AiM user manual

Honda
CBR 1000RR (2004-2016)
CBR 600RR (2003-2019)

Release 1.02

ECU

1
Models and years

This document explains how to connect AiM devices to the vehicle Engine Control Unit (ECU) data stream.
Supported years and models are:

• Honda	CBR 1000RR	2004-2016
• Honda	CBR 1000RR HRC	2014-2016
• Honda	CBR 600RR	2003-2019
• Honda	CBR 600RR HRC with ECU marked D11	2013-2015

Please note: Honda CBR 1000RR HRC and CBR 600RR HRC previous to these listed above are not supported

2
Connection

Honda CBR-RR with PGM-Fi after 2003-2004 bikes feature a bus communication protocol based on K-line, accessible through the Sumitomo red connector (DLC) placed under the bike seat. For this installation refer to the DLC connector wires colours and functions.
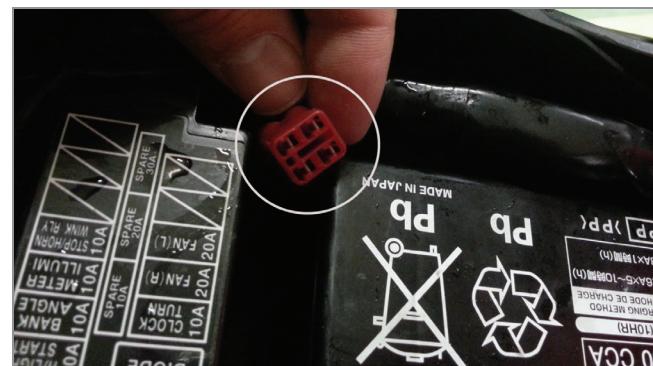

Cable colour

Brown

Orange/White

Black/White

Green

Cable function

Not used

K Line

+Vb switched

Ground

3
Race Studio configuration

Before connecting the AiM device to the bike ECU, set all functions using AiM software Race Studio. The parameters to select in the AiM device configuration are:

- ECU Manufacturer: **Honda**
- ECU Model according to the following table:

Bike model:	HDS_TAB10	HDS_TAB11
Honda CBR 1000RR from 2008		X
Honda CBR 1000RR HRC from 2014		X
Honda CBR 600RR from 2008		X
Honda CBR 600RR HRC from 2013 with ECU marked D11		X
Honda CBR 1000RR from 2004 to 2007	X	
Honda CBR 600RR from 2003 to 2007	X	

4
Available channels

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

4.1
"Honda – HDS_TAB10" protocol

Channels received by AiM devices configured with "Honda – TAB_10" protocol are:

CHANNEL NAME	FUNCTION
HDS_RPM	RPM
HDS_TPS_V	Throttle position sensor voltage
HDS_TPS	Throttle position sensor
HDS_ECT	Engine coolant temperature
HDS_IAT	Intake air temperature
HDS_MAP	Manifold air pressure
HDS_BATT	Battery supply
HDS_SPD	Speed
HDS_IGN_ANG	Ignition angle
HDS_INJ_B	Injection banking
HDS_INJ_W	Injection width

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
"Honda – HDS_TAB11" protocol

Channels received by AiM devices configured with "Honda – TAB_11" protocol are:

CHANNEL NAME	FUNCTION
HDS_RPM	RPM
HDS_TPS_V	Throttle position sensor voltage
HDS_TPS	Throttle position sensor
HDS_ECT	Engine coolant temperature
HDS_IAT	Intake air temperature
HDS_MAP	Manifold air pressure
HDS_BATT	Battery supply
HDS_SPD	Speed
HDS_IGN_ANG	Ignition angle
HDS_INJ_Tms	Injection time
HDS_unk	Unknown channel

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.