



## **Bus-Scan<sup>®</sup> CR2**

**A New Solution for You...**  
**A Replacement for CRS CR2 A/B**

## 1.0 Introduction

The **Bus-Scan CR2** is a specialized version of our traditional **BS 300** series of Child Reminder Systems. It is intended to provide a generalized replacement for the now-defunct **CRS CR2 A/B** systems that were manufactured by one of our competitors. Even though it is not meant to be an exact recreation of that product, it fulfills these criteria:

- It is plug & play, with a totally-compatible connector for direct substitution, and uses the wiring from your existing CRS CR2 A/B installation. It is meant to plug into your existing harnesses, and presumes your existing, working wiring.
- We also offer a wire harness, remote LED and remote disarm switch for new installations.
- It relies on your door sensors to 'captivate' drivers until the unit has been properly disarmed.
- The system will automatically arm after the ignition has been on for 10 minutes with the doors closed (field-trip mode).
- If a driver fails to disarm the system and attempts to exit the bus, the horn will be activated.
- To reset an alarm, the driver must recycle the ignition then complete the inspection properly.
- We expect to add more features as we go—we listen to our customers!
- **NOTE 1:** The mounting centers of the Bus-Scan (4.1") differ slightly from the CRS system (approx. 4.2").
- **NOTE 2:** Our CR2 replacement requires direct wiring to a push button that feeds a Ground level for disarming. If your existing system uses the vehicle's door buzzer circuit and diodes, then you will need to provide a simple push button switch (we can provide one, if you like – Order Num: **103547**). It was never a good practice for the original CR2 to use the vehicle buzzer wiring and diodes for disarming, and as a matter of proper engineering, we chose not to perpetuate it.

### 1.1 The Purpose

This prototype represents our effort to fill the need and vacuum that was created when CRS went out of business, and their products became extinct.

### 2.0 Just so you know...

When it comes to Child Reminders, we have been around longer than anyone else—including CRS. We were founded in 1988, and created the **Bus-Scan®** Child Reminder in 1995, about 10 months *before* CRS. We offer both hard-wired and our **exclusive wireless** models for quick and easy installation. These models offer some great features, so please check them out at: <http://www.roboticstech.com/busscan/>

***We provide the best selection of Child Reminder types and models to fit every requirement.***

**Here are feature comparisons between the Bus-Scan® CR2 and the CRS CR2 A/B:**

<b>Function</b>	<b>Bus-Scan® CR2</b>	<b>CRS CR2 A/B</b>
Ignition <b>ON</b> (Yellow +12V) Prepares the system for operation.	<b>YES</b>	<b>YES</b>
Arming Signal (Orange +12V) Arms the system <b>OR...</b>	<b>YES</b>	<b>YES</b>
System will automatically <b>ARM</b> after 10 minutes w/door(s) closed.	<b>YES</b>	<b>YES</b>
System has 2 door-sensing inputs: One for +12V / One for 0V (Gnd)	<b>YES</b>	<b>YES</b>
If either the White or Blk/Gry Wire is Grounded (0V), the system will <b>DISARM</b> , and the interior lights will flash twice to confirm.	<b>YES</b>	<b>YES</b>
If Exit Courtesy Lights are on, they can be interrupted by turning the Ignition <b>ON</b> , so that the system is immediately ready for operation.	<b>YES</b>	<b>NO</b>
If the system has been <b>ARMED</b> , then the Ignition is turned off, a reminder tone will sound, indicating that the vehicle must be checked & disarmed. Also, the dome lights will be activated.	<b>YES</b>	<b>YES</b>
Ignition must be in the <b>OFF</b> position to disarm system.	<b>YES</b>	<b>YES</b>
If any door is opened during the <b>REMINDER</b> state, the horn will <b>ALARM</b> — ½ second on / ½ second off intervals until system is disarmed.	<b>YES</b>	<b>YES</b>
Ignored Horn Fail-safe operation: An ignored Horn alarm will cease sounding after 5 minutes, to save battery power and horn function.	<b>YES</b>	<b>NO</b>
If the system is in an <b>ALARM</b> state, the only way to stop the alarm is to recycle the ignition and start the <b>DISARM/INSPECTION</b> sequence over. The system will not permit an exit without alarm until the proper <b>DISARM SEQUENCE</b> has been performed.	<b>YES</b>	<b>YES</b>
Upon <b>DISARM</b> , the interior lights will remain <b>ON</b> for a period of 60 seconds, for help in exiting the vehicle (Exit Courtesy Lights).	<b>YES</b>	<b>YES</b>
Entry Courtesy Lights will be activated for 60 seconds upon first entry (door open, if closed / door closed, if open). Activating Ignition will cancel the lights.	<b>YES</b>	<b>NO</b>
If Ignition is <b>ON</b> and a door is opened, Passenger Courtesy Lights will be activated to help guide passengers on/off the vehicle. The lights will be immediately turned <b>OFF</b> upon door closing.	<b>YES</b>	<b>NO</b>
The Warning Beeper is built-in, so no additional wiring is required.	<b>YES</b>	<b>NO</b>
Dual-row, 6-position Interface Connector for Power & Signals	<b>YES</b>	<b>YES</b>
Single-row 2-position Interface Connector for Remote LED	<b>YES</b>	<b>YES</b>

NOTE: We have been told that the main connector in the CRS CR2 A/B was too accessible, and was being disconnected by some drivers. We have purposely recessed the connector slightly, to make that less likely. Please let us know if that helps.

More features have been created for the **Bus-Scan® CR2**. See the next page for **details**.

## New CR2 Features 3-Position DIP Switch on Back of Unit

- 1. Timed Auto-arming** (field-trip mode). In addition to arming the Bus-Scan **CR2** by an input signal (8-way flashers, stop sign, etc.), you can choose to have the system automatically arm after the ignition has been on for 10 minutes, with both doors closed. Enable by sliding **Switch 1** of the 3-position DIP switch to the 'ON' position.
- 2. Timed Alarm Mode** Adds a timeout alarm to the usual "Door Opened Without Disarming" mode. Sliding **Switch 2** to the 'ON' position enforces a time limit of 60 seconds for the driver to press the "Disarm" button. Therefore, the system must be disarmed before opening a door AND within 60 seconds.
- 3. Diagnostic Mode** This is used for factory testing, but can be used during installation, to speed up the process. There are many timed functions in the **CR2**, including auto-arming, light delays, etc. Sliding **Switch 3** to the 'ON' position will "speed up the clock" to move through those delays very quickly—so that you can confirm that everything is working properly. For example, the usual Auto-arm of 10 minutes occurs in only 10 seconds. If you use this special Diagnostic Mode, make sure to return **Switch 3** to the 'OFF' position when you are finished. Otherwise, the system will not function properly.

