

AiM user manual

EVO4/EVO4S and
Solo/SoloDL kit for Honda
CBR 1000RR (2004-2015)
CBR 600RR (2003-2015)

Release 1.03



KIT





1

Models and years

This user guide explains how to connect AiM EVO4, EVO4S and SoloDL to the Engine Control Unit (ECU) of Honda CBR-RR bike. Supported years and models are:

- Honda CBR 1000RR 2004-2015
- Honda CBR 1000RR HRC 2014-2015
- Honda CBR 600RR 2003-2015
- 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

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Kit content and part number

An installation kit with bracket and ECU interface cable is available for Solo/SoloDL while a connection cable is available for EVO4/EVO4S.

2.1

Kits for Solo/SoloDL

Two Solo/SoloDL kits are available for your Honda bike:

- **connection kit** that includes the ECU interface cable and fits all Honda bike listed before, whose part number is: **V02569290**
- **installation kit** shown here below – that includes ECU interface cable and bracket kit – that only fits Honda CBR 600RR and 600HRC with ECU marked D11 kit, whose part number is: **V0256929CS**.

The installation kit includes:

- 1 AiM interface cable for Honda CBR 600RR and 600RR HRC with ECU marked D11 (1)
- 1 bracket (2)
- 2 – M4x10mm flat head screw
- 1 washer
- 1 – M6X60 screw
- 1 rubber rawl nut



Please remember: connection kit fits all Honda bikes listed before while installation one only fits Honda CBR 600RR and Honda CBR 600RR HRC with ECU marked D11.

AiM connection kit (1) and bracket (2-6) can be also bought as spare parts:

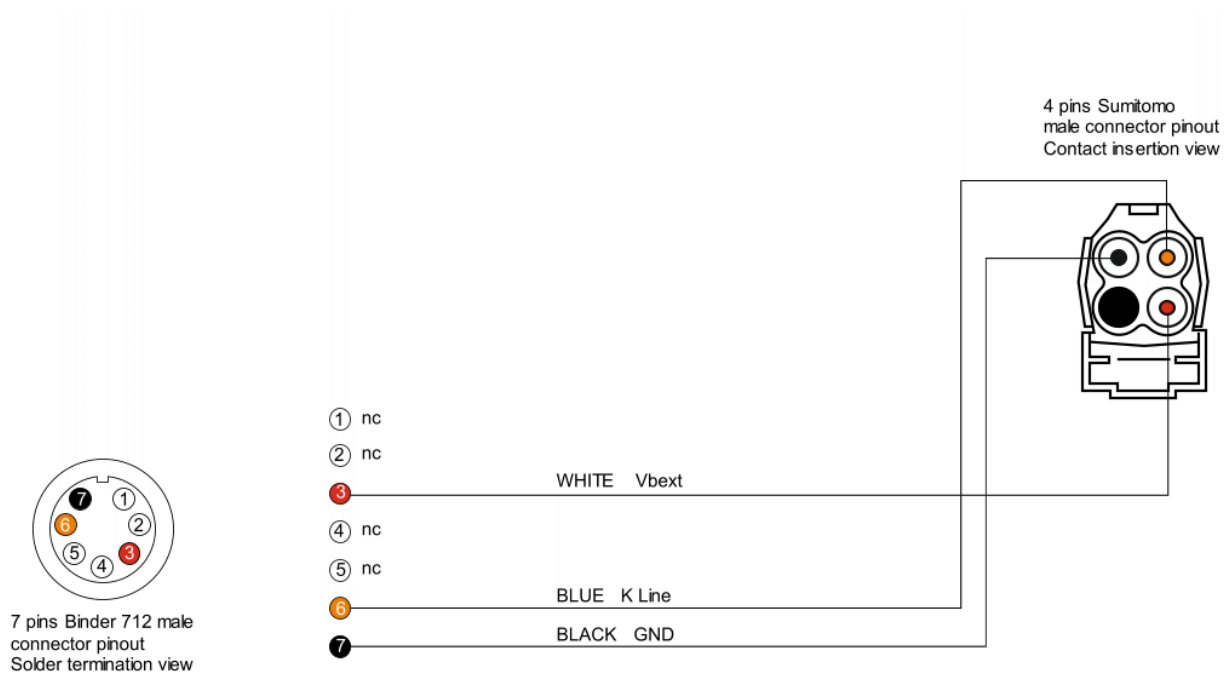
- SoloDL connection kit: **V02569290**
- Solo/SoloDL bracket: **X46KSHCBR6**.

2.2 AiM cable for SoloDL/EVO4S

SoloDL interface cable – shown here below – part number is: **V02569290**.



The image below shows the cable construction scheme.

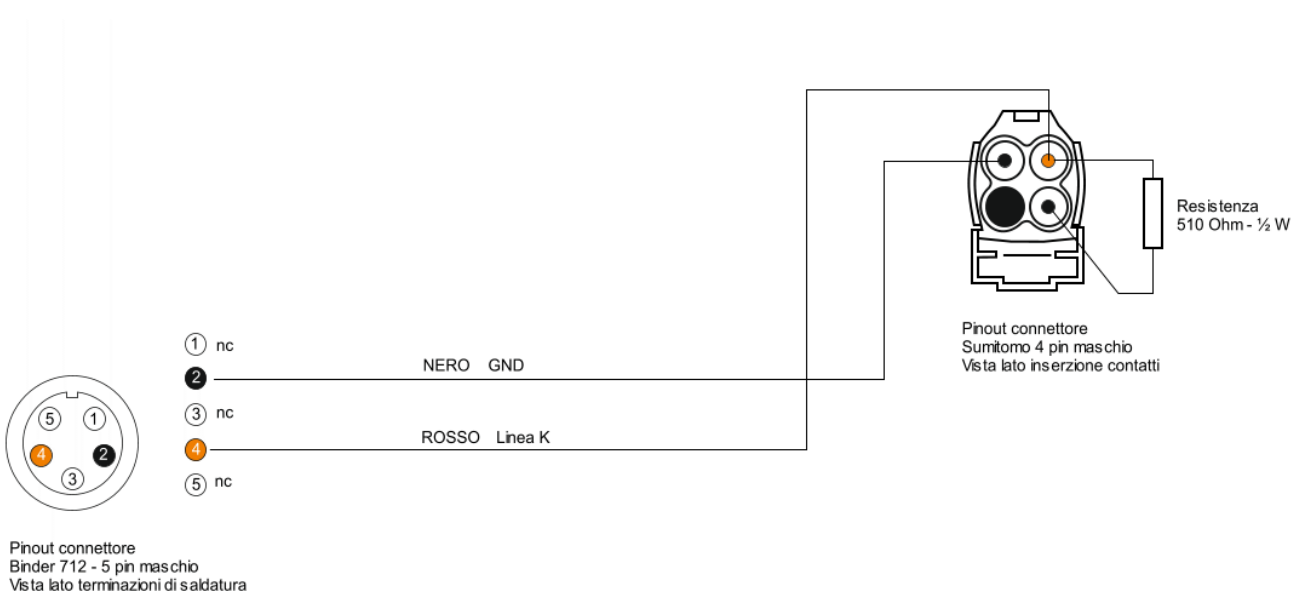


2.3 AiM cable for EVO4

EVO4 interface cable – shown here below – part number is: **V02563290**.



The image below shows the cable construction scheme.



3

Installation and connection

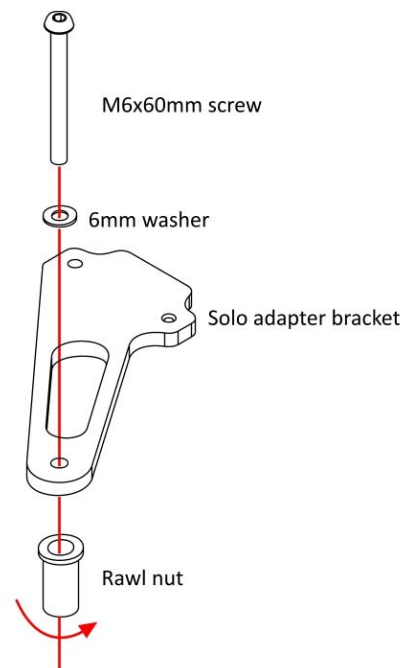
Here you find the instructions to install Solo and SoloDL and to connect EVO4, EVO4S and SoloDL to your Honda bike ECU. EVO4 cable is long enough to allow installation under the bike seat.

3.1

Installing Solo and SoloDL

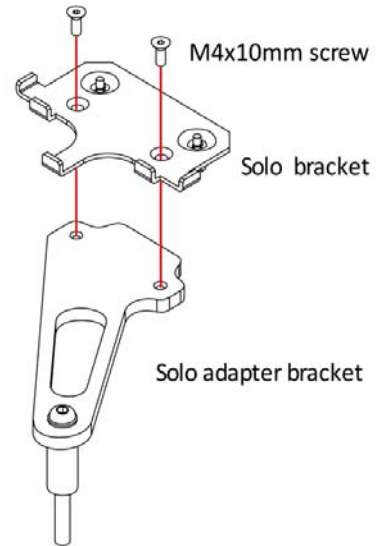
To install Solo/SoloDL on your Honda CBR 600RR and 600RR HRC with ECU marked D11:

Insert the screw and the washer in the bracket.
Screw the rawl nut on the screw.

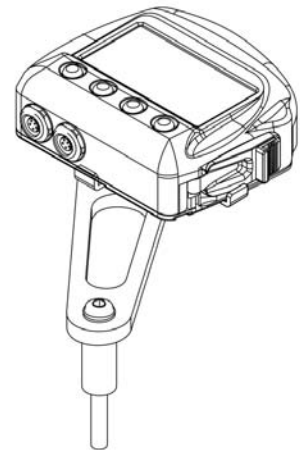




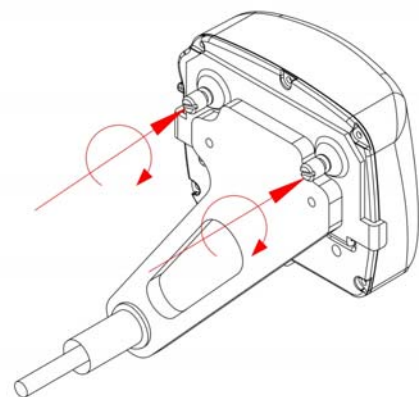
Fix Solo and Solo bracket on the kit bracket using M4x10 screws.



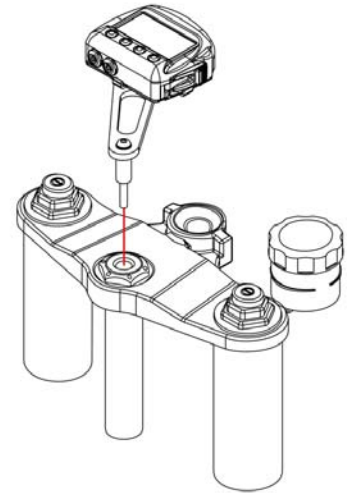
Hook Solo to its bracket.



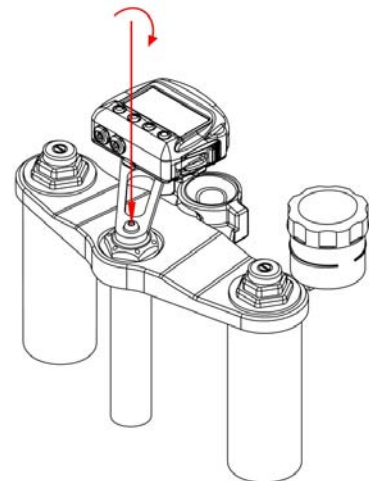
Fix Solo screwing the kit bracket screws



Remove the cap of the bike handle bar hinge and insert the rawl nut in the hole.



Tighten the central screw on the hinge so that the rawl nut grips.



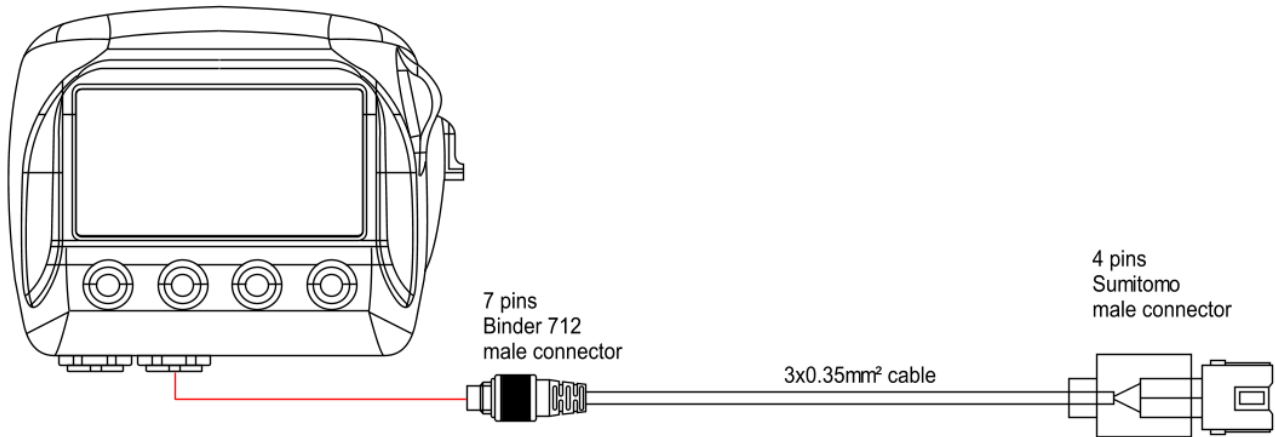
3.2

Connect SoloDL, EVO4 and EVO4S

Honda CBR-RR with PGM-Fi after 2003-2004 bikes communicate with Honda Diagnostic system (HDS) using the K Line. To connect SoloDL, EVO4 and EVO4S to the bike K Line use the Sumitomo red connector (DLC) shown here below and connect it to Sumitomo connector of SoloDL, EVO4 and EVO4S connection kits.



Connect 7 pins Binder 712 female connector of SoloDL – right under the logger – to 7 pins Binder 712 male connector of the connection kit (**V02569290**) as shown here below.

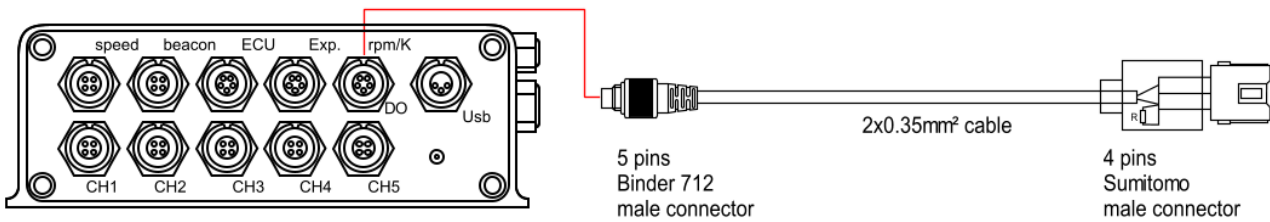


As said SoloDL connection kit allows also to power the logger. The table below shows colours of the cables connected to Honda Sumitomo connector and their function.

Cable colour	Cable function
Brown	Not used
Orange/White	K Line
Black/White	+Vb switched
Green	Ground

Note: in order to enable the required pull-up resistor integrated in SoloDL, power the logger with 12V line as described above.

Connect EVO4 5 pins Binder 712 female connector labelled "rpm/K DO" –second from right of the top row – to 5 pins Binder 712 male connector of **V02563290** kit as shown here below..



The table below shows the colour of the cables connected to Honda Sumitomo connector as well as their function.

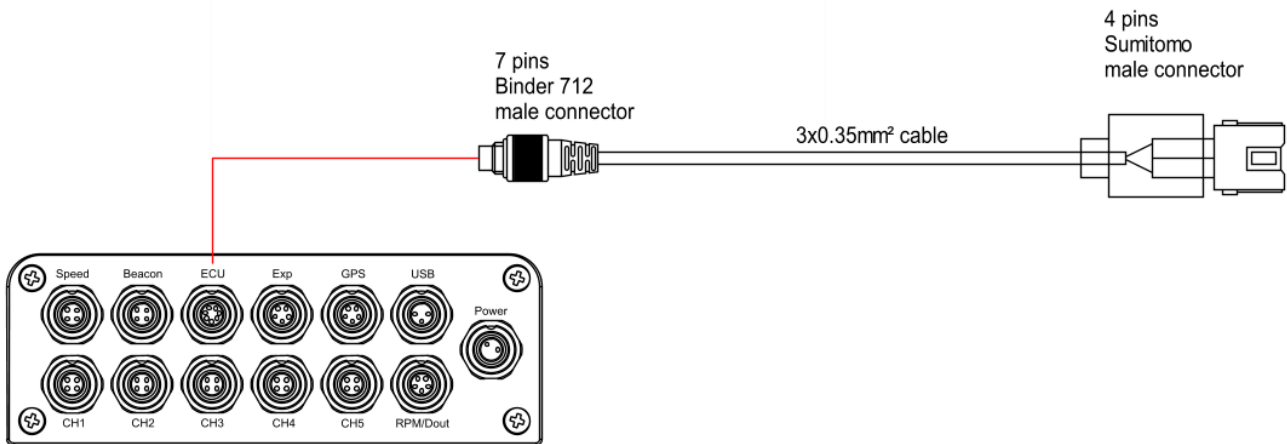
Cable colour

- Brown
- Orange/White
- Black/white
- Green

Cable function

- Not used
- K Line
- +Vb (switch) not connected
- Ground

Connect 7 pins Binder 712 female connector labelled ECU of EVO4S to 7 pins Binder 712 male connector of the connection kit (**V02569290**) as shown here below.



As said EVO4S connection kit allows also to power the logger. The table below shows colours of the cables connected to Honda Sumitomo connector and their function.

Cable colour	Cable function
Brown	Not used
Orange/White	K Line
Black/White	+Vb switched
Green	Ground

Note: in order to enable the required pull-up resistor integrated in SoloDL, power the logger with 12V line as described above.

4

Race Studio configuration

Before connecting EVO4, EVO4S and SoloDL to the bike ECU set it up using Race Studio 2 software. The parameters to select in the logger configuration are:

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

	"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	

5

Available channels

Channels received by SoloDL, EVO4 and EVO4S connected to Honda bike change according to the selected protocol.

5.1

"Honda" "HDS_TAB10" protocol

Channels received by SoloDL, EVO4 and EVO4S connected to "Honda" "HDS_TAB10" protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	HDS_RPM	RPM
ECU_2	HDS_TPS_V	Throttle position sensor voltage
ECU_3	HDS_TPS	Throttle position sensor
ECU_4	HDS_ECT	Engine coolant temperature
ECU_5	HDS_IAT	Intake air temperature
ECU_6	HDS_MAP	Manifold air pressure
ECU_7	HDS_BATT	Battery supply
ECU_8	HDS_SPD	Speed
ECU_9	HDS_IGN_ANG	Ignition angle
ECU_10	HDS_INJ_Tms	Injection time

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.

5.2

"Honda" "HDS_TAB11" protocol

Channels received by SoloDL, EVO4 and EVO4S connected to "Honda" "HDS_TAB11" protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	HDS_RPM	RPM
ECU_2	HDS_TPS_V	Throttle position sensor voltage
ECU_3	HDS_TPS	Throttle position sensor
ECU_4	HDS_ECT	Engine coolant temperature
ECU_5	HDS_IAT	Intake air temperature
ECU_6	HDS_MAP	Manifold air pressure
ECU_7	HDS_BATT	Battery supply
ECU_8	HDS_SPD	Speed
ECU_9	HDS_IGN_ANG	Ignition angle
ECU_10	HDS_INJ_Tms	Injection time
ECU_11	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.