AiM User Guide

Kit EVO4S, SOLO 2/SOLO 2 DL for Ducati Panigale 899 / 959 / 1199 / 1199R / 1299

Release 1.00

DUCATI

PANIGALE

KIT

1
Models and years

This manual explains how to connect EVO4S/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:

• 899 Panigale	2013-2015
• 959 Panigale	from 2016
• 1199 Panigale	2012-2014
• 1199R Panigale	2015-2017
• 1299 Panigale	2015-2019

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 contents and part numbers

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

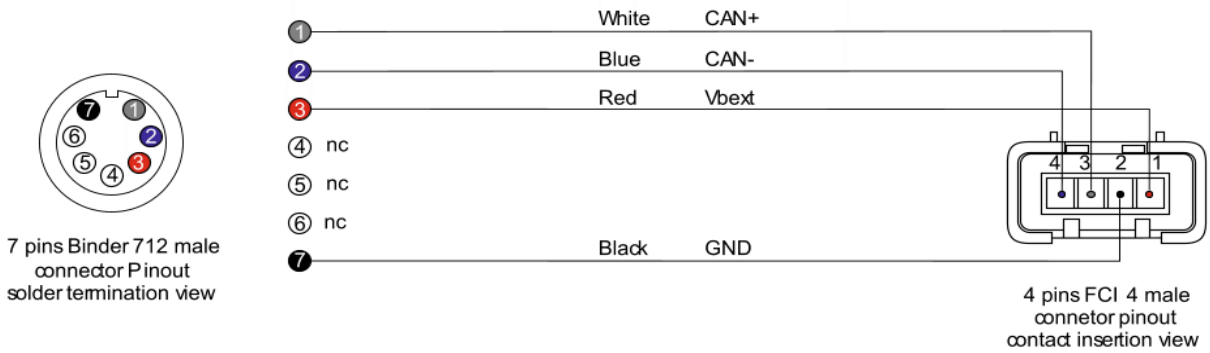
Part number for **SOLO 2/SOLO 2 DL** installation bracket for **Ducati Panigale** – shown below – is: **X46KSTSDP.**

Installation kit contains:
1 bracket (**1**)
2 allen screws with flat head M4x10mm (**2**)
1 washer (**3**)
1 rubber dowel (**4**)
1 allen screw with rounded head M8x45mm (**5**)

2.2
AiM cable for EVO4S/SOLO 2 DL

Part number for **EVO4S/SOLO 2 DL** connection cable for **Ducati Panigale**– shown below – is: **V02569170**.

Following image shows the cable constructive scheme.

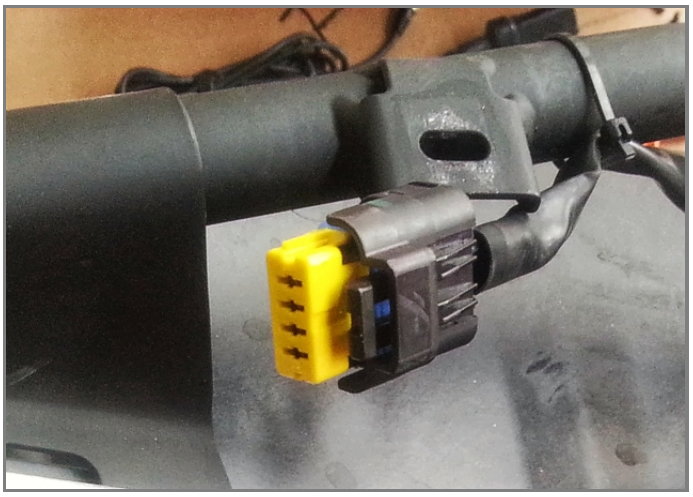


Connection cable for SOLO 2 DL and installation bracket for Ducati Panigale can be bought together. Part number: **V0256917CSP.**

3
EVO4S/SOLO 2 DL connection

To connect EVO4S/SOLO 2 DL to the Ducati Panigale bikes ECU use the DDA connector placed under the bike tail and shown here below:

Open the bike tail and remove the cap from the DDA connector (shown on the right), then plug the specific AiM cable.

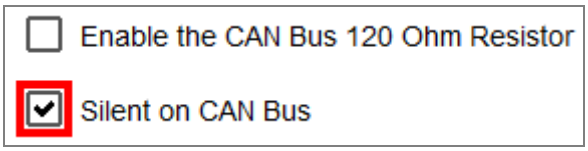


4
Configuration with Race Studio 3

Before connecting EVO4S/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: “Ducati”
- ECU Model:
  - "Panigale" for Ducati 899 Panigale and 1199 Panigale
  - "1299" for Ducati 959, 1199R Panigale and 1299 Panigale

After this first selection, enable/disable the 120Ohm resistor and the “Silent” mode on CAN Bus as follows:



5
Ducati protocols

Available channels change according to the selected protocol.

5.1
"Ducati - Panigale" protocol

Received channels by EVO4S/SOLO 2 DL configured with “Ducati – Panigale” protocol are:

CHANNEL NAME	FUNCTION
ECU DTC RDC	Ducati Traction Control intervention
ECU DTC PERC	Ducati Traction Control percentage correction
ECU SPD REAR	Rear wheel speed
ECU SPD FRONT	Front wheel speed
ECU DTC LEV	Ducati Traction Control level
ECU GEAR	Engaged gear
ECU NEUTRAL SW	Neutral switch
ECU BRAKE SW	Brake switch
ECU TURN RIGHT	Right turn
ECU TURN LEFT	Left turn
ECU SW ENG MAP	ECU map selector
ECU SW BEAM	Beam switch
ECU BRK FRONT	Front brake pressure
ECU BRK REAR	Rear brake pressure
ECU RPM	RPM
ECU TPS1 ENG	Throttle position cylinder 1
ECU TPS2 ENG	Throttle position cylinder 2
ECU CLUTCH SW	Clutch switch

ECU TPS HAND	Handle throttle position
ECU WATER T	Water temperature
ECU INT AIR TEMP	Intake air temperature
ECU BATTERY	Battery voltage
ECU OILP SW	Oil pressure switch
ECU BARO	Barometric pressure
ECU MAP SELECT	Engine map selection
ECU AFR HOR	Horizontal cylinder Lambda value (Ducati Corse kit)
ECU LAMB TEMP H	Horizontal cylinder Lambda temperature (Ducati Corse kit)
ECU DIAG H	Horizontal cylinder Lambda diagnosis (Ducati Corse kit)
ECU AFR VER	Vertical cylinder Lambda value (Ducati Corse kit)
ECU LAMB TEMP V	Vertical cylinder Lambda temperature (Ducati Corse kit)
ECU DIAG V	Vertical cylinder Lambda diagnosis (Ducati Corse kit)

Technical note: 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.

5.2 "Ducati - 1299" protocol

Received channels by EVO4S/SOLO 2 DL configured with “Ducati – 1299” protocol are:

CHANNEL NAME	FUNCTION
ECU SPD REAR	Rear wheel speed
ECU SPD FRONT	Front wheel speed
ECU SW MAP	Engine map selection switch
ECU BRK P F	Front brake pressure
ECU SPD FRONT 01	Front wheel speed 01
ECU RPM	RPM
ECU GEAR	Gear
ECU TPS TARG	Throttle position target

ECU TPS1 ENG	Throttle position sensor – bank 1
ECU TPS2 ENG	Throttle position sensor – bank 2
ECU TPS HAND	Handle throttle position sensor
ECU WATER T	Water temperature
ECU INT AIR TEMP	Intake air temperature
ECU BATTERY	Battery voltage
ECU OILP SW	Oil pressure switch
ECU BARO	Barometric pressure
ECU AFR HOR	Horizontal cylinder lambda value (Ducati Corse kit)
ECU LAMB TEMP H	Horizontal cylinder lambda temperature (Ducati Corse kit)
ECU DIAG H	Horizontal cylinder lambda diagnosis (Ducati Corse kit)
ECU LAMB V	Vertical cylinder lambda value (Ducati Corse kit)
ECU LAMB TEMP V	Vertical cylinder lambda temperature (Ducati Corse kit)
ECU DIAG V	Vertical cylinder lambda diagnosis (Ducati Corse kit)

Technical note: 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.