

AIM Infotech

Suzuki GSX-R 1000 L7 from
2017

Release 1.01



ECU



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Models and years

This document explains how to connect AiM devices to the vehicle Engine Control Unit (ECU) data stream.

Supported years and models are:

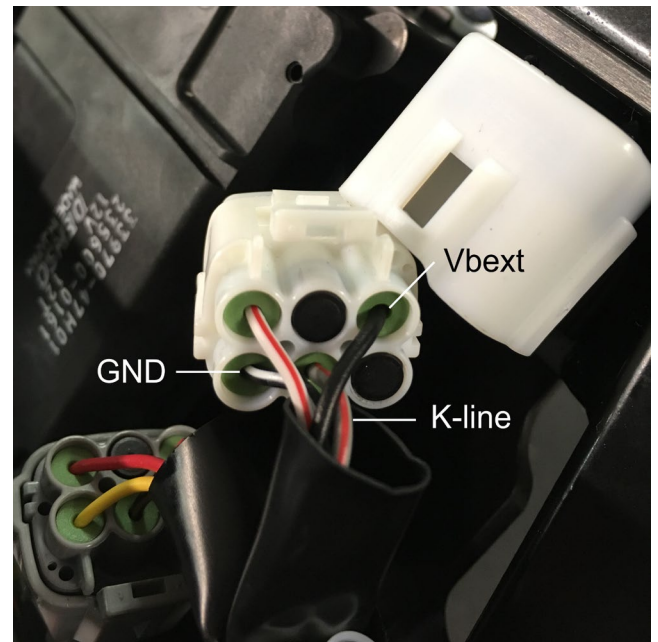
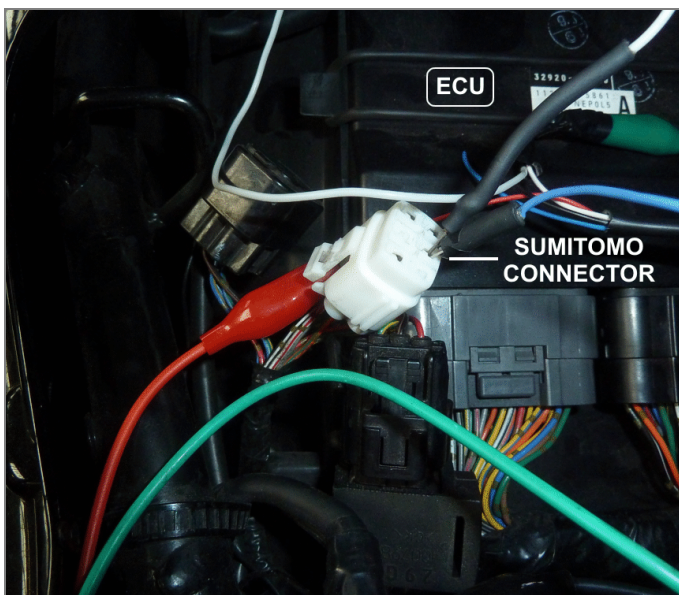
- GSX-R 1000 L7 2017 onwards

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Connection

Suzuki GSX-R 1000 L7 features a bus communication based on K-line, accessible through the Sumitomo diagnostic connector (SDS) placed near the ECU, under the bike seat.

For this installation refer to the following picture of the SDS connector, that refers each wire function (vehicle side – rear view).



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Race Studio configuration

Before connecting the AiM device to the ECU, set all functions using AiM software Race Studio. The parameters to select in the AiM device configuration are:

- ECU Manufacturer: **Suzuki**
- ECU Model: **SDS 2 Protocol**

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“Suzuki – SDS 2 Protocol” protocol

Channels received by AiM devices connected to "Suzuki – SDS 2 Protocol" are:

CHANNEL NAME	FUNCTION
SDS RPM	RPM
SDS SPEED R	Rear wheel speed
SDS SPEED F	Front wheel speed
SDS GEAR	Engaged gear
SDS BATT VOLT	Battery Voltage
SDS CLT	Coolant Temperature
SDS IAT	Intake Air Temperature
SDS MAP	Manifold Air Pressure
SDS BAROM	Barometric pressure
SDS FUEL1 msx10	Fuel injector 1
SDS FUEL2 msx10	Fuel injector 2
SDS FUEL3 msx10	Fuel injector 3
SDS FUEL4 msx10	Fuel injector 4
SDS IGN AN 1	Ignition angle 1
SDS IGN AN 2	Ignition angle 2



SDS IGN AN 3	Ignition angle 3
SDS IGN AN 4	Ignition angle 4
SDS TPS1 V	TPS1 voltage
SDS TPS2 V	TPS2 voltage
SDS GRIP1 V	GRIP1 voltage
SDS GRIP2 V	GRIP2 voltage
SDS SHIFT SENS	Gear shift sensor
SDS TPS1	Throttle 1 position
SDS TPS2	Throttle 2 position
SDS GRIP1	Grip1 position
SDS GRIP2	Grip2 position
SDS SPIN RATE	Wheel spin rate (TC: OFF)
SDS SPIN RT TC	Wheel spin rate (TC: ON)
SDS DH COR AN	Dashpot correction angle

Technical notes:

Not all data channels outlined in the ECU template are validated for each manufacturer model or variant; some of the outlined channels are model and year specific, and therefore may not be applicable;

The following channels work only if the AiM system is connected to a Yoshimura ECU:

- **SDS SPEED F**
- **SDS SPIN RATE**
- **SDS SPIN RT TC**
- **SDS DH COR AN**