SETUP GUIDE

Bosch/Subaru Yaw Rate Sensor to CD Dash

Supported Devices

Bosch 0 274 B00 754
Bosch 0 265 005 814
Subaru 27542FG000
Subaru 27542FG001

IMPORTANT! There are quite a few different variations of the Bosch Yaw Rate sensor in circulation and many appear identical to the one pictured. They are not all identical and there are many differences between them, you can't assume that just because you have one "that looks just like this one" that it will have the same configuration, scaling or even pinout.

The version we have validated carries the Bosch P/N 0 274 B00 754 on the sticker on the top of the unit. It also carries a second green sticker on the connector shroud with the Subaru P/N 27542FG000 on it. The later version of the same part combines both stickers into one and revs the Subaru P/N.

DANGER! On the bottom of the unit there is the Bosch P/N 1 275 100 464 embossed as part of enclosure body. THIS IS NOT THE DEVICE P/N, This is the P/N of the enclosure and all the different variations of the sensor carry this exact same number. Do not use this number to identify the sensor. It is best to use the Subaru P/N to find this sensor. According to an internet search, it came on the following vehicles:

Forester 2009-2017
4 Cyl 2.0L DOHC DIT, 4 Cyl 2.5L DOHC EMPI NA, 4 Cyl 2.5L SOHC EMPI NA
Impreza 2008-2011
4 Cyl 2.5L DOHC EMPI TURBO, 4 Cyl 2.5L SOHC EMPI NA
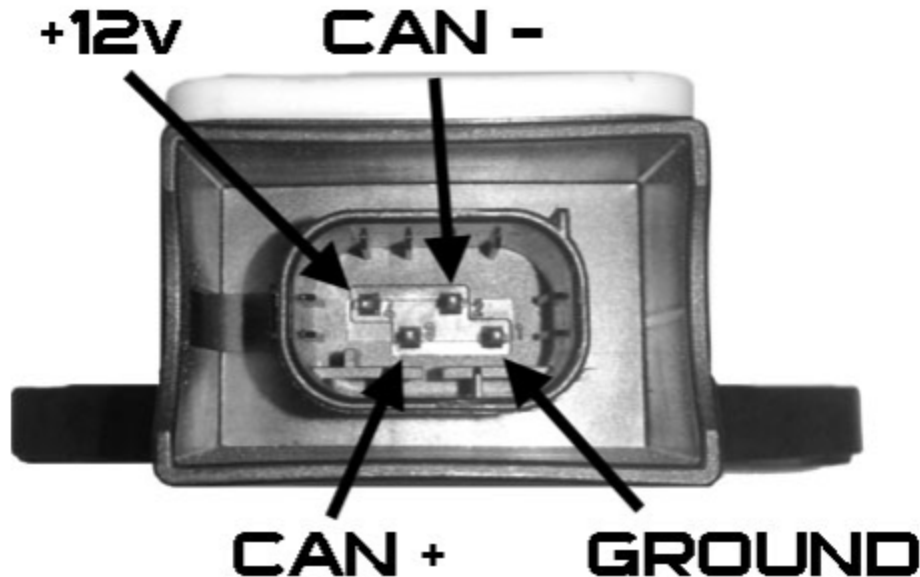Impreza WRX and STI 2008-2014
4 Cyl 2.5L DOHC EMPI TURBO, 4 Cyl 2.5L SOHC EMPI NA

SETUP GUIDE

CAN Bus Wiring

There are 4 connections needed with this sensor; +12V, Ground, CAN- and CAN+

AEM CD has 2 separate CAN ports. For 3rd party devices, AEM recommends you use AEM CAN Bus 2, whose connections are contained in a 2 pin Deutsch DTM connector. On older harnesses it may be in an unterminated, twisted/shielded flying lead in the dash harness.

CAN+ → AEM CD "CAN 2" Pin 1 (CAN 2+), Gray wire in twisted/shielded pair
CAN- → AEM CD "CAN 2" Pin 2 (CAN 2-), Black wire in twisted/shielded pair

Optional
 Since this device transmits at 500kbit/sec, which is the same as AEMnet, it can also be hooked up to CAN Bus 1.

Wiring for CAN Bus 1:

CAN+ → AEM CD Pin 3 (CAN 1+), White wire in twisted/shielded pair
CAN- → AEM CD Pin 4 (CAN 1-), Green wire in twisted/shielded pair

All CAN networks require 2 terminating resistors, one located at each physical end of the network. This device does not have any terminating resistor and it is assumed to be added to an existing properly terminated network.

This product is legal in California for racing vehicles only and should never be used on public highways. AEM Performance Electronics, 2205 W. 126th Street Unit A, Hawthorne, CA 90250, Phone: (310) 484-2322 Fax: (310) 484-0152

SETUP GUIDE

Supported Channels

Channel Name	Units	Description
VehicleLongitudinalG	G	Braking yields +G's, Acceleration yields –G's
VehicleLateralG	G	Turning Left gives –G's, Turning Right gives +G's
VehicleYaw RateofChange	°/sec	Increasing left turn is +Yaw RoC, Decreasing is -Yaw RoC
VehicleYaw Accel	°/sec/sec	Instantaneous change in the Yaw Rate

CAN Setup

To use this device, the CD-7 must be running firmware 13x19 or later. To import the CAN setup for this sensor, select "SETUP" then "DISPLAY" from the main DashDesign menu. Once the dialog box opens you select the "CAN Receive" tab.

Whichever port you choose, make sure the speed is set to 500 kbit/s. Click on "Import CAN" on the lower left and open the "Subaru_YawG_27542FG000_RevX" file then click on "Import" in the lower right of the dialog box. Those raw channels will be added to CAN BUS channel list and the scaling information will be added for each under the Scalars tab.

SETUP GUIDE
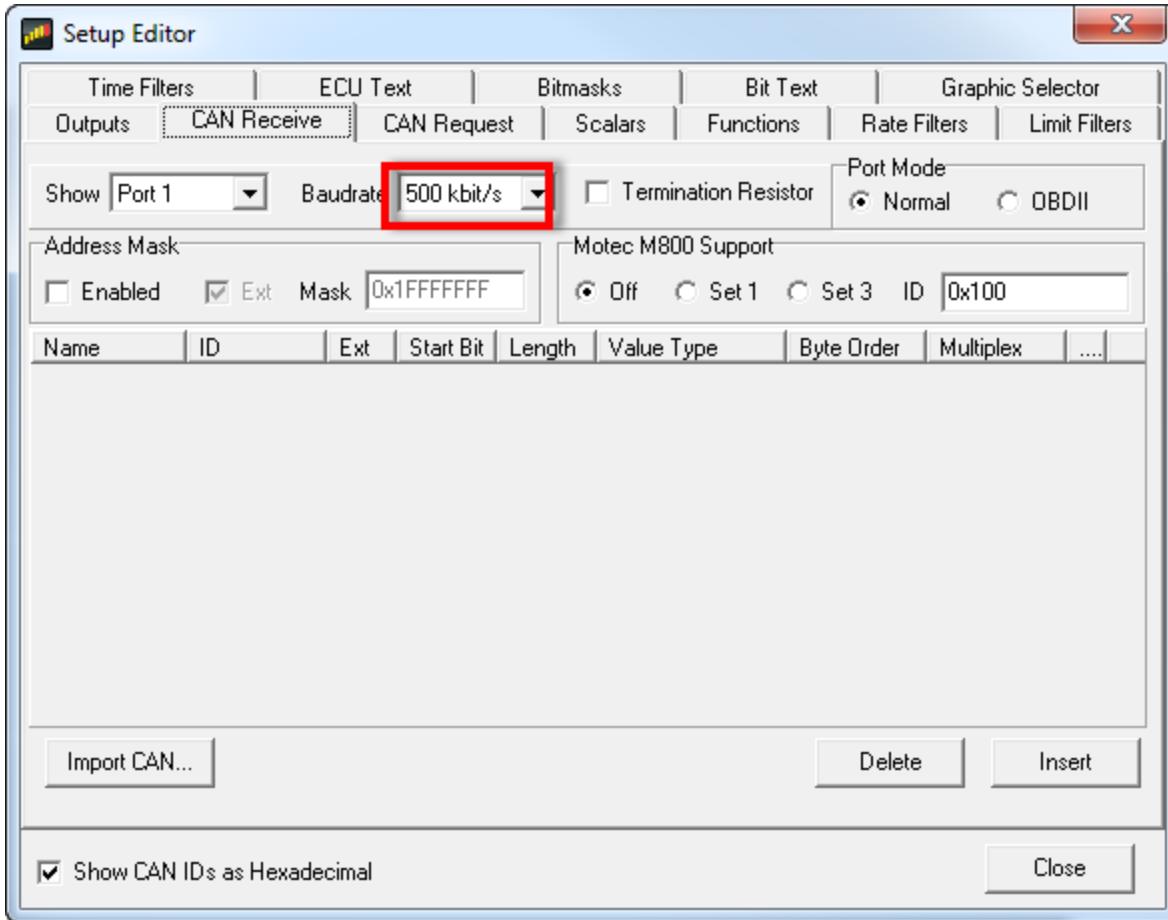
There will also be final calibrated channels added under the Outputs tab. They can now be viewed on the display or logged. You can rename, filter, or manipulate any of these channels or use them as conditions for alarms

SETUP GUIDE