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CODE 3 MATRIX Compatible OBDII Interface



Product Information

Specifications

- Model: 2021+ Tahoe
- Manufacturer: Code 3
- Usage: Emergency warning device

Product Usage Instructions

- Carefully remove the product from its packaging. Check for any transit damage and ensure all parts listed in the Kit Contents table are present.
- Contact customer support if any damage or missing parts are found. Do not use damaged components.
- Before starting installation, plan the wiring and cable routing. Disconnect the vehicle battery before proceeding with installation and reconnect it after installation is complete.
- Remove the two push-in rivets as shown in Figure 1 to take off the felt foot well

covering.

- When drilling into any vehicle surface, ensure there are no electrical wires, fuel lines, or upholstery that could be damaged in the process.

IMPORTANT! Read all instructions before installing and using. Installer: This manual must be delivered to the end user.

WARNING!

Failure to install or use this product according to the manufacturer's recommendations may result in property damage, serious injury, and/or death to those you are seeking to protect!

Do not install and/or operate this safety product unless you have read and understood the safety information contained in this manual.

1. Proper installation combined with operator training in the use, care, and maintenance of emergency warning devices are essential to ensure the safety of emergency personnel and the public.
2. Emergency warning devices often require high electrical voltages and/or currents. Exercise caution when working with live electrical connections.
3. This product must be properly grounded. Inadequate grounding and/or shorting of electrical connections can cause high current arcing, which can cause personal injury and/or severe vehicle damage, including fire.
4. Proper placement and installation are vital to the performance of this warning device. Install this product so that the output performance of the system is maximized and the controls are placed within convenient reach of the operator so that they can operate the system without losing eye contact with the roadway.
5. Do not install this product or route any wires in the deployment area of an airbag. Equipment mounted or located in an air bag deployment area may reduce the effectiveness of the air bag or become a projectile that could cause serious personal injury or death. Refer to the vehicle owner's manual for the airbag deployment area. It is the responsibility of the user/operator to determine a suitable mounting location, ensuring the safety of all passengers inside the vehicle particularly avoiding areas of potential head impact.
6. It is the responsibility of the vehicle operator to ensure that all features of this

product work correctly. In use, the vehicle operator should ensure the projection of the warning signal is not blocked by vehicle components (i.e., open trunks or compartment doors), people, vehicles, or other obstructions.

7. The use of this or any other warning device does not ensure all drivers can or will observe or react to an emergency warning signal. Never take the right-of-way for granted. It is the vehicle operator's responsibility to be sure they can proceed safely before entering an intersection, drive against traffic, responding at a high rate of speed, or walking on or around traffic lanes.
8. This equipment is intended for use by authorized personnel only. The user is responsible for understanding and obeying all laws regarding emergency warning devices. Therefore, the user should check all applicable city, state, and federal laws and regulations. The manufacturer assumes no liability for any loss resulting from the use of this warning device.

Unpacking and Pre-Installation

2021+ Tahoe

- Carefully remove the product from its packaging. Examine the unit for transit damage and locate all parts as detailed in the Kit Contents table below. If damage is found or parts are missing, contact the transit company or Code 3 customer support. Do not use damaged or broken parts.
- This device is a Matrix® compatible interface between the OEM CAN network and the Code 3 Matrix® system. It allows the user to configure system operations that respond to OEM data.

Kit Contents Table

OBDII Device – Matrix® Compatible

OBDII Harness

Installation and Mounting

Before proceeding with installation, plan all wiring and cable routing. Disconnect the vehicle battery. Reconnect the battery after installation is complete.

CAUTION!

When drilling into any vehicle surface, make sure that the area is free from any electrical wires, fuel lines, vehicle upholstery, etc., that could be damaged.

- Step 1. Remove the two push in rivets indicated in Figure 1 in order to remove the felt foot well covering.
- Step 2. Using a 7mm wrench, remove the bolt holding the black plastic heating vent in place.
- Step 3. Remove the vent shown in Figure 2.
- Step 4. Locate the serial gateway module shown in Figure 3.
- Step 5. Remove the black connector shown in the far left position in Figure 3.
- Step 6. Locate the wires going to pins 5 and 6 (Blue and White) and trace them back along the cable a few inches, as shown in Figure 5. You may need to cut back the mesh jacket to get far enough back from the connector to work.
- Step 7. Splice the Code 3 supplied harness to the blue and white wires following the chart below shown in Figure 4. Note: It is recommended that the splice be soldered after functionality is checked.

Tips: The Tahoe hazards are temporarily activated when the turn signal is turned off. By default, Matrix activates the Arrowstik flash when the hazards are triggered. Remove Arrowstik flash from the Matrix configuration if you do not want this feature used with the turn signals.

The trigger wire for the OEM headlight flasher activates the high beam signal on the dashboard. It also sends a signal to Matrix the highbeams are on. Deactivate highbeam default settings in Matrix if you don't want the white lighting in Matrix to turn on.

Code 3 Harness	Tahoe 2021 Harness
Green	Blue
White	White

- Step 8. Repeat for the other wire.
- Step 9. Tuck and secure any excess cabling under the dash, up and away from vehicle controls (e.g. pedals). Ensure that the cabling does not interfere with proper operation of the vehicle. The other connectors will be routed back to the OBDII

Device and another Matrix compatible device.

- Step 10. Reset the shroud back into its location on the connector. Place the connector back into the correct location on the Serial Data Gateway Module. Lock the unit in place using the red tab. Ensure a positive lock.
- Step 11. Replace the black plastic heating vent and secure it with the 7mm bolt. Replace the felt covering and secure it with the push-in rivets. Ensure that the felt does not interfere with the proper operation of the vehicle.

Note: For alternate mounting location, see Silverado 1500 Mounting install instructions.

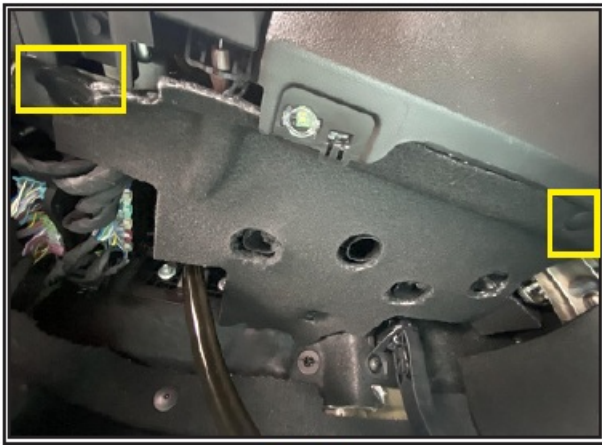


Figure 1

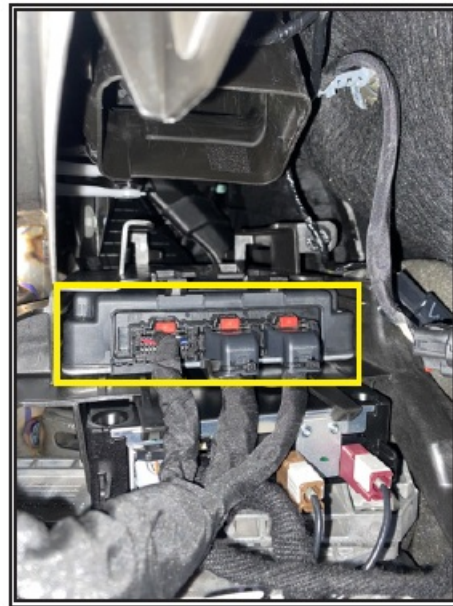


Figure 3



Figure 2

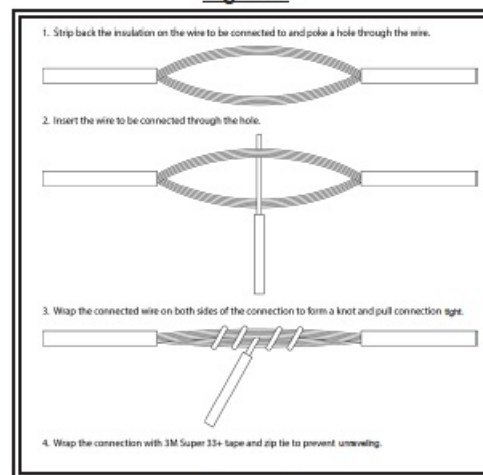


Figure 4

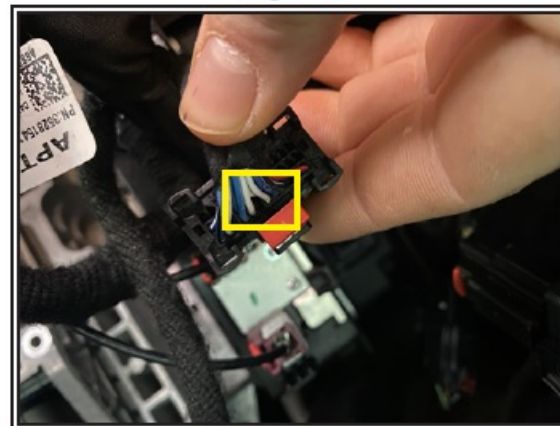


Figure 5

2021+ Silverado 1500

Installation and Mounting

- Step 1. Under the passenger seat, locate the passenger constraint module.
- Step 2. Using provided Posi-taps, connect the green wire from the OBDII module to one of the blue wires and connect the white wire from the OBDII module to one of

the white wires. See FIGURE 6. Note: Selection of the paired blue and white wires does not affect the operation of the OBDII module.

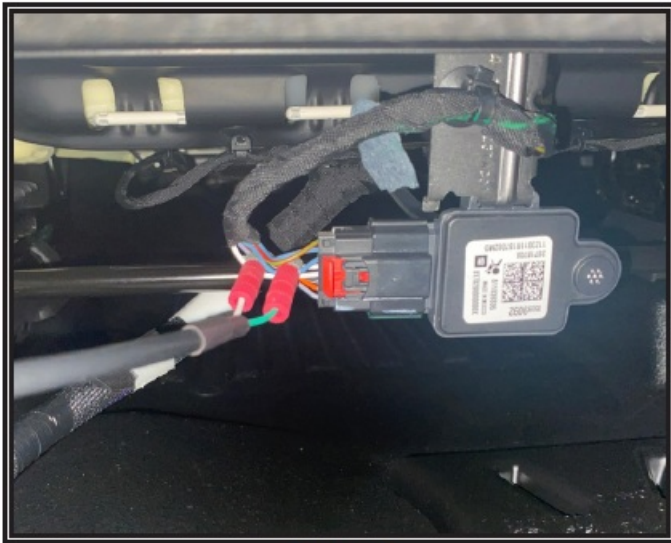


Figure 6

Note: The following functions are not included in the Silverado 1500:

- Rear Hatch
- Air Condition
- Marker Lights

Wiring Instructions

Notes:

1. Larger wires and tight connections will provide longer service life for components. For high current wires, it is highly recommended that terminal blocks or soldered connections be used with shrink tubing to protect the connections. Do not use insulation displacement connectors (e.g., 3M Scotchlock-type connectors).
2. Route wiring using grommets and sealant when passing through compartment walls. Minimize the number of splices to reduce voltage drop. All wiring should conform to the minimum wire size and other recommendations of the manufacturer and be protected from moving parts and hot surfaces. Looms, grommets, cable ties, and similar installation hardware should be used to anchor and protect all wiring.
3. Fuses or circuit breakers should be located as close to the power takeoff points as

possible and properly sized to protect the wiring and devices.

4. Particular attention should be paid to the location and method of making electrical connections and splices to protect these points from corrosion and loss of conductivity.
5. Ground termination should only be made to substantial chassis components, preferably directly to the vehicle battery.
6. Circuit breakers are very sensitive to high temperatures and will “false trip” when mounted in hot environments or operated close to their capacity.

Caution: Disconnect the battery before wiring up the product to prevent accidental shorting, arcing, and/or electrical shock.

- Step 1. Route the remaining, unused OBDII Harness connectors to the location where the OBDII Device will be mounted. The OBDII Device must be mounted near another Matrix® compatible device with a 4 Pin AUX connector. Confirm that the cable length is sufficient to reach both required locations. See FIGURE 7 for further details.
- Step 2. Connect the OBDII Device to the 14-pin connector on the OBDII Harness. Secure the device away from moving parts. See FIGURE 8.
- Step 3. Connect the 4 Pin connector of the OBDII Harness to a Matrix® compatible device, which may be the central node of the system (e.g. Serial Interface Box or Z3 Serial Siren).

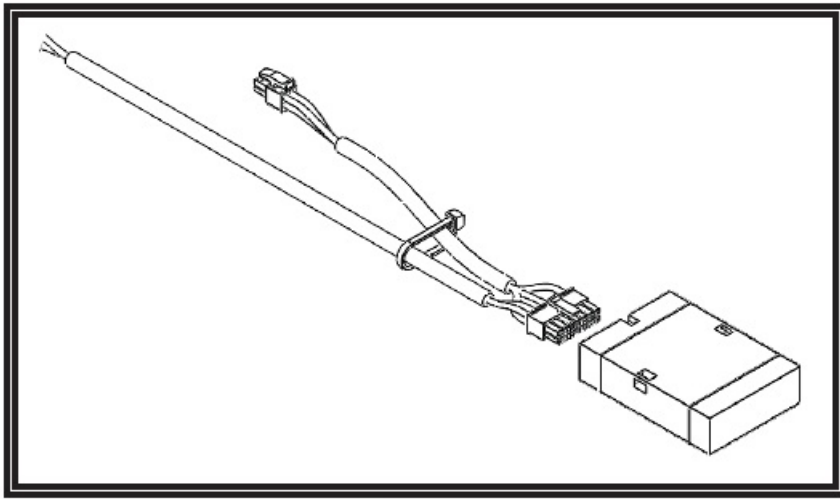


Figure 7

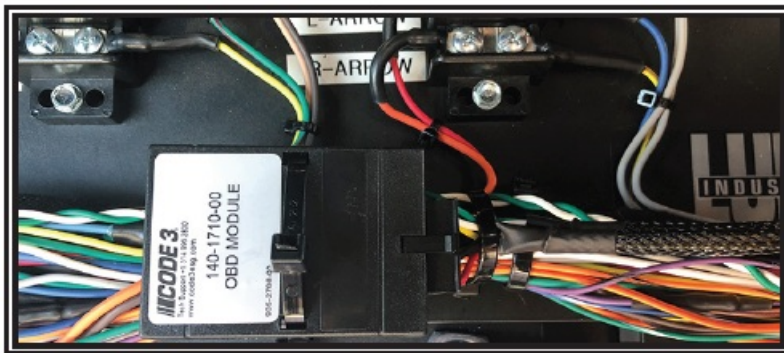


Figure 8

- The OBDII interface is designed to interact with other Matrix® compatible products out of the box using default settings. However, device operation can be further configured using the Matrix® Configurator.

OBD Signal – Default Functions

Input

Driver Side Door Open

Passenger Side Door Open

Rear Hatch Door Open

High Beams = ON

Left Turn Signal = ON

Right Turn Signal = ON

Brake Pedal Engaged

Key Position = ON

Function

Driver Side Cut

Passenger Side Cut

Rear Cut

N/A

N/A

N/A

Rear Steady Red

N/A

Transmission Position = PARK

Park Kill

Transmission Position = REVERSE

N/A

Troubleshooting

- All products are thoroughly tested prior to shipment. However, should you encounter a problem during installation or during the life of the product, follow the guide below for troubleshooting and repair information.
- If the problem cannot be rectified using the solutions given below, additional information may be obtained from the manufacturer – contact details are at the end of this document.

Problem	Possible Cause(s)	Comments / Response
OBDII Device not functional	Improper connection between the OBDII Device and the Matrix® network	Verify that all harness Device are properly se
	The Matrix® network is inactive (sleep mode)	An ignition input is req a sleep state if the time to the user manual for (e.g., SIB or Z3X Sirer wake up the network v
The check engine light has come on	BLACK connector is not seated properly	The check engine light communications on the cable/clearing short be the vehicle/clear the cl
	Spliced wires are making contact	vehicle. Ensure that th back on.

Warranty

Manufacturer Limited Warranty Policy:

- The manufacturer warrants that on the date of purchase, this product will conform to the Manufacturer's specifications for this product (which are available from the

Manufacturer upon request). This Limited Warranty extends for Sixty (60) months from the date of purchase.

- DAMAGE TO PARTS OR PRODUCTS RESULTING FROM TAMPERING, ACCIDENT, ABUSE, MISUSE, NEGLIGENCE, UNAPPROVED MODIFICATIONS, FIRE OR OTHER HAZARD; IMPROPER INSTALLATION OR OPERATION; OR NOT BEING MAINTAINED IN ACCORDANCE WITH THE MAINTENANCE PROCEDURES SET FORTH IN MANUFACTURER'S INSTALLATION AND OPERATING INSTRUCTIONS, VOID THIS LIMITED WARRANTY.

Exclusion of Other Warranties

- MANUFACTURER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED.
- THE IMPLIED WARRANTIES FOR MERCHANTABILITY, QUALITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING FROM A COURSE OF DEALING, USAGE OR TRADE PRACTICE ARE HEREBY EXCLUDED AND SHALL NOT APPLY TO THE PRODUCT AND ARE HEREBY DISCLAIMED, EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW.
- ORAL STATEMENTS OR REPRESENTATIONS ABOUT THE PRODUCT DO NOT CONSTITUTE WARRANTIES.

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This Limited Warranty defines specific legal rights. You may have other legal rights that vary from jurisdiction to jurisdiction. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages.

Product Returns:

If a product must be returned for repair or replacement*, please contact our factory to obtain a Return Goods Authorization Number (RGA number) before you ship the product to Code 3®, Inc. Write the RGA number clearly on the package near the mailing label. Be sure you use sufficient packing materials to avoid damage to the product being returned while in transit.

Code 3®, Inc. reserves the right to repair or replace at its discretion. Code 3®, Inc. assumes no responsibility or liability for expenses incurred for the removal and /or reinstallation of products requiring service and/or repair.; nor for the packaging, handling, and shipping; nor for the handling of products returned to sender after the service has been rendered.

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FAQ

- **Q: What should I do if I find transit damage or missing parts during unpacking?**
 - **A:** Contact the transit company or customer support immediately to report the issue and get assistance.
- **Q: Can anyone operate this emergency warning device?**
 - **A:** No, this equipment is intended for use by authorized personnel only. Users must understand and follow all laws related to emergency warning devices.

Documents / Resources



[CODE 3 MATRIX Compatible OBDII Interface \[pdf\]](#) Instruction Manual
MATRIX Compatible OBDII Interface, MATRIX, Compatible OBDII
Interface, OBDII Interface

References

- [User Manual](#)

■ [Code 3](#) ◆ [Code 3, Compatible OBDII Interface, MATRIX, MATRIX Compatible OBDII Interface, OBDII Interface](#)

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