the keypad or checking when dark.**
 - If NO
 - Keypad battery could need replacing.
 - See slide 9 for more information.

2) Can't Change the User Code

- **Confirm the keypad lights are coming on when any button is pressed.**
 - If NO, see FAQ 1.
 - If Yes, Does the current user code still work?
 - **If YES, follow the instructions for changing user codes (see slide 10). Advise them to use the keypad lights as a guide for when to release the buttons. (Some people count faster or slower than others).**
 - Note: If the keypad lights go off during the process, then the programming has been timed out and the process needs to be repeated.
 - **If NO (and the keypad lights are coming on when any button is pressed)**
 - The date code will be needed to reset the user code back to 1234 (see slides 11& 12 for resetting the user code and contact customer service).

3) Key fob does not lock or unlock the door

- **Confirm the indicator light on the key fob is coming on when any button is pressed.**
 - **If NO**
 - **Replace batteries in key fob (see slide 7 for more details)**
 - **Key fob could be damaged or defective**
 - **Note: Key fobs should not be exposed to water.**
 - **If YES**
 - **Is the door closed? Door must be closed to supply power to the RF Receiver and dead bolt actuator.**
 - **Is the RV master power switch in the ON position?**
 - **Confirm power to the bridge connector.**
 - **RF Receiver and key fob may not be paired. Go through the pairing process as described on slides 14-17.**

