AiM Infotech

Yamaha YZF-R1/R1M
2015 - 2019
YZF-R6 from 2017

Release 1.04

ECU

1
Supported models and years
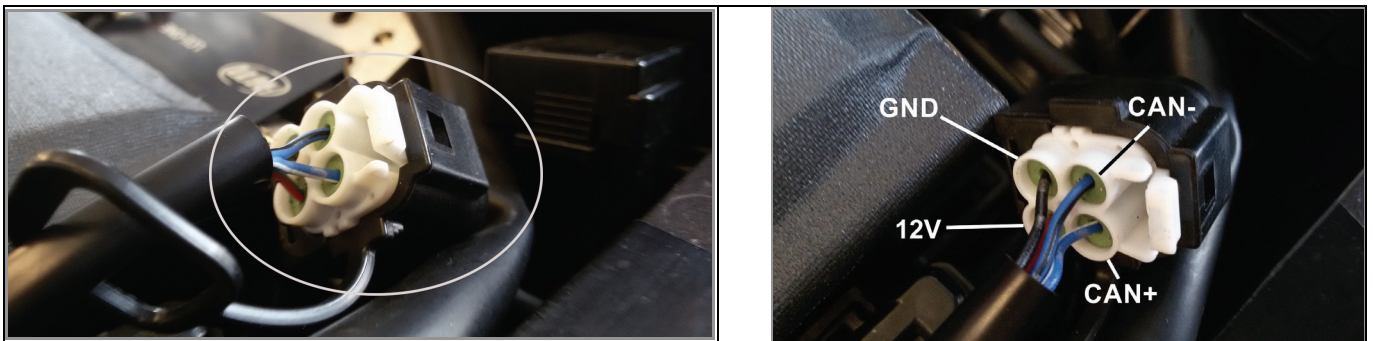
This user guide explains how to connect Yamaha R1 MY15 to AiM devices. Supported models and years are:

- Yamaha   DiYZF-R1 (YEC included)   2015 - 2019
- Yamaha   YZF-R1M (YEC included)   2015 - 2019
- Yamaha   YZF-R6 (YEC included)   from 2017

Warning: for this model/year AiM recommends not to remove the stock dash. Doing so will disable some of the bikes functions or safety controls. AiM Tech srl will not be held responsible for any consequence that may result from the replacement of the original instrumentation cluster.

2
Wiring connection

Yamaha bikes are equipped with a bus communication protocol based on CAN on the CCU (Communication Control Unit) connector placed under the bike seat and shown here below (left image). The following table shows colours of the cables of CCU connector and their function (rear view).
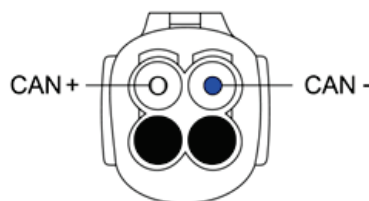

Cable colour: **Cable function:**

Blue/White   CAN High

Blue/Black   CAN Low

Red   +Vb (unswitched)

Black   GND

The CCU connector counterpart must be cabled as follows:

4pins Sumitomo
male connector pinout
rear view

3
Configuration with Race Studio

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

- ECU Manufacturer: **YAMAHA**
- ECU Model: **CAN_2015**

4
"YAMAHA – CAN_2015" protocol

Channels received by AiM Devices configured with "YAMAHA - CAN_2015" protocol are.

CHANNEL NAME	FUNCTION
ECU W SPD F	Front wheel speed
ECU W SPD R	Rear wheel speed
ECU RPM	RPM
TCS MODE	Traction control mode
ECU GEAR	Engaged gear
ECU GEAR RAW	Gear raw
ECU POWER MODE	Power mode
ECU THROTTLE	Throttle position sensor
ECU TPS HAND	Throttle handgrip
ECU LIFT SET	Lift control set
ECU LAUNCH SET	Launch control set
ECU SCS SET	Suspension control system set
ECU QSS SET	Quick shift set
ECU R ABS IN	Rear ABS intervention
ECU F ABS IN	Front ABS intervention

ECU LAUNCH IN	Launch control intervention
ECU LIFT IN	Lift intervention
ECU SCS IN	Suspension control system intervention
ECU TCS IN	Traction control system intervention
ECU MAP SEL	Map selected
ECU ECT	Engine coolant temperature
ECU AAT	Intake air temperature
ECU ACCX	Inline acceleration
ECU ACCY	Lateral acceleration
ECU GYRO	Gyroscope
ECU BRK F REQ	Front brake pressure request
ECU BRK R REQ	Rear brake pressure request
ECU BRKP F	Front brake pressure
ECU BRKP R	Rear brake pressure

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.