AiM Infotech

Ducati
Panigale V4
from 2018

Release 1.02

1
Bike years and models

This tutorial explains how to connect Ducati Panigale V4 and V2 ECU to AiM devices. Supported models and years are:

- Panigale V4 from 2018
- Panigale V2 from 2020

Warning: for these models/years AiM recommends not to remove the stock dash. Doing so will disable some of the bike's 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.

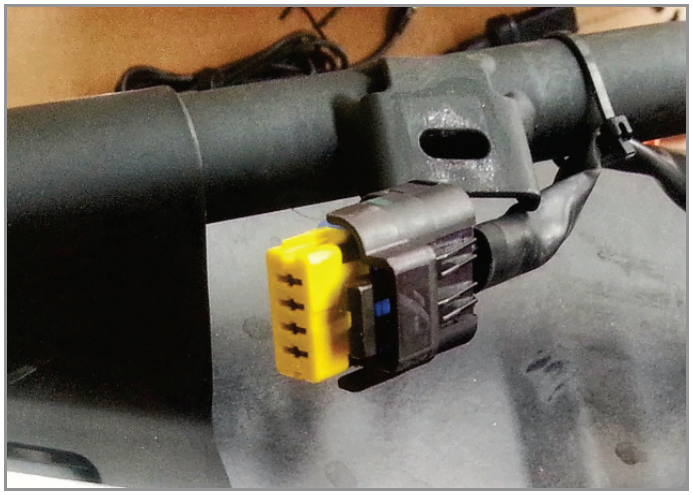
2
Wiring connection

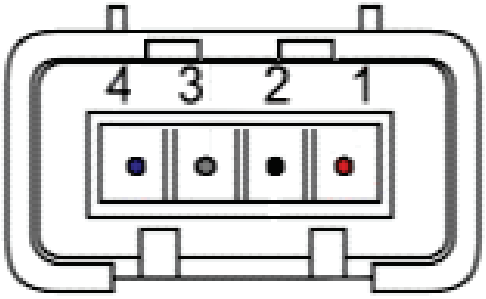
Ducati Panigale V4 and V2 are equipped with a bus communication protocol based on CAN that can be accessed through the DDA connector you find under the bike tail.

2.1
Ducati Panigale V4 CAN connection

Ducati Panigale models are equipped with a 4 ways DDA connector.

Below is indicated its pinout (rear view) and connection table.





DDA connector pin	Pin function	Ducati cable colour	AiM cable label
1	+12V	Red/Yellow	9-15 VDC
2	GND	Black/Blue	GND
3	CAN High	Green/Black	CAN+
4	CAN Low	White/Green	CAN-

3 Race Studio configuration

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

- ECU manufacturer: **Ducati**
- ECU Model: **PANIGALE V4** (RS3 Only)

4 “Ducati – PANIGALE V4” protocol

Channels received by AiM devices connected to "Ducati – PANIGALE V4" protocol are:

CHANNEL NAME	FUNCTION
RPM	RPM
Gear	Engaged gear
Speed Rear	Rear wheel speed
Speed Front	Front wheel speed
Lon Acc	Longitudinal acceleration
Lat Acc	Lateral acceleration
Roll Rate	Roll rate
Pitch Rate	Pitch rate
Yaw Rate	Yaw rate
Engine Temp	Engine temperature
Intake Temp	Intake air temperature
TPS Vert	Vertical throttle position sensor
TPS Hor	Horizontal throttle position sensor
Bike Angle	Bike angle
Brake Front	Front brake pressure

Twist grip	Hand throttle position
Battery Volt	Battery voltage
ShiftSw	Shift switch
Trq Slow	Torque slow
Trq Fast	Torque fast
EBC ON	Engine brake control ON
EBC Lv	Engine brake level
DWC OFF	Ducati wheelie control OFF
DWC Lv	Ducati wheelie control level
DTC OFF	Ducati traction control OFF
DTC Lv	Ducati traction control level
DSC OFF	Ducati slip control OFF
DSC Lv	Ducati slip control level
EngineStatus	Engine status
Eng St	Engine status
Brake Switch	Brake switch

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.