e-ASK CAN Keypad Instructions: Changing CAN Protocols



Using this Guide

High-End Tri*Mark* keyless entry system components used a multiplexing communication network, known as CAN, to communicate to each other as well as with other CAN-enabled devices on the vehicle. There are several different, and incompatible, languages (or protocols) of CAN, including J1939, RV-C,



CANopen, DeviceNet, NMEA 2000, and many more. Tri*Mark* components specifically support 2 protocols (J1939 and RV-C), but only one at a time. Occasionally, a keypad may not be set to the correct protocol, and needs to be changed. This guide explains how to properly change the CAN protocol of Tri*Mark* keypads.

Do you need this guide?

If your vehicle's keyless entry system is designed to use CAN communication instead of bulky discrete signals, then this guide may apply. The easiest way to tell is to look at the wiring harness coming out of your keypad. There should be one or two bundled harnesses. Keypads with two harnesses will only have one plugged into a vehicle harness, and the other will be hanging free.

- If your keypad has a harness with 9 wires plugged in (Fig. 1), your keypad uses discrete signals and this guide will not help you.
- If your keypad has a harness with 4 wires plugged in, and they are protected by a smooth, rubber insulation (Fig. 2), you have an older multiplexing technology and this guide will not help you.
- If your keypad has a harness with 4 wires plugged in, and they are protected by plastic, ribbed, convoluted tubing (Fig. 3), then this guide could help you.

Before proceeding, ensure that the Tri*Mark* Keyless Entry components in your vehicle are receiving power, the keypad responds to button presses with an audible sound, the RF receiver works properly with the RF transmitters, and the keypad's lock and unlock commands are not producing the same results as the RF key fobs.



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Changing the Protocol

- 1. Remove the keypad from the side of the RV and pull the wire harness out until the 4-Pin plastic connector is exposed.
- 2. Short the yellow "LEARN" wire to ground for 2 seconds. If this is an eGRAB chrome grab-handle, the "LEARN" wire is tucked up just inside the convoluted tubing covering the keypad's harness (Fig. 4). If this is an embedded keypad, the "LEARN" wire is in the 9-Pin connector of the unused harness (Fig. 5).
- Press and hold the [7/8] button (or [4] button on doorbell keypads) for about 5 seconds. The keypad will beep when it is held down long enough.
- 4. Press the button corresponding to the protocol you wish to use:
 - J1939 MODE: Press [1/2] button (or [1] on doorbell keypads)
 - RV-C MODE: Press [9/0] button (or [DOOR BELL] on doorbell keypads)
- 5. The keypad will confirm your choice with one short beep for J1939 mode or two short beeps for RV-C mode.
- The keypad will do a soft-restart and beep for about 1 second. However, the protocol change will not take effect until power is cycled to the keypad. Unplug the keypad's 4-Pin harness for 5 seconds, and then plug it back in.
- 7. Test the keypad to ensure proper operation.
- 8. Reinstall the keypad to its original location.





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