

# AiM User Guide

Kit EVO4S, SOLO 2/SOLO 2  
DL for Suzuki GSX-R 1000 L7  
(2017 onwards)

Release 1.02

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ECU

# 1

## Models and years

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This manual explains how to connect EVO4S and SOLO 2 DL to the bike engine control unit (ECU) and how to install AiM SOLO 2/SOLO 2 DL on the bike steering plate.

Compatible models are:

- GSX-R 1000 L7 2017 onwards

**Warning:** for these models/years AiM recommends not to remove the stock dash. Doing so will disable some of the bike functions or safety controls. AiM Tech srl will not be held responsible for any consequences that may result from the replacement of the original instrumentation cluster.

## 2

### Kit content and part numbers

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AiM developed a specific installation bracket for SOLO 2/SOLO 2 DL and a connection cable to the ECU for EVO4S/SOLO 2 DL.

#### 2.1

#### Bracket for SOLO 2/SOLO 2 DL

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Part number for **SOLO 2/SOLO 2 DL** installation bracket for **Suzuki GSX-R**– shown below – is: **X46KSSGSXR**.

Installation kit contains:

- 1 bracket (1)
- 1 allen screw with rounded head  
M8x45mm (2)
- 2 allen screws with flat head M4x10mm (3)
- 1 toothed washer (4)
- 1 rubber dowel (5)

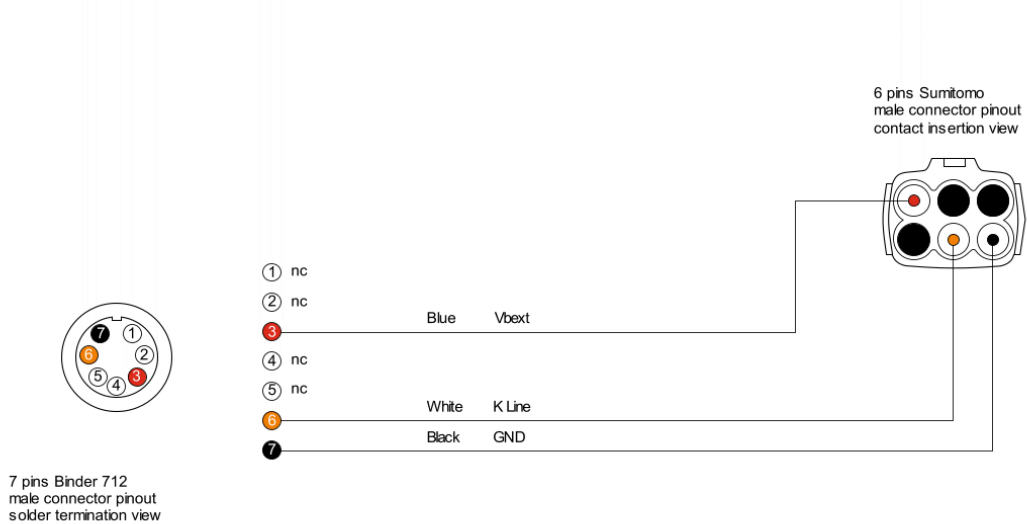


## 2.2 AiM cable for EVO4S/SOLO 2 DL

Part number for **EVO4S/SOLO 2 DL** connection cable for **Suzuki GSX-R**– shown below – is: **V02569140**.



Following image shows the cable constructive scheme.



Installation bracket and connection cable for SOLO 2 DL for Suzuki GSX-R can be bought together. Part number: **V0256914CS**.

### 3

## EVO4S/SOLO 2 DL connection

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To connect EVO4S/SOLO 2 DL to the bike ECU use the diagnostic connector placed under the bike seat and shown here below.

Lift the bike seat, the ECU diagnostic connector presents a black rubber cap: remove it and connect the AiM cable to Suzuki connector.



## 4

# Configuring with Race Studio 3

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Before connecting EVO45/SOLO 2 DL to the bike ECU, set all functions using the AiM software Race Studio 3. The parameters to set in the AiM device configuration section are ("ECU Stream" tab):

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

## 5

# "Suzuki – SDS 2 Protocol" protocol

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Channels received by Solo 2 DL and EVO45 connected to "Suzuki – SDS\_Protocol" are:

<b>CHANNEL NAME</b>	<b>FUNCTION</b>
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	Handgrip 1 position
SDS GRIP2	Handgrip 2 position
SDS SPIN RATE	Wheel spin rate (TC: OFF)
SDS SPIN RT TC	Wheel spin rate (TC: ON)
SDS DH COR AN	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;

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.**