AiM User manual

EVO4/EVO4S and SoloDL connection kit for Kawasaki Ninja ZX-10R and ZX-10R Racing kit MY2011-MY2016

Release 1.04

KIT

1
Supported models and years

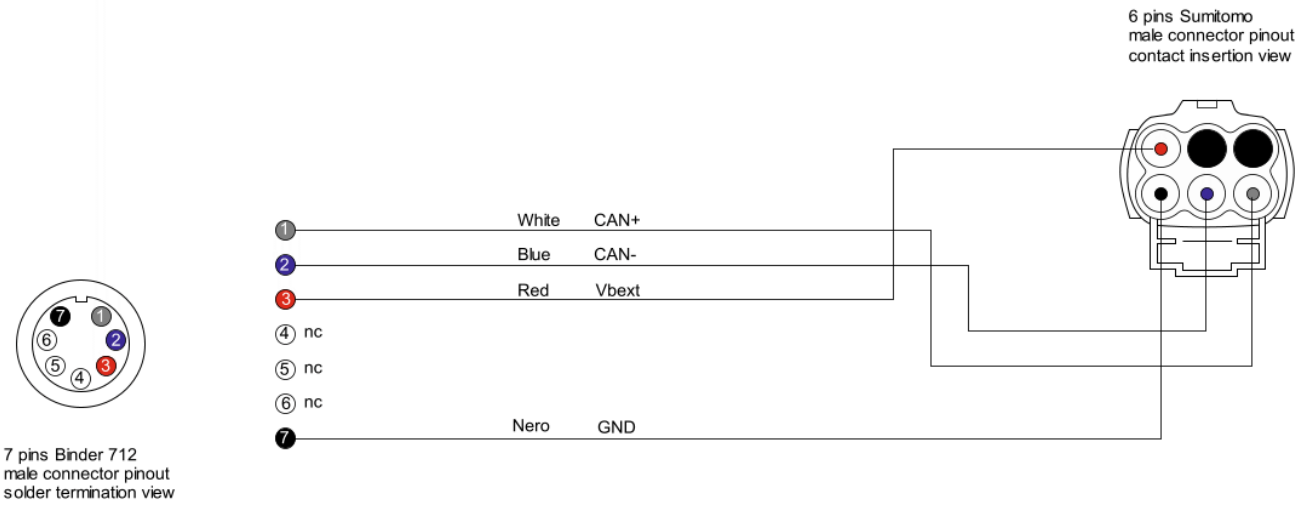
This user manual explains how to connect AiM SoloDL, EVO4 and EVO4S to your bike engine control unit (ECU). Supported models and years are:

- Kawasaki Ninja ZX-10R MY2011 2011-2015
- Kawasaki Ninja ZX-10R MY2011 Racing kit 2011-2015
- Kawasaki Ninja ZX-10R MY2016 from 2016
- Kawasaki Ninja ZX-10R MY2016 Racing kit from 2016

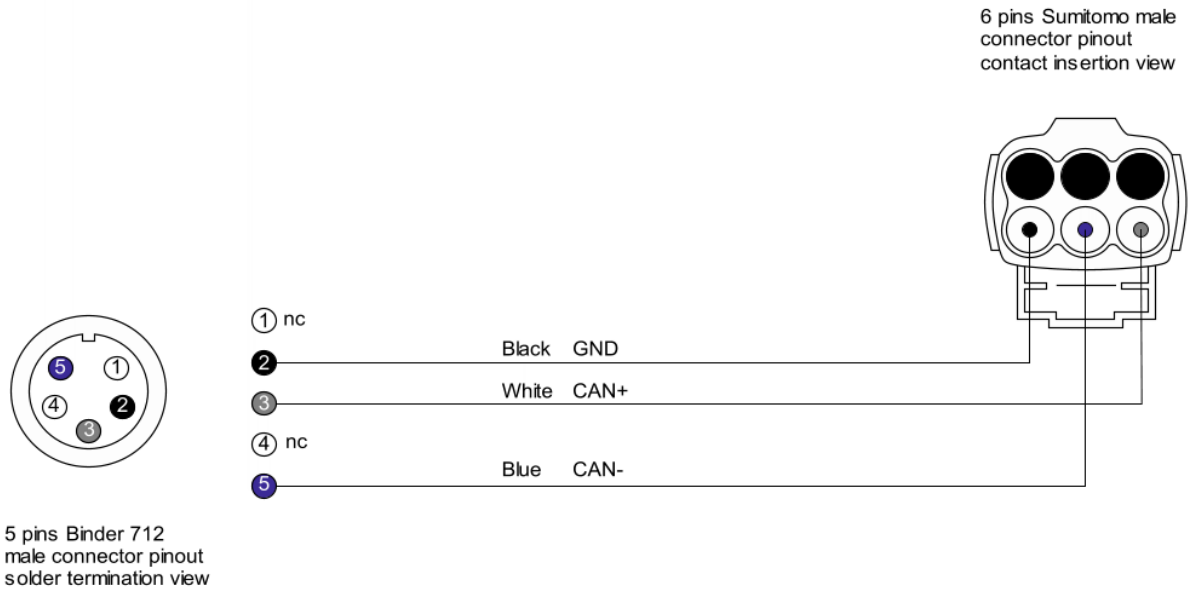
Warning: for this models/years AiM recommends not to remove the stock dash.Doing so will disalble some of the bike functions or safety controls. AiM Tech srl will not be held responsible for any consequence that may result from the replacement of the original instrumentation cluster.

2
Connection kit for SoloDL, EVO4 and EVO4S

AiM designed and developed connection kits for SoloDL, EVO4 and EVO4S. Here below SoloDL/EVO4S connection kit is shown (part number: **V02569220**) with the related constructive scheme.



EVO4 connection kit is shown here below (part number **V02563160**) with the related constructive scheme.



3
Connecting SoloDL, EVO4 and EVO4S

SoloDL can be installed on the bike steering while EVO4/EVO4S can be installed under the bike seat. Position of the ECU connector to be used changes according to the bike model.

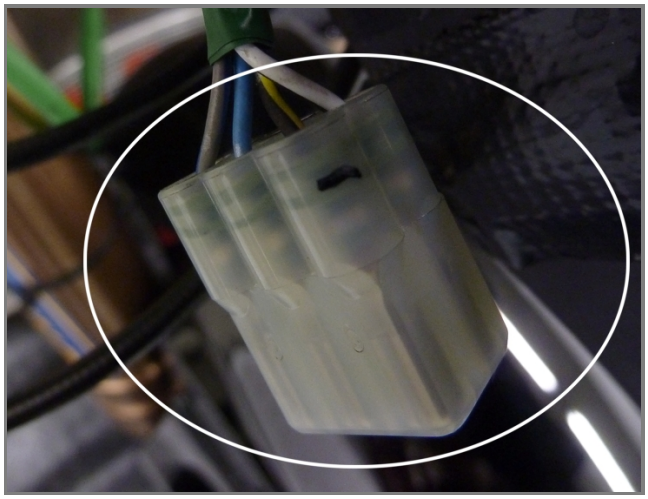
Kawasaki ZX10R connector is under the bike seat and is called "diagnosis connector" while Kawasaki ZX10R Racing kit connector is under the windscreen and is called "CAN output".

3.1
Connecting SoloDL/EVO4S

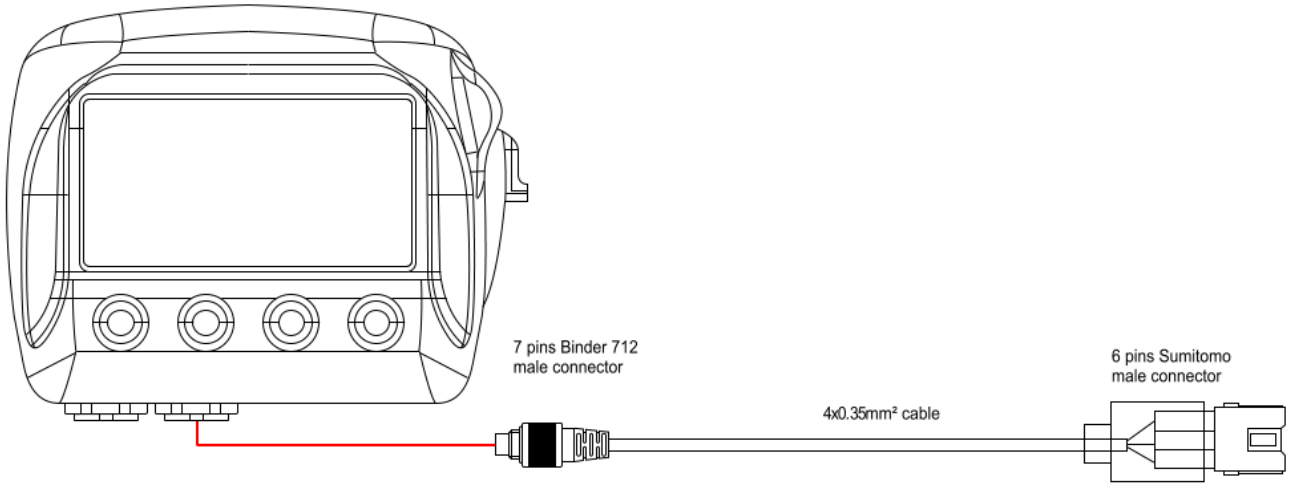
To connect SoloDL/EVO4S to your Kawasaki ZX10R ECU use the diagnosis connector placed under the bike seat.

Connection cable is 140 cm long.

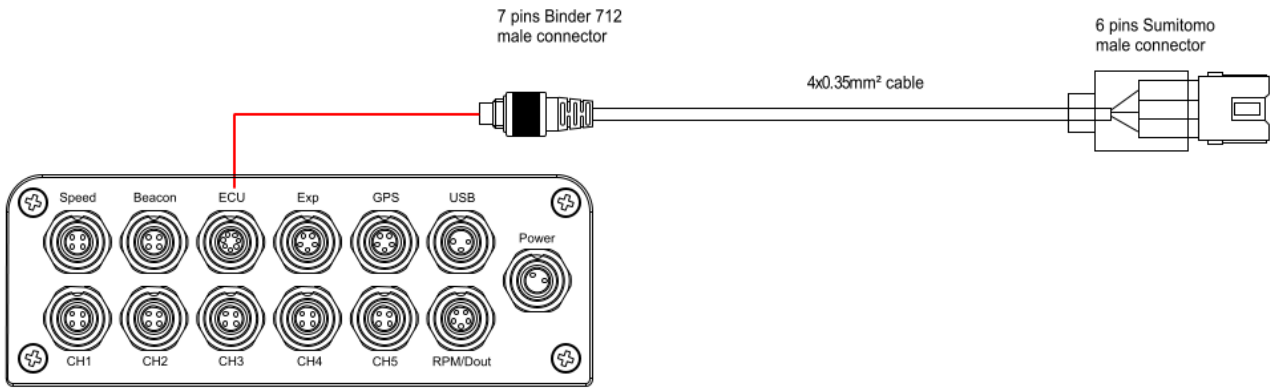
To connect SoloDL/EVOO4S to your Kawasaki ZX10R Racing kit ECU use CAN OUTPUT connector placed under the bike windscreen.



Connection between SoloDL and connection kit is shown here below.

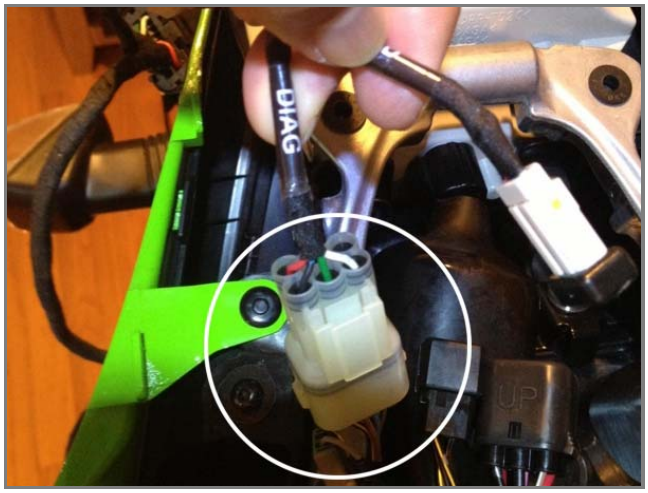


Connection between EVO4S and connection kit is shown here below.

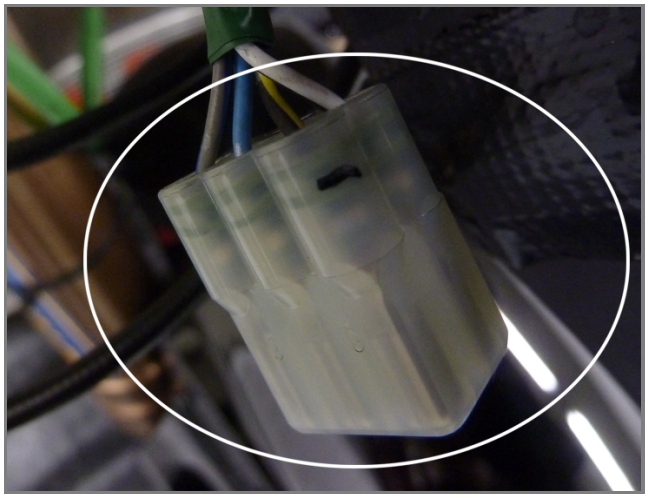


3.2
Connecting EVO4

To connect EVO4 to your Kawasaki ZX10R ECU use "diagnosis connector" placed under the bike seat.



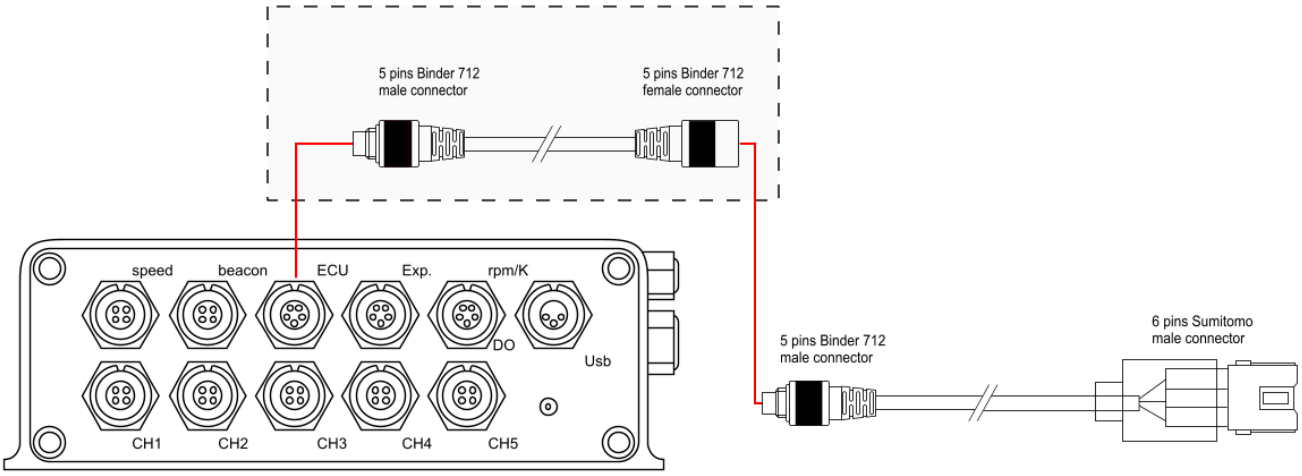
To connect EVO4 to your Kawasaki ZX10R Racing ECU kit use "CAN output" connector placed under the bike windscreen.



To connect ECU connector under the windscreen to EVO4, installed under the bike seat, use the CAN extension cable shown here on the right. The cable is available in multiple lengths. Part numbers are:

- 1m CAN extension cable: **V02552700**
- 1,5m CAN extension cable: **V02552710**

Connection between EVO4, connection kit and CAN extension – when needed – is shown here below.



4 Configuring with Race Studio

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

- ECU Manufacturer “Kawasaki”
- ECU model:
  - “Kit Racing” for Kawasaki ZX-10R MY2011 and ZX-10R MY2011 Racing kit from 2011 to 2015
  - "ZX10R_2016" for Kawasaki ZX-10R MY2016 and ZX-10R MY2016 Racing kit from 2016

5 Kawasaki protocols

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

5.1 "Kawasaki" "Kit Racing" protocol

Channels received with "Kawasaki" "KIT RACING" protocol are:

ID	NOME CANALE	FUNZIONE
ECU_1	ZX_RPM	RPM
ECU_2	ZX_SPEED_F	Front wheel speed
ECU_3	ZX_SPEED_R	Rear wheel speed
ECU_4	ZX_TPS	Throttle position sensor
ECU_5	ZX_ECT	Engine coolant temperature
ECU_6	ZX_IAT	Intake air temperature
ECU_7	ZX_GEAR	Engaged gear

ECU_8	ZX_CLUTCH	Clutch switch
ECU_9	ZX_POW_MODE	Selected power mode
ECU_10	ZX_TC_MODE	Traction control mode
ECU_11	ZX_SHIFTER	Shifter
ECU_12	ZX_PIT_ROAD	Pit lane speed limiter
ECU_13	ZX_DIAG_CODE_1	Diagnostic code 1
ECU_14	ZX_DIAG_CODE_2	Diagnostic code 2
ECU_15	ZX_DIAG_CODE_3	Diagnostic code 3
ECU_16	ZX_V_BATT	Battery supply
ECU_17	ZX_TC_SELECT	Selection of traction control level

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 "Kawasaki" "ZX10R_2016" protocol

Channels received with "Kawasaki" "ZX10R_2016" protocol are:

ID	NOME CANALE	FUNZIONE
ECU_1	RPM	RPM
ECU_2	SPEED_F	Front wheel speed sensor
ECU_3	SPEED_R	Rear wheel speed sensor
ECU_4	TPS	Throttle position sensor
ECU_5	ECT	Engine coolant temperature
ECU_6	IAT	Intake air temperature
ECU_7	GEAR	Engaged gear
ECU_8	CLUTCH	Clutch switch
ECU_9	POW_MODE	Map selection
ECU_10	KLCM_MOD	Launch control

ECU_11	SHIFTER	Shifter switch
ECU_12	GRIP_VOLT	Grip voltage
ECU_13	S_KTRC_MOD	Traction control mode
ECU_14	KEBC_MOD	Engine brake mode
ECU_15	KLCM ACT	Launch control activation
ECU_16	V_BATT	Battery supply
ECU_17	KQS_UP_ACT	Quick shift up activation
ECU_18	KQS_DW_ACT	Quick shift down activation
ECU_19	KQS_UP_WK	Quick shift up working level
ECU_20	KQS_DW_WK	Quick shift down working level
ECU_21	S_KTRC	Traction control
ECU_22	WHLIE_CRTL_L	Wheelie angle control low digit
ECU_23	LEAN_ANG	Lean angle
ECU_24	WHLIE_ANG	Wheelie angle
ECU_25	S_KTRC_ACT	Traction control activation
ECU_26	S_KTRC_SL	Traction control setting level
ECU_27	WHLIE_CTR_ACT	Wheelie control activation
ECU_28	WHLIE_CTR_SL	Wheelie control setting level
ECU_29	KEBC_SL	Engine brake setting level
ECU_30	REAR_DIST	Rear distance

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.