EROAD

CoreHub Trailer Install Guide

Technical support

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PARTS & EQUIPMENT

CoreHub Trailer 4-tail Harness Kit	CN000960A, with harness MSE000437C
Corehub Trailer 2-tail Harness Kit	CN000970A, with harness MSE000455B
Kits Include: • Mounting Screws, Nyloc nuts, washers • Antenna – dual GPS and Cellular • Blanking pins	• HR000077A • AT000091A • A114017-SR
(Optional) Wheel Speed sensor	MSE000056
(Optional) Speed sensor extension cable	CBE000102
(Optional) Wabco TEBS E EBS harness	CBE000103

INSTALLATION

Preamble

* **Truck power on.** Ensure existing systems are reporting correctly.
* **Truck power off, or disconnected.** Make the trailer safe for installation.
* Numbers in parentheses, eg. **(1)**, refer to the red dots in the following image - not the steps.

1. Location: When locating the unit's final mounting position, ensure that:
   a. the unit is on the LEFT SIDE of the trailer, easily accessible, and viewable.
   b. neither the unit, nor its cables, block access to neighboring gear.
   c. no part of the trailer hangs over the front face of the unit.
   d. the site is clean and level enough for secure seating.
2. Drill 4 holes into the site for unit mounting to accommodate 6 mm bolts, and secure the unit to the trailer.
3. Drill/locate a hole in the chassis rail that will allow the unit's cabling to thread through. The aim is to ensure the cable is as protected from as much damage and strain as possible.

> ⚠️ Using zip or cable ties alone to the chassis rail is **INSUFFICIENT**.

4. Mount the antenna. The mounted antenna should:
   a. have clear line-of-sight to the sky
   b. be within cable distance of the unit (max 7 metres)
   c. plug into the colour-coded terminals at **(1)**.

4-TAIL HARNESS INSTALLS

4-tail CoreHub Trailer harness

Non-EBS

1. Connect the harness's 8-pin and 19-pin connectors to their appropriate unit sockets **(2)** and **(3)**.
2. 12-pin tail to truck power battery (Pin 1 is 12/24 V power).
3. GREY 4-pin tail to Power (12/24V - truck power) and wheel speed sensor.
4. (Optional) GREEN 4-pin tail to Solar power.
5. (Optional) BLACK 4-pin tail to EBS CAN interface.

> ⚠ **Unused pins on the tails must be terminated using the blanking pins provided, then covered with their blanking plugs.**

a) Shorting Pin 1 for power. b) Protect unused terminators with blanking pins AND plugs.

EBS Install

1. BLACK 4-pin connector to EBS CAN interface.

> ✅ You should obtain specific instructions regarding the most appropriate port to use. By default, EROAD uses GPIO 5 (Wabco TEBS-E).

> ⚠️ **EBS CAN is only available on GPIO5 port** (Wabco TEBS E)
>
> **If GPIO5 isn't available then any of GPIO1 - 4 ports can be used but only for Power.**

2. You will need to terminate the EBS harness's loose wires. Pin-outs are found at the end of this guide.

> ⚠️ **Do not cut excess cabling.** Wrap and cable-tie excess cables securely and out of the way.
>
> **Protect unused tails with the blanking plugs provided.**

2-TAIL HARNESS INSTALLS

2-tail CoreHub Trailer harness

Non-EBS

1. Connect the harness's 8-pin and 19-pin connectors to their appropriate unit sockets **(2)** and **(3)**.
2. GREY 4-pin tail to Power (12/24V - truck power) and wheel speed sensor.
3. (Optional) GREEN 4-pin terminator to Solar power.
4. (Optional) BLACK 4-pin terminator to EBS CAN interface.

RUNNING THE CONFIGURATION TOOL

- To download the Configuration Tool, scan QR code in/on the box to download, or search for the Unit in Google Play or Apple's App store for the CoreHub Installer app.

- Log in to the app using your 360 credentials.
- Step through the process outlined on the Configuration tool to register the device. The serial number QR code is on the front of the unit **(4)**.

INDEMNITY

Photo Verification

Installers are encouraged to photo-document their work – through dedicated apps like vWork, bespoke configuration apps, or general cameras – to assist in supporting work order documents. Any digital camera may be used for 2 or 3 images per site, but images must:

- Show the device clearly, mounted in place, oriented appropriately.
- Show connections and wiring secure and tidily managed.
- Indicate the environment in which the device is installed (its position in the cab, or on the asset).
- You may also wish to note the vehicle make/model for future reference.

> ⚠ **Photos are evidence of a compliant install.** They protect EROAD's and the Installer's liability, should a future 3rd party or incident affect compliance integrity.

Health & Safety

Installation in or on water-borne equipment is not recommended and is not covered by EROAD's warranty.

This device is factory-sealed; tampering will void the warranty.

EROAD expects installers and contractors to understand and follow all relevant health and safety regulatory requirements.

The Installer must wear appropriate Personal Protective Equipment (PPE) for the install risk and customer requirements. PPE may include safety glasses, safety shoes, work gloves, hard hat, high visibility vest, sun cream, sun hat and coveralls. The Installer must understand and comply with the safety requirements of customers or third parties.

Avoid fitting EROAD-supported equipment in locations that could impede or cause injury to people. This includes potential head strike zones on the windshield or dashboard, airbag deployment locations, seatbelts, and other safety-relevant devices.

The vehicle must be parked and level, with the parking brake engaged.

Before installation, check that other safety-relevant equipment is working properly and report any issues to the customer.

Before the Installer is permitted to work under or around suspended equipment – held aloft with slings, hoists, or jacks – ensure the equipment is secured to prevent collapse or falls. Secondary controls should be in place; working under a suspended load should be avoided.

Avoid running cables close to heat sources, sharp edges, obstacles or safety-relevant devices.

After installation, check that all other safety-relevant equipment continues to work properly.

While EROAD-supported devices are comprehensively tested against corrosion and ingress, devices are not invulnerable to water, fire or impact damage, and certain devices are not able to be environmentally shielded. Do not subject EROAD-supported devices to extreme heat, high-pressure water force or other intense physical forces. Operating temperatures for the equipment related to this guide are found in the specifications.

The Installer must ensure they fully understand these instructions before installing an EROAD-supported device and immediately seek advice from a Regional Installation Manager on any matter that is not understood.

Legal

The rules and requirements concerning the lawful and compliant installation and operation of electronic driver aids vary, depending on state, country and regulatory authority. You are required to be familiar with the applicable laws of the locations in which the vehicle will be operated. This includes any rules, orders and codes of practice issued by any regulator governing installation of electronic driver aids, or the lawful monitoring, reporting and management of distracted driving and compliance with road rules and requirements for safe driving.

It is your sole responsibility to install and ensure that each vehicle operator uses the devices and accessories that you install in a manner that complies with the law without causing accidents, personal injury or property damage. To the fullest extent permitted by law, EROAD disclaims all liability and excludes all warranties for installation or use of this device and its accessories.

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

If you think that the installation of this device may have caused your vehicle's performance to be impeded, please contact EROAD Technical Support immediately to resolve the issue. EROAD is not liable for any costs or expenses incurred by engaging a third party to repair the fault without EROAD's prior consent.

PINOUTS: 4-TAIL HARNESS (MSE000437C)

4-tail CoreHub Trailer harness

Unit end Circular connectors

19-way connections

Pin	Color	Function	Connection
1	BLACK/WHITE	RS232_TX1	Do Not Connect
2	WHITE	RS232_RX1	Do Not Connect
3	BLUE/BLACK	RS232_TX2	Do Not Connect
4	BLUE	RS232_RX2	Do Not Connect
5	GREEN/BLACK	1 - WIRE	
6	PURPLE/RED	+5 V − EXT	
7	YELLOW/RED	GPIO 1 / IGN	
8	ORANGE	GPIO 2	
9	BROWN	GPIO 3	
10	GREY	GPIO 4	
11	ORANGE/WHITE	GPIO 5	
12	PURPLE	ODO +	Speed
13	BLUE	ODO -	

> ⚠️ **Pins 14-19: DISCONNECTED: DO NOT USE.** Blanking plug 20 AWG, N/A

8-Way connections

Pin	Color	Function	Connection
1	RED	+12/ 24 V	Power
2	BLACK	GND	Earth
3	BLUE	J1708 -	Do Not Connect
4	PINK	J1708 +	Do Not Connect
5	YELLOW	CAN – HIGH	
6	GREEN	CAN – LOW	
7	PURPLE/WHITE	SOLAR +	Only for auxiliary solar power charging
8	BLACK	SOLAR -	Only for auxiliary solar power charging

12-pin tail

12-way Plug. IGN, GPIOs, RS232 Connection. Male GREEN Insert

Pin	Color	Function	Connection
1	YELLOW/RED	GPIO 1/IGN*	**Short to Power Speed Plug Pin 1 (GREY 4-pin)**
2	ORANGE	GPIO 2	
3	BROWN	GPIO 3	
4	GREY	GPIO 4	
5	ORANGE/WHITE	GPIO 5	
6	BLACK/WHITE	RS232_TX1	
7	WHITE	RS232_RX1	
8	BLUE/BLACK	RS232_TX2	
9	BLUE	RS232_RX2	

⚠️ *** GPIO 1 needs to be shorted with +ve power.**

Pins 10-12: DISCONNECTED: DO NOT USE.

4-pin tails

Power/ Speed pulse Connection 4 Pin Plug - Male GREY Insert

Pin	Color	Function	Connection
1	RED	POWER + (12/ 24 V)	Power from truck
2	BLACK	GND	Ground to chassis
3	PURPLE	ODO +	Speed sensor
4	BLUE	ODO -	Speed sensor

CAN/J1708 Connection 4 Pin Plug - Male BLACK Insert

Pin	Color	Function
1	YELLOW	CAN HIGH
2	GREEN	CAN LOW
3	PINK	J1708 +
4	BLUE	J1708 -

Solar Connection 4 Pin Plug - Male GREEN Insert

Pin	Color	Function
1	PURPLE/WHITE	SOLAR +
2	BLACK	SOLAR -
3	GREEN/BLACK	1 – WIRE
4	PURPLE/RED	+5 V → EXT

PINOUTS: 2-TAIL HARNESS (MSE000455B)

2-tail CoreHub Trailer harness

Unit end: 8-way and 19-way Circular

19-Way

Pin	Color	Function	Connection
1-6		NO CONNECTION	NO CONNECTION
7	YELLOW/RED	GPIO 1 / IGN	
8	ORANGE	GPIO 2	
9	BROWN	GPIO 3	
10-11		NO CONNECTION	NO CONNECTION
12		ODO +	Speed
13		ODO -	Speed

> ⚠️ **Pins 14-19: DISCONNECTED: DO NOT USE.** Blanking plug 20 AWG, N/A

8-Way

Pin	Color	Function	Connection
1	RED	+12/ 24 V	Power*
2	BLACK	GND	Earth
3-4		NO CONNECTION	NO CONNECTION
5	YELLOW	CAN – HIGH	
6	GREEN	CAN – LOW	

> ⚠️ **Pins 7 & 8: DISCONNECTED: DO NOT USE.**

4-pin tails

Power/ Speed pulse Connection 4 Pin Plug - Male GREY Insert

Pin	Color	Function	Connection
1	RED	POWER + (12/ 24 V)	Power from truck
2	BLACK	GND	Ground to chassis
3	PURPLE	ODO +	Speed sensor
4	BLUE	ODO -	Speed sensor

CAN/J1708 Connection 4 Pin Plug - Male BLACK Insert

Pin	Color	Function
1	YELLOW	CAN HIGH
2	GREEN	CAN LOW
3	PINK	GPIO 2
4	BLUE	GPIO 3

EBS Harness loose wires - Pin Outs

	Color	Function	Connection
1	RED	POWER + (12/ 24 V)	Power/ Speed Plug PIN 1 (GREY 4-pin)
2	BROWN	GND	Power/ Speed Plug PIN 2 (GREY 4-pin)
3	GREEN/YELLOW	CAN HIGH	CAN/ 1708 Plug PIN 1 (BLACK 4-pin)
4	BLUE	CAN LOW	CAN/ 1708 Plug PIN 2 (BLACK 4-pin)

> ⚠️ **Pins 3 & 4: Only connect if using GPIO5 on Wabco EBS TEBS E otherwise DO NOT USE.**