

AiM Infotech

Ducati Panigale
899, 959, 1199 and 1299

Release 1.01



PANIGALE



1

Supported models and years

This user guide explains how to connect Ducati Panigale bikes to AiM devices. Supported models and years are:

- 899 Panigale 2013-2015
- 959 Panigale from 2016
- 1199 Panigale 2012-2014
- 1299 Panigale from 2015

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.

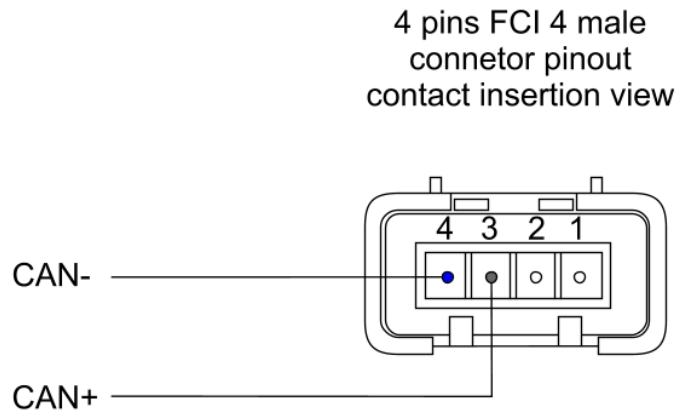
2

CAN bus connection

Ducati Panigale ECU features a bus communication protocol based on CAN that can be reached through the DDA connector. To connect to the ECU of the bike use the connector you find under the bike tail shown here on the right.



Below is shown the DDA connector pinout as well as connection table.



DDA connector pin	Pin function	AiM cable label
3	CAN+	CAN+
4	CAN Low	CAN-

3

Configuration with Race Studio 2

Before connecting the bike ECU to AiM device set this up using AiM Race Studio 2 software. The parameters to select in the logger configuration are:

- ECU Manufacturer: "Ducati"
- ECU Model:
 - "Panigale" for Ducati 899 Panigale and 1199 Panigale
 - "1299" for Ducati 959 and 1299 Panigale

4

Ducati protocols

Channels received by AiM devices connected to "Ducati" "Panigale" bikes change according to the selected protocol.

4.1

"Ducati" "Panigale" protocol

Channels received by SoloDL and EVO4 connected to "Ducati" "Panigale" protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	ECU_RPM	RPM
ECU_2	ECU_SPD_REAR	Rear speed
ECU_3	ECU_TPS1_ENG	Throttle position cylinder 1
ECU_4	ECU_TPS2_ENG	Throttle position cylinder 2
ECU_5	ECU_TPS_HAND	Manual throttle
ECU_6	ECU_WATER_T	Engine coolant temperature
ECU_7	ECU_SPD_FRONT	Front speed
ECU_8	ECU_INT_AIR_TEMP	Intake air temperature
ECU_9	ECU_BATTERY	Battery supply
ECU_10	ECU_BRAKE_SW	Brake switch
ECU_11	ECU_CLUTCH_SW	Clutch switch
ECU_12	ECU_NEUTRAL_SW	Neutral switch
ECU_13	ECU_OILP_SW	Oil pressure switch
ECU_14	ECU_TURN_RIGHT	Right turn indicator
ECU_15	ECU_TURN_LEFT	Left turn indicator
ECU_16	ECU_SW_ENG_MAP	Engine MAP selector
ECU_17	ECU_SW_BEAM	High beam switch
ECU_18	ECU_BARO	Barometric pressure



ECU_19	ECU_LAMB_H	Horizontal cylinder lambda value
ECU_20	ECU_LAMB_TMP_H	Horizontal cylinder lambda temperature
ECU_21	ECU_DIAG_H	Horizontal cylinder lambda diagnosis
ECU_22	ECU_LAMB_V	Vertical cylinder lambda value
ECU_23	ECU_LAMB_TEMP_V	Vertical cylinder lambda temperature
ECU_24	ECU_DIAG_V	Vertical cylinder lambda diagnosis
ECU_25	ECU_BRK_FRONT	Front brake pressure
ECU_26	ECU_BRK_REAR	Rear brake pressure
ECU_27	ECU_DTC_RDC	Ducati traction control intervention
ECU_28	ECU_DTC_PERC	Ducati traction control percentage
ECU_30	ECU_GEAR	Engaged gear
ECU_31	ECU_DTC_LEV	Ducati traction control level
ECU_32	ECU_MAP_SELCT	Map selection

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.

4.2 "Ducati" "1299" protocol

Channels received by SoloDL and EVO4 connected to "Ducati" "1299" are:

ID	CHANNEL NAME	FUNCTION
ECU_1	ECU_RPM	RPM
ECU_2	ECU_SPD_REAR	Rear wheel speed sensor
ECU_3	ECU_TPS1_ENG	Throttle position cylinder 1
ECU_4	ECU_TPS2_ENG	Throttle position cylinder 2
ECU_5	ECU_TPS_HAND	Manual throttle
ECU_6	ECU_WATER_T	Engine coolant temperature
ECU_7	ECU_SPD_FRONT	Front speed
ECU_8	ECU_INT_AIR_TEMP	Intake air temperature
ECU_9	ECU_BATTERY	Battery supply
ECU_10	ECU_TPS_TARG	Throttle position sensor target value
ECU_11	ECU_CLUTCH_SW	Clutch switch
ECU_12	ECU_GEAR	Engaged gear
ECU_13	ECU_OILP_SW	Oil pressure switch
ECU_14	ECU_BARO	Barometric pressure
ECU_15	ECU_LAMB__H	Horizontal cylinder lambda value
ECU_16	ECU_LAMB_TMP_H	Horizontal cylinder lambda temperature
ECU_17	ECU_DIAG_H	Horizontal cylinder lambda diagnosis
ECU_18	ECU_LAMB__V	Vertical cylinder lambda value
ECU_19	ECU_LAMB_TEMP_V	Vertical cylinder lambda temperature
ECU_20	ECU_DIAG_V	Vertical cylinder lambda diagnosis

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.