

AiM User Guide

Solo 2/Solo 2 DL, EVO4S,
XLog and ECULog kit for
Ducati Panigale
899/959/1199/1199R/1299

Release 1.02



PANIGALE





1

Models and years

This manual explains how to connect Solo 2 DL, EVO4S, XLov and ECULog to the bike engine control unit (ECU).

Compatible models are:

- | | |
|------------------|-----------|
| • 899 Panigale | 2013-2015 |
| • 959 Panigale | 2016-2020 |
| • 1199 Panigale | 2012-2014 |
| • 1199R Panigale | 2015-2017 |
| • 1299 Panigale | 2015-2017 |

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 Solo 2 DL, EVO4S, XLog and ECULog.

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**.

The 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)



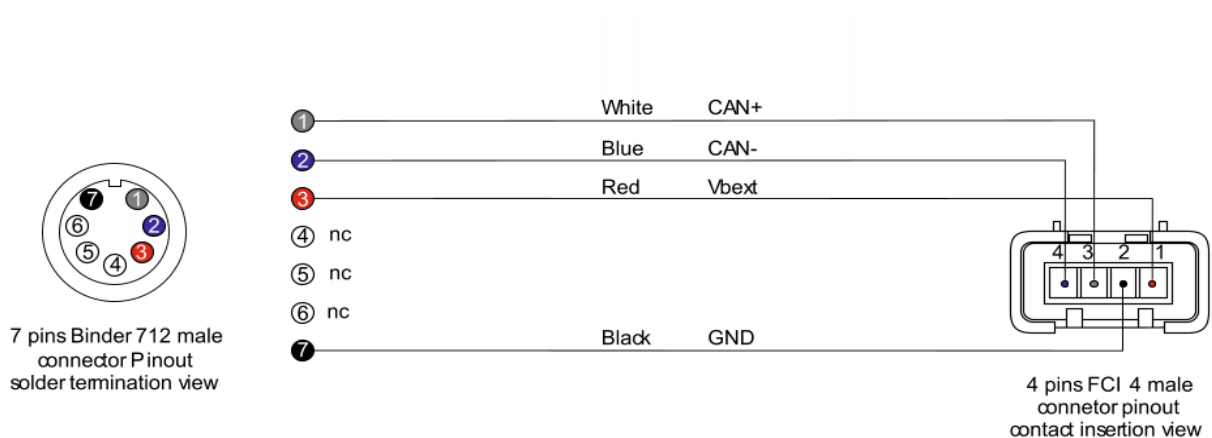
2.2

AiM cable for Solo 2 DL, EVO4S, XLog and ECULog

Part number of Solo 2 DL, EVO4S, XLog and ECULog connection cable for Ducati Panigale– shown below – is: **V02569170**.



The following image shows the cable constructive scheme.



2.3

AiM kit for Solo 2 DL (CAN cable + bracket)

Connection cable for Solo 2 DL and installation bracket for Ducati Panigale can also be bought together with part number: **V0256917CSP**.

3

Solo 2 DL, EVO4S, XLog and ECULog connection

To connect Solo 2 DL, EVO4S, XLog and ECULog to Ducati Panigale bikes ECU use the DDA connector placed under the bike tail.

Open the bike tail and remove the cap – highlighted here on the right – from the DDA connector.



The connector is then available.



Plug AiM cable.



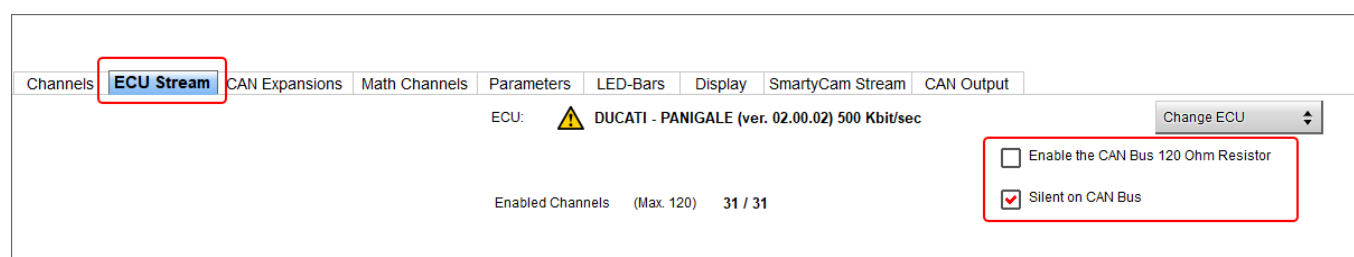
4

Configuration with Race Studio 3

Before connecting the ECU to AiM device set all functions using AiM RaceStudio 3 software. The parameters to set in the AiM device configuration section ("ECU Stream" tab) are:

- ECU Manufacturer: **"Ducati"**
- ECU Model:
 - **"Panigale"** for Ducati 899 Panigale and Ducati 1199 Panigale
 - **"1299"** for Ducati 959, 1199 Panigale R and 1299 Panigale (RaceStudio3 only)

After this first selection check "Silent mode on CAN Bus" as follows:



5

Ducati protocols

Channels received by AiM devices connected to Ducati bike change according to the selected protocol.

5.1

"Ducati – Panigale" protocol

Received channels by AiM devices 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 sensor cylinder 1
ECU TPS2 ENG	Throttle position sensor 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 AiM devices 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 sensor 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.