



gaugeART™
BY RUSH RACING DEVELOPMENT

gaugeART CAN OBD Link

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gaugeART CAN OBD Link

part number
11-101

USER MANUAL

revision: 2016-05-27

Included:

- 1 – gaugeART CAN OBD Link
- 1 – OBD cable
- 1 – data / power cable (one of three included)
 - part no. 11-101.03: for use with gaugeART CAN Gauge
 - part no. 11-101.04: for use with gaugeART Video Gauge Adapter
 - part no. 41-001.02: for use with gaugeART Analog to CAN Converter
- 1 – user manual

Introduction:

The gaugeART CAN OBD Link allows display products like the gaugeART Video Display Adapter or gaugeART CAN Gauge to display real-time gauges from a vehicle's factory ECU CAN OBD data stream.

Required:

- **Vehicle with CAN communication in OBD port**

CAN communication was required in 2008 and later model vehicles sold in the USA. Some models prior to 2008 and most 2008 and later model year vehicles sold outside the USA also included CAN communication in the OBD port. To locate the OBD port and test if your vehicle is equipped with CAN communication, see this link: <http://gaugeart.com/?p=2202>
- **gaugeART Display Device**

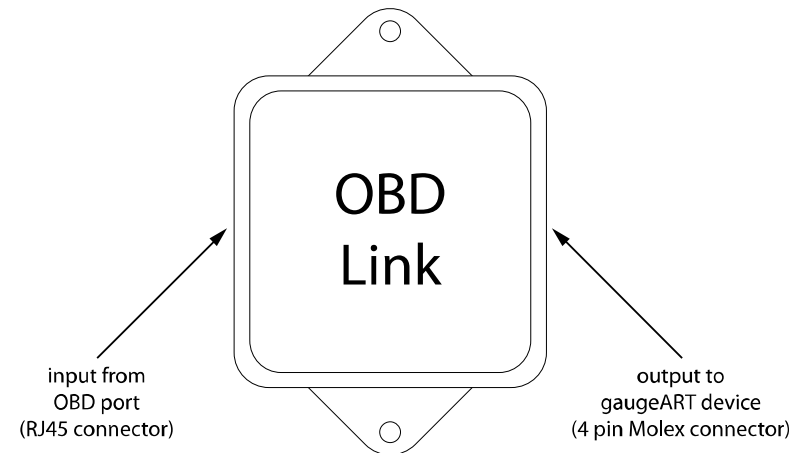
A gaugeART display device (gaugeART Video Gauge Adapter or gaugeART CAN Gauge) is required to display gauges from the OBD Link.

Hardware Installation:

1. First, find the OBD diagnostic port. These are required to be installed in the passenger cabin, and are usually on the driver's side in newer vehicles under the dash board. The port may be covered.



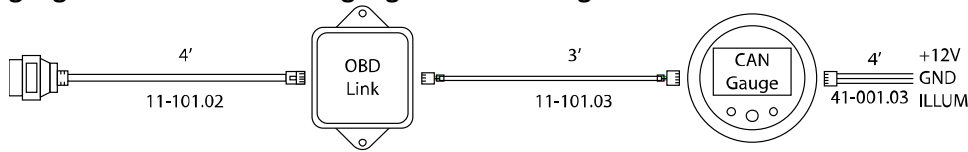
2. Install supplied OBD cable to OBD connector. Route cable and secure cable so that it can not interfere with the driver's pedals or steering system.
3. Install and secure the gaugeART CAN OBD Link module in the interior of the vehicle. The mounting holes on the module can be used with either zip ties or screws to secure in place.
4. Connect the gaugeART CAN OBD Link to your gaugeART device according to the diagrams on the next page.



Note: when installing and removing cables from the gaugeART CAN OBD Link module, always release the retaining tab on the connector and then pull from the connector itself. Do not pull from the wires, or damage to the cable may result.

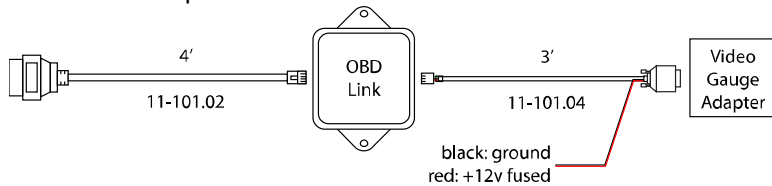
The gaugeART Video Gauge Adapter includes one of three cables, depending on which gaugeART device you are connecting it to. Connect the cable to the output port of the CAN OBD Link depending on which gaugeART device you are connecting to as shown:

gaugeART CAN OBD Link & gaugeART CAN Gauge

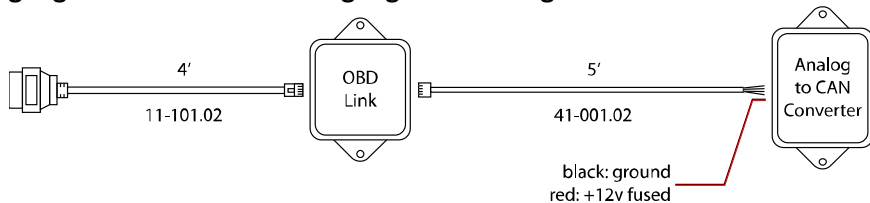


gaugeART CAN OBD Link & gaugeART Video Gauge Adapter

Note: connect the black wire to chassis ground and the red wire to a 5 amp fused +12 volt power source.



gaugeART CAN OBD Link & gaugeART Analog to CAN Converter



gaugeART CAN OBD Link Channels:

- engine speed (RPM)
- engine coolant temperature (°F / °C)
- intake air temperature (°F / °C)
- vehicle speed (MPH/KPH)
- manifold pressure* (PSIg / kPa)
- throttle position (%)
- engine load, calculated (%)
- short term fuel trim – bank 1 (%)
- long term fuel trim – bank 1 (%)
- short term fuel trim – bank 2 (%)
- long term fuel trim – bank 2 (%)
- oxygen sensor 1, AFR equivalence (AFR)
- oxygen sensor 2, AFR equivalence (AFR)
- ignition timing (degrees)
- engine oil temperature* (°F / °C)
- fuel pressure (gauge pressure)* (PSIg / kPa)
- ethanol fuel %* (%)
- MAF flow rate* (grams/sec)
- fuel rail gauge pressure* (PSIg / kPa)
- battery volts (volts)

* not supported by all vehicles

Note: channel sample speed and which channels are supported vary by manufacture. Some channels, like throttle position, the factory ECU will transmit inaccurate data (such as transmitting throttle position as 85% when the throttle blade is opened all the way).

Using your CAN OBD Link with gaugeART display device:

See the user manual included with your gaugeART display device for customizing your display device for use with the gaugeART CAN OBD Link.