AiM InfoTech

HONDA CBR 600RR HRC 2025

Release 1.00







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Models and years

This document explains how to connect AiM devices to the vehicle Engine Control Unit (ECU) data stream.

Supported models and years are:

CBR 600RR HRC from 2025



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Wiring connection

These bikes feature a specific protocol based on CAN, accessible through the Yazaki Sogyo female connector labelled "LOGGER" connector. For this installation refer to the following pinout of the Yazaki connector and its connection table.

Note: this is a specific connector provided by the HRC harness, reserved to data logging and is not to be confused with the red diagnostic connector of standard bikes.



Yazaki CBR600RR	Function	AiM cable	AiM cable color
Brown	CAN High	CAN+	White
White	CAN Low	CAN-	Blue
In alternative for SNG			
White	CAN High	CAN+	White
Red	CAN Low	CAN-	Blue



3

Race Studio configuration

Before connecting the AiM device to the ECU, set all functions up using AiM software RaceStudio 3. The parameters to set in the device configuration are:

• ECU manufacturer: HONDA

ECU Model: CBR600 HRC 2025 (RaceStudio 3 only)

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"HONDA – CBR600 HRC 2025" protocol

Channels received by AiM devices configured with "HONDA – CBR600 HRC 2025" protocol are:

CHANNEL NAME	FUNCTION
Engine RPM	Engine RPM
Grip Opening Adj	Grip position (deg) after tool adjustment
Grip Opening	Grip position (angle)
Grip Opening Prc	Grip position (percentage)
Throttle Pos	Throttle position sensor (percentage)
Throttle Opening	Throttle position (angle)
Gear Position	Engaged gear
Coolant Temp	Engine coolant temperature
Intake Air Temp	Intake air temperature
MAP Sensor Value	MAP sensor value
Est Vehicle Spd	Vehicle Speed
Front Wheel Spd	Front wheel speed
Rear Wheel Spd	Rear wheel speed
Fuel Consumption	Fuel Consumption
Drum Angle AD	Drum angle sensor voltage
Battery Voltage	Battery voltage

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LAF1 Value Air/Fuel cylinder 1
LAF2 Value Air/Fuel cylinder 2
LAF3 Value Air/Fuel cylinder 3
LAF4 Value Air/Fuel cylinder 4

LAF1 AD1 Air/Fuel voltage cylinder 1
LAF2 AD2 Air/Fuel voltage cylinder 2
LAF3 AD3 Air/Fuel voltage cylinder 3
LAF4 AD4 Air/Fuel voltage cylinder 4

Ext AD Input 1 External AD input 1
Ext AD Input 2 External AD input 2
Ext AD Input 3 External AD input 3
Ext AD Input 4 External AD input 4

Shift Learn Ref Shift sensor learning value reflection value

Shift Sensor In Shift sensor input value

Shift Sens Learn Shift sensor input value learned value

SRC Basic Factor SRC basic setting Factor

Fuel Correction 1

TC Efficacy LVL

TC efficacy level

IGCFF Level IGCFF level

IGCFF Roll Adj L IGCFF roll adjust level

IGCFF Cut Freq S IGCFF cut frequency search value

IGCFF CutFreqCor IGCFF cut frequency correction factor

IGCFF CutFreqFin IGCFF cut frequency final value
Up Force CutTime Upshift driving force cut time level

EB Skid EB skid ThAdj

EB Basic Set

EB basic setting ThAdj

Drive Sprocket

Driven Sprocket

Driven sprocket number

FI IND FI warning

Dn PostShift EB Downshift post-shift EB adjustment level

Dn Blip Adj Downshift Blip adjustment level

Up Force Return Upshift driving force return time level

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Gear Id Err Stat Gear identification error status

Ignition Corr Ignition correction amount

Fuel Correction 2
Fuel Correction 3
Fuel Correction 4
Fuel Correction 4

NE Conversion FW Conversion value from front wheel speed

STG Identified STG determined
Clutch Switch ON Clutch switch ON

FI Mode FI mode IG Mode IG mode

Power Mode Power mode
GRPPCT Mode GRPPCT Mode

TCS Mode Traction control mode
Slip Tar Offset Slip target offset level

Wheelie Mode Wheelie mode

SRC Mode Slip Rate Control mode

EB mode Engine Brake mode

EBSLIP Mode EBSLIP mode

Drum Control LVL Drumming control level

P Mode P mode meter selection value
EB Mode MeterSel EB mode meter selection value

Mode TYRE Mode tyre MILCODE MIL code

Intervention CS Intervention control status

Front Tire Diam Front tire diameter

Rear Tire Diam Rear tire diameter

Rear Wheel RSpd Rear wheel speed (rpm)
Front Wheel RSpd Front wheel speed (rpm)

NE Conversion RW Conversion value from rear wheel speed

Pitch Angular V Pitch angular speed

Pitch Angle Pitch angle

Rel PitchWheelie Relative pitch angle from wheelie start

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Bank Angle Bank angle

Amount Control R Amount of control retards

Direction Accel Acceleration in the direction of travel

Delta Slip Delta slip rate variation

SRC Trigger Set SRC trigger setting value

Slip Rate Wil Slip rate for wheelie

Target Slip Rate Target slip rate

Slip Tar MAP Val Slip target map value SlipTar Offset Slip target offset level

Slip Rate Slip rate

FC Rate Cycle Fuel consumption rate per cycle

Control Torque I Control torque intervention amount

Technical note: not all data channels outlined in the ECU template are validated for each manufacture's model or variant; some of the outlined channels are model and year specific, and therefore may not be applicable.