

EROAD Ehubo®

Installation Guide



Congratulations on purchasing your EROAD Ehubo®

IMPORTANT: Do not install or use the Ehubo until you have read this Installation Guide thoroughly.

EROAD recommends the use of a professional automotive technician to install the Ehubo in your vehicle. Please make this Guide available to your installer and keep it for future reference.

The Ehubo is easy to install by carrying out the following steps as described in this Guide:

- Make sure to read EROAD's Safety Information and follow all standard safety precautions
- Choose a suitable mounting location and mount the Ehubo
- Install the Ehubo by connecting it to the vehicle
- Finalize the installation to ensure the Ehubo operates correctly

Refer to ***"Replacement Installation"*** on page 10 if you are installing a replacement Ehubo

Sticker with serial number goes here

VEHICLE
NAME

_____ 

Please record the Ehubo's serial number along with the vehicle ID or number plate of the vehicle it is installed in. This information is required by the administrator in the office to activate the newly installed Ehubo. You can use this page to record the vehicle ID and forward it to the office.

We have provided the serial number of your Ehubo above.

After the install, you may use the panel above to record the name/ID of the vehicle. Simply give this page to your EROAD Administrator to help them link the Ehubo to a vehicle in the EROAD Depot.

Important Safety Information

Please read carefully before beginning installation!

DISCLAIMER

It is the Customer's sole responsibility to install and use the Ehubo (the Product) in a manner that will not cause accidents, personal injury or property damage. The Owner of this Product is solely responsible for observing safe driving practices

EROAD DISCLAIMS ALL LIABILITY FOR ANY USE OF THIS PRODUCT IN A WAY THAT MAY CAUSE ACCIDENTS, DAMAGE OR VIOLATE THE LAW.

TO THE MAXIMUM EXTENT PERMITTED BY LAW, ALL REPRESENTATIONS AND WARRANTIES (EXCEPT ANY WHICH MAY NOT LAWFULLY BE EXCLUDED) ARE EXPRESSLY EXCLUDED, INCLUDING WITHOUT PREJUDICE TO THE GENERALITY OF THE FOREGOING, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE

As EROAD is continuously improving this Product, EROAD may make changes to the Product at any time which may not be reflected in this document. Please contact your nearest EROAD office if you require any further assistance.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Federal regulations require wearing appropriate Personal Protective Equipment (PPE). Adherence to this requirement is monitored and mandated by Environmental Health and Safety (EHS) personnel and regulated and mandated by the U.S. Department of Labor Occupational Safety and Health Administration (OSHA).

PPE may include items such as safety glasses, safety shoes, work gloves, hard hat, high visibility vest, and work uniform. Make sure to comply with appropriate standards and check with customers or third parties to verify whether they have additional PPE requirements.

INSTALLATION

- Installers and contractors must follow OSHA regulatory requirements for working on equipment, or parts thereof, which are suspended or held aloft by use of slings, hoists, or jacks.
- Whenever the equipment is parked, the parking brake shall be set. Equipment parked on inclines shall have the wheels chocked and the parking brake set.
- Equipment, or parts thereof, which are suspended or held aloft by use of slings, hoists, or jacks shall be substantially blocked or cribbed to prevent falling or shifting before employees are permitted to work under or between them.
- Installing and servicing electronic devices can be hazardous due to electrical components. Make sure to create a safe working environment to avoid hazards and to ensure correct & safe installation & operation.
- EROAD recommends the use of a qualified professional automotive technician to install the Ehubo. Make this Installation Guide available to the appropriate personnel. Store it for future reference.
- To avoid damage do not run cables close to heat sources, sharp edges or other obstacles that might damage them.
- Do not run cables directly next to safety-relevant devices.
- Do not damage existing wiring and components when drilling the dashboard.
- After installation, check that all safety-relevant equipment is working properly.

OPERATION

- Only operate or look at the Ehubo when it is safe to do so. Always keep your hands free to operate the vehicle while driving. Your first consideration while driving should be road safety.
- To avoid driver distraction, the Ehubo screen is initially configured to automatically turn off when movement is detected.
- Do not use sharp-edged objects on the Ehubo touch screen.
- The Ehubo is not waterproof. Do not spill any liquid on it.
- Protect the Ehubo from extreme temperatures. Operating temperature for the Ehubo is between -4°F and 185°F.
- Always follow local regulations when disposing of the Ehubo.
- Do not dispose of the battery in trash cans, fire or water.

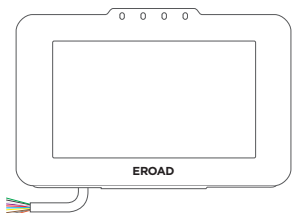


FCC COMPLIANCE STATEMENT

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Inside the box

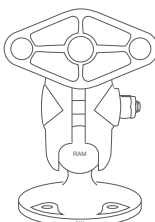
Open your Ehubo box and please check that everything is inside.



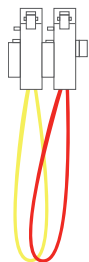
EROAD Ehubo
(pre-fitted wiring loom)



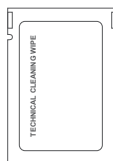
This installation guide



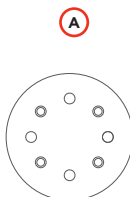
Ehubo mount



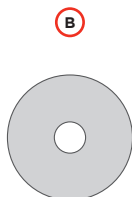
Fuse kit
(permanent/switched power)



Alcohol wipe



Mounting plate



High-strength adhesive tape
(optional, for tape mount)



C 2 x 3/4" screws + washers

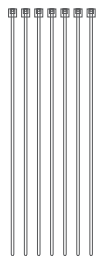


D 4 x 1/2" counter sunk screws + nyloc nuts



E 4 x 1" screws + nuts

Screws, nuts and washers to mount Ehubo.



Cable ties



Rear hatch
security plugs

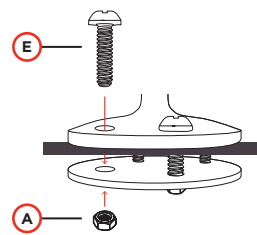
Mount the Ehubo

The Ehubo can be mounted on the dashboard or windshield. For windshield mount or temporary installation on a flat surface please use the adhesive tape supplied.

NOTE: Choose the mounting location for your Ehubo carefully and ensure that it complies with all local regulations. Make sure that the Ehubo does not impair the driver's visibility, does not pose a risk in the event of an accident, does not interfere with any systems used in the operation of the vehicle, does not block or impair the deployment of the airbag, and has a good view of the sky. Choose a location that does not expose the Ehubo to excessive temperature or vibration.

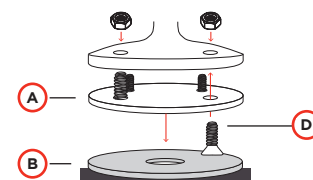
- 1** Insert the two rear hatch security plugs. The plugs are keyed and only fit in their correct position. Proceed with **2A PERMANENT MOUNT** (dashboard) or **2B TAPE MOUNT** (windshield or flat surface).

- 2A PERMANENT MOUNT**
Attach mount to dash using mounting plate **(A)**, 1" screws and nuts **(E)**.

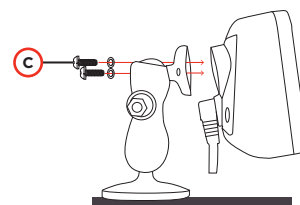


or

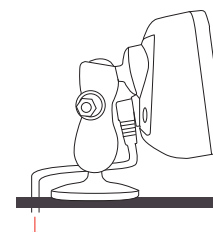
- 2B TAPE MOUNT**
Clean flat surface with alcohol wipe. Fit mounting plate **(A)** to mount using counter sunk screws/holes and nuts **(D)**. Apply adhesive tape **(B)** to mounting plate and firmly press to surface.



- 3** Attach Ehubo to the mount using 3/4" screws and washers **(C)**. **Use of the washers is essential to reliably secure the Ehubo!**



- 4** Route the Ehubo wiring out of the way and down the back of the dashboard.



NOTE: If swapping mounting option do not re-use nyloc nuts, use unused nuts as supplied.

Install the Ehubo

NOTE







- The engine must be turned off prior to installing the Ehubo.
- Do not connect in any way to a CANBUS or other engine management system.
- Power supply must not be taken from any ABS/EBS braking system.

The Ehubo needs a permanent power source and a good view of the sky to operate optimally. While the vehicle is off, the Ehubo will shut down to a low power mode and will draw a very small current from the vehicle supply. Remove the Ehubo permanent power fuse if the vehicle is in storage or parked up for more than a month to avoid discharging the vehicle battery.

INSTALLATION

The Ehubo is fitted with a 10 way cable which is used to connect to the vehicle and for optional digital inputs.

NOTE: Fuse connections at vehicle connection points to protect the wiring in case of a short circuit.

WIRE	FUNCTION	FUSE	NOTES
 Red	+12V / 24V DC Supply	Use supplied fuse kit	Connect to a 12V or 24V DC permanent power source.
 Yellow	Switched Power		Connect to a switched power source that is switched on when the engine is running and off when the engine is not running.
 Black	Ground	Do not fuse	Connect to a permanent Ground.
 Orange	Digital Input 1	Fuse individually with 3A fuse	Optional digital inputs for integration purposes.
 Brown	Digital Input 2		
 Gray	Digital Input 3		

INSTALLING THE EHUBO

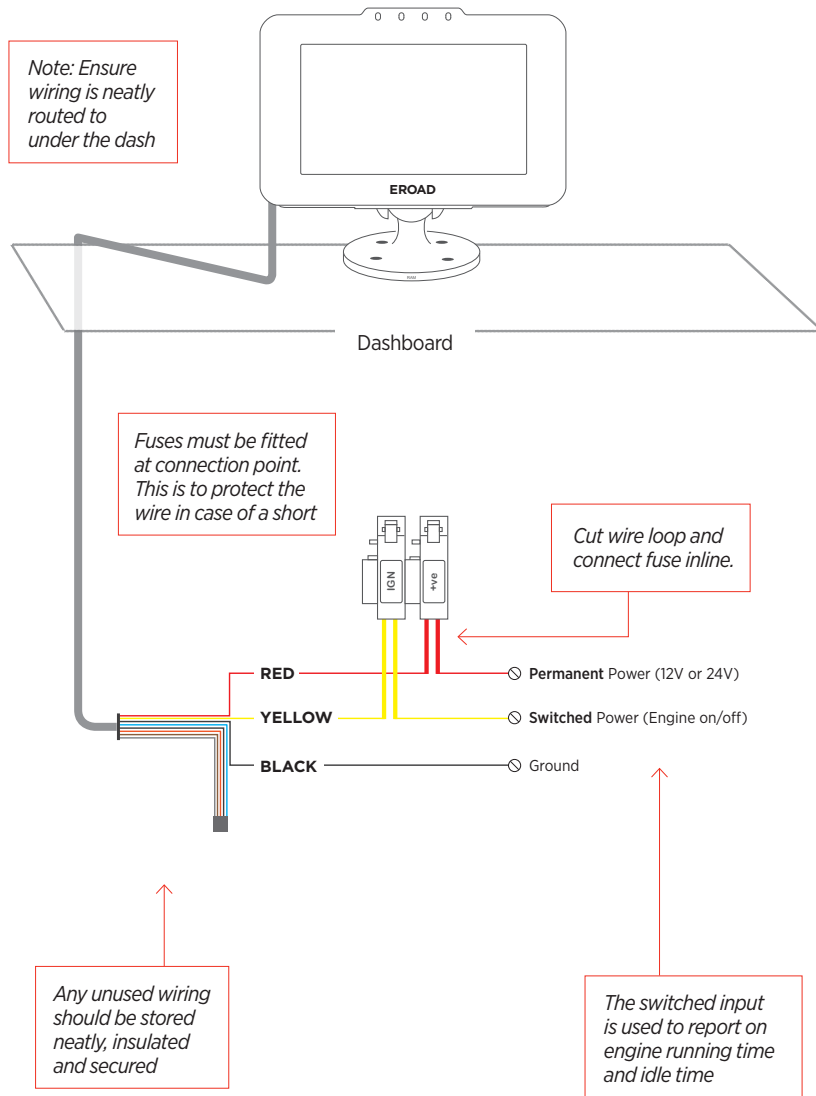
1. Connect the black wire to a solid Ground.
2. Connect the red wire to a permanent power source.
3. Connect the yellow wire to a switched power source.
4. If required, connect additional wires (orange, brown and gray) for monitoring vehicle activity on three digital inputs.
Refer to “Wiring Diagram – Additional Inputs” and table above.
5. Store all unused wires neatly, insulated and secured using cable ties supplied.
6. Pull the sticker and screen protection film off the Ehubo screen.
7. Check and finalize the installation by following the instructions on the screen. Once the install checks have been successfully completed, the Ehubo Home screen will appear. The install is complete.
You are good to go!

NOTE: If the screen remains black and does not prompt you to carry out some checks, the wiring of the Ehubo might not be quite right.

Please refer to the Wiring Diagrams in this Installation Guide or to the “**Troubleshooting**” section and adjust your wiring. If the screen still remains black please contact the EROAD Helpdesk.

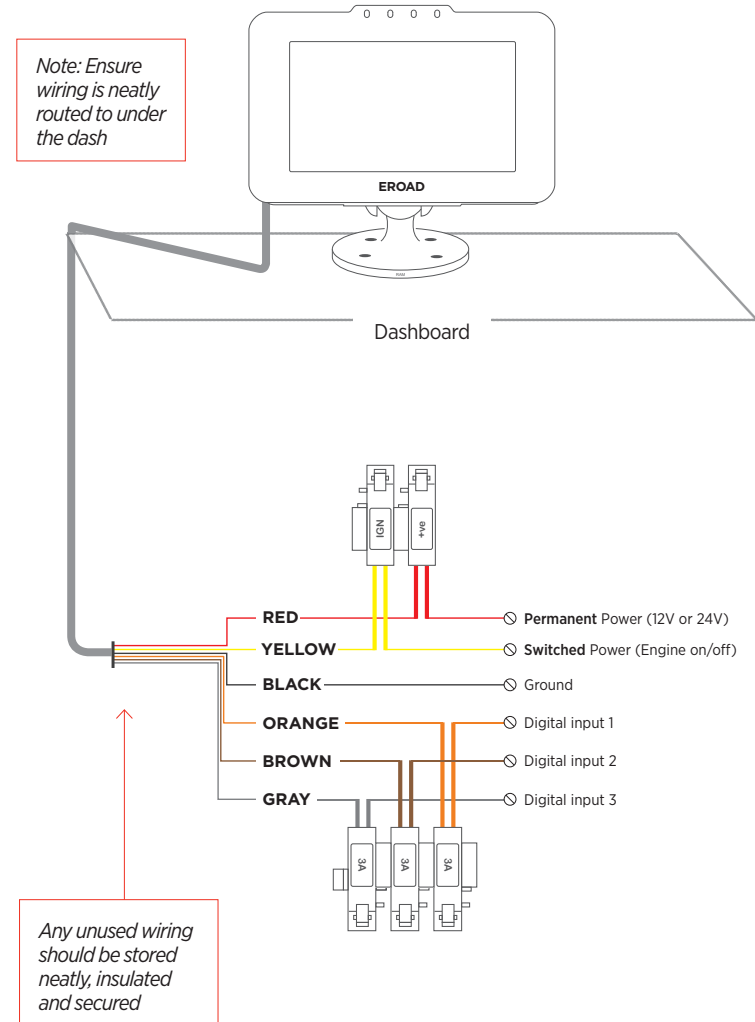
Please remember to record the Ehubo's serial number along with the vehicle ID or number plate of the vehicle it is installed in and supply this information to an administrator in the office.

Wiring Diagram – Standard



Wiring Diagram – Additional inputs

- Additional connections are available for three digital inputs – orange, brown and gray wires. If used, they must be fused individually using 3A fuses.
- Below is the connection diagram showing the additional input connections. Example inputs include things such as PTO, lights, generator etc.

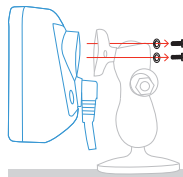


Replacement installation

To replace an existing Ehubo, disconnect the power cable from the existing Ehubo and connect it to the replacement Ehubo by following these simple steps.

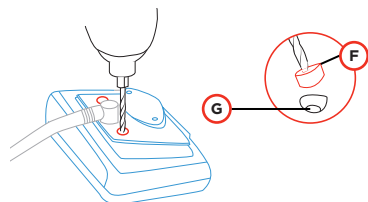
NOTE: Turn off the engine prior to replacing the Ehubo

- 1 Remove the **existing Ehubo** from its mount and carefully place it screen down on a clean, flat surface.
Make sure to not scratch or damage the screen!

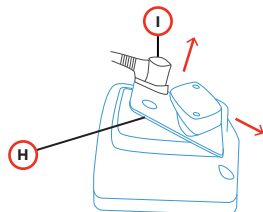


- 2 Unpack the **replacement Ehubo** and also place it screen down on a clean, flat surface.
Make sure to not scratch or damage the screen!

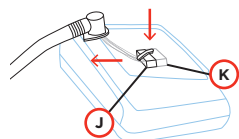
- 3 Remove the rear hatch of both, **the existing and the replacement Ehubo**: Remove the rear hatch security plugs (**F**) by using a handheld battery powered drill or similar. Unscrew the rear hatch screws (**G**) on both units.



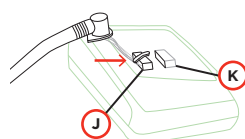
- 4 Lift the rear hatch (**H**) off the **existing Ehubo** and slide it off the cable grommet (**I**). Lift the rear hatch off the **replacement Ehubo**.



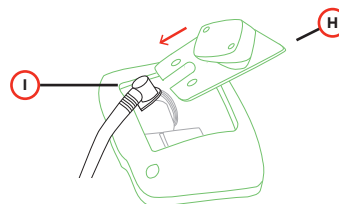
- 5 **EXISTING EHUBO:** Push down the cable plug latch to release the cable plug (**J**) and carefully slide the cable plug off the internal connector (**K**).



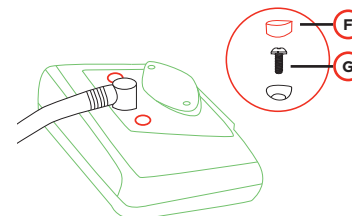
- 6 **REPLACEMENT EHUBO:** Carefully insert the cable plug (**J**) to the internal connector (**K**). Make sure the cable plug latch clicks into place to safely secure the plug.



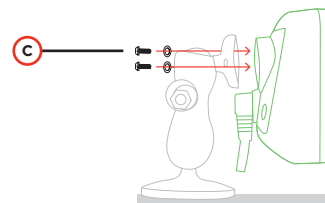
- 7 Slide the **replacement Ehubo's** rear hatch (**H**) onto the cable grommet (**I**) and insert it into the **replacement Ehubo**.



- 8 Insert the two rear hatch screws (**G**) and new security plugs (**F**).



- 9 Mount the **replacement Ehubo** on the existing mount using the screws and washers (**C**) supplied with the **replacement Ehubo**.



- 10 Pull the sticker and screen protection film off the Ehubo screen.

- 11 Check and finalize the installation by following the instructions on the screen. Once the install checks have been successfully completed, the Ehubo Home screen will appear.

The install is now complete.
You are good to go!

Please remember to record the Ehubo's serial number along with the vehicle ID or number plate of the vehicle it is installed in and supply this information to an administrator in the office.

- 12 Please place the uninstalled Ehubo in the replacement box and return to EROAD including surplus parts.

Troubleshooting

This section will provide some solutions if the installation of your Ehubo is unsuccessful or the Ehubo doesn't perform as expected.

SCENARIO	DETAILS	SOLUTION
The Ehubo screen remains black after installation even if I tap the screen	No connection to permanent power	<p>Ensure that the vehicle is stationary.</p> <p>Check that the fuses have been inserted properly.</p> <p>Check that permanent power has been properly connected to the red wire.</p>
Green power light on top is off when driving	No connection to permanent power	<p>Check that the fuses have been inserted.</p> <p>Check that permanent power has been properly connected to the red wire.</p> <p>Check that switched power has been properly connected to the yellow wire.</p>
I can't successfully complete the install checks	<p>Permanent and/or switched power connections potentially incorrect.</p> <p>Permanent power connection point unable to supply enough current to the Ehubo.</p>	<p>Check that the fuses have been inserted properly.</p> <p>Check your wiring against the wiring diagram and this manual.</p> <p>Ensure that the permanent supply connection point is capable of supplying the Ehubo.</p> <p>Ensure you have a good Ground and power connection.</p>
Engine on/off icon shows incorrectly	Switched power incorrectly connected	Check that switched power has been connected to the yellow wire.



SCENARIO	DETAILS	SOLUTION
Icons indicate that the Server Connection and/or Cellular Connection cannot be established.	<p>The Ehubo needs to be in cellular coverage to connect successfully. It may take a minute or two to connect initially.</p> <p>**** 3G</p>	Ensure that your vehicle is in a location with adequate cellular coverage.
Icons indicate that GPS reception is poor or cannot be established.	<p>A good view of the sky is required for optimal GPS operation. It may take a few minutes initially to get reception.</p>	<p>Reposition the Ehubo so it has a good view of the sky.</p> <p>Move the vehicle outside, away from overhead obstructions.</p>
The screen doesn't turn on when I tap it	You can only turn on the screen when the vehicle is stationary.	<p>Ensure that the vehicle is stationary.</p> <p>Check that the Ehubo has been installed correctly.</p> <p>Check that the fuses have been inserted properly.</p> <p>Check that permanent power has been connected to the red wire.</p>
One of the following icons shows:	Something is not quite right.	Contact your supervisor or employer
Faulty ignition		
Faulty connection		
Faulty SIM		
Faulty GPS		



INNOVATION AND INTEGRITY

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