

AIM Infotech

MV Agusta F4 2010 ECU connection

Release 1.01



1

Bike models and compatibility with AIM devices

This tutorial describes how to connect AIM devices to an MV Agusta F4 2010 ECU.

The bike can be connected to AIM SoloDL, EVO4 and ECU Bridge. No compatibility is allowed with AIM MXL because this logger installation would imply MV Agusta stock dash removal.

2

CAN and K line wiring connection

MV Agusta is equipped with both the CAN bus and the K line. Channels received by these two communication lines are different. The CAN line exports 8 channels while K line exports other four channels.

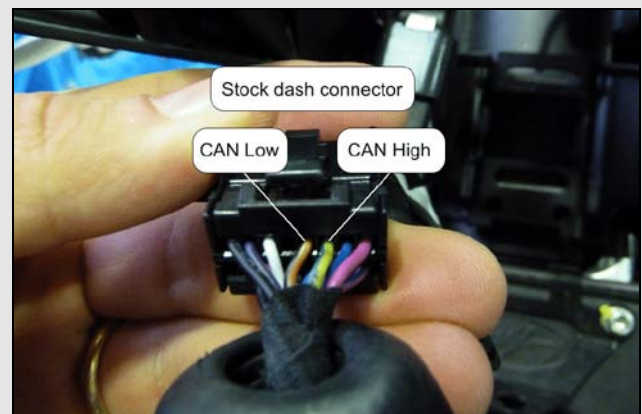
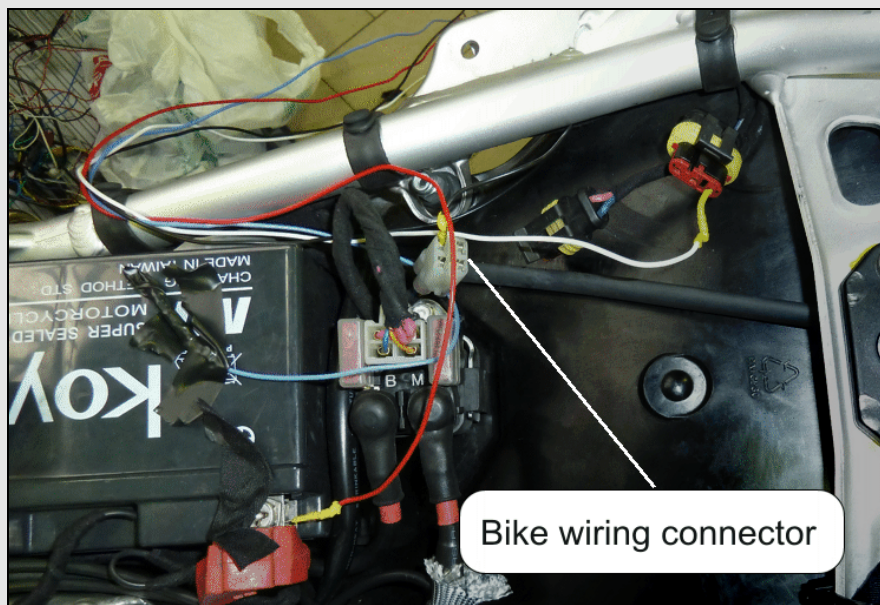
AIM devices can manage both protocols; it is thereby recommended to connect both lines.

2.1

CAN line wiring connection

The bike CAN bus can be reached through two gateways: the stock Dash connector behind the OEM stock dash and the bike wiring connector under the bike seat.

Here below the CAN bus gateway position under the bike seat is shown while the two images below show the cables to be used for the connection.

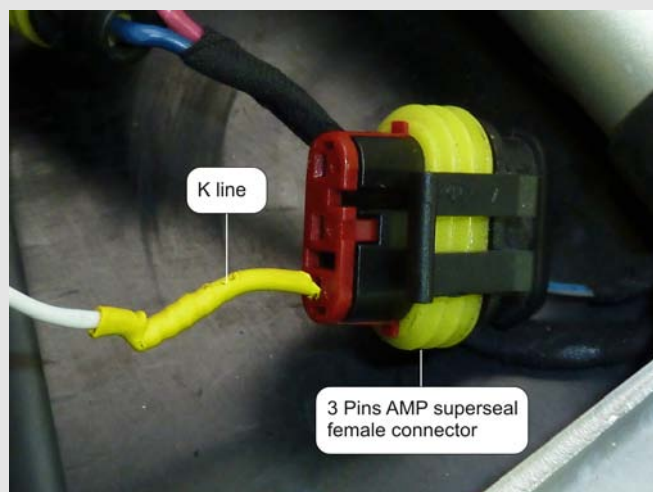
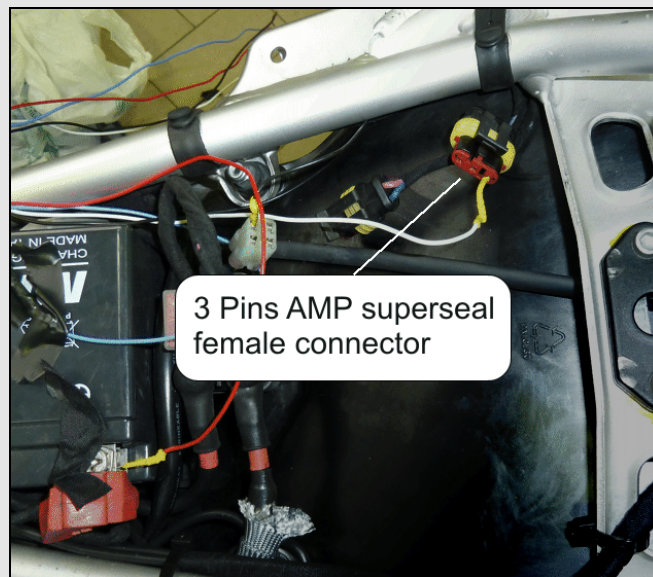


2.2

K line wiring connection

The bike K line can be reached through a connector under the bike seat.

Here below K line gateway position under the bike seat and connection cable to be used are shown



3

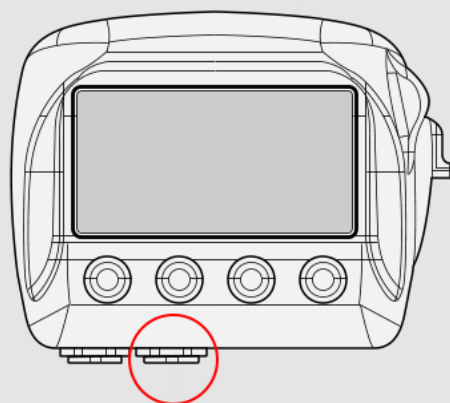
Connection with AIM devices

Here below you find instructions on how to connect MV Agusta F4 2010 to AIM SoloDL, EVO4 and ECU Bridge:

3.1

SoloDL

To connect SoloDL to MV Agusta use the seven pins right female connector placed under the logger. Below you see the connection table.



Function

CAN+
CAN-
K line

SoloDL connector pin

Pin 1
Pin 2
Pin 6

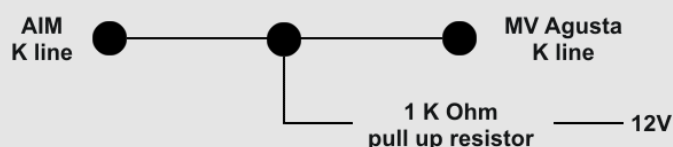
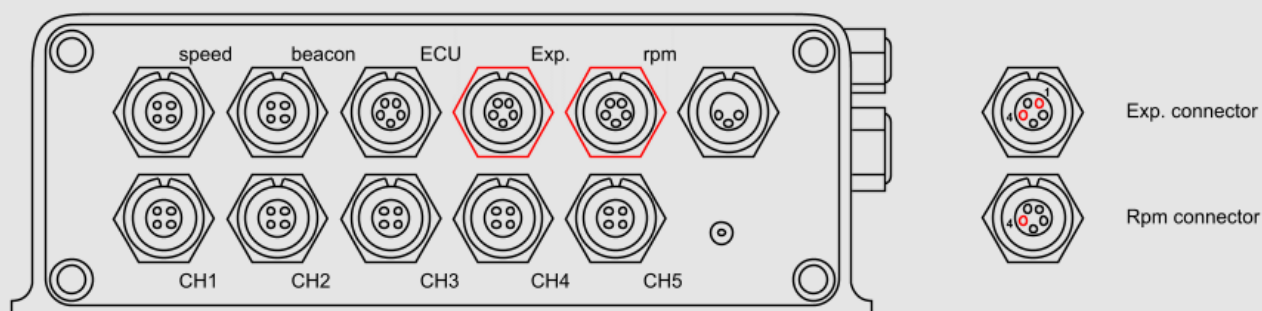
MV Agusta cable colour

Yellow with blue stripe
Orange with black stripe
Superseal connector

3.2

EVO4

EVO4 has the CAN Bus and the K line on two different connectors (red circled here below). Furthermore it is necessary to install a 1K Ohm resistor between AIM logger and MV Agusta ECU as shown in the drawing that follows.



Function

CAN+
CAN-
K line

EVO4 connector pin

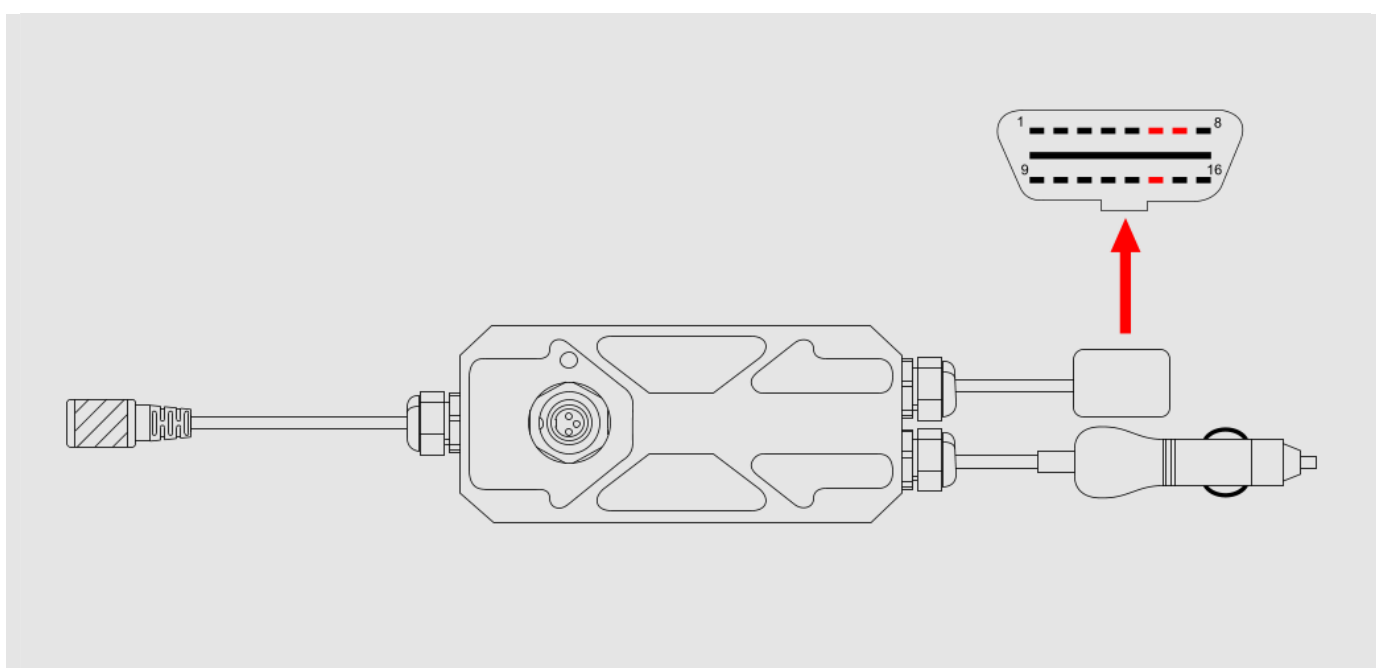
Exp connector pin 1
Exp connector pin 4
RPM connector pin 4

MV Agusta cable

Yellow with blue stripe
Orange with black stripe
Superseal connector

3.3 ECU Bridge

ECU Bridge is available in two versions: CAN/RS232 and K/CAN line with OBDII connector. The latter is the only one equipped with both the CAN Bus and the K line, that are available on the OBDII connector as shown here below. The part number of this ECU Bridge is **X90BGCK12MA**.



Function	ECU Bridge connector pin	MV Agusta cable colour
CAN+	OBDII connector pin 6	Yellow with blue stripe
CAN-	OBDII connector pin 14	Orange with black stripe
K line	OBDII connector pin 7	Superseal connector

4

Available channels

Channels received by AIM devices connected to MV Agusta F4 2010 are shown in the table below; channels from 1 to 8 come from the CAN Bus while channels from 9 to 12 come from the K line.

ID	CHANNEL NAME	FUNCTION	PROTOCOL
ECU_1	F4_RPM	RPM	The CAN bus
ECU_2	F4_SPEED	Vehicle speed	The CAN bus
ECU_3	F4_TPS	Throttle position sensor	The CAN bus
ECU_4	F4_GEAR	Engaged Gear	The CAN bus
ECU_5	F4_ECT	Engine coolant temperature	The CAN bus
ECU_6	F4_INTK_AIRT	Intake air temperature	The CAN bus
ECU_7	F4_VBATT	V Battery	The CAN bus
ECU_8	F4_TC	Traction control enabled	The CAN bus
ECU_9	F4_MAP	Manifold air pressure	The K line
ECU_10	F4_IGN_ADV1	Ignition advance 1	The K line
ECU_11	F4_IGN_ADV2	Ignition advance 2	The K line
ECU_12	F4_INJ_TIME	Injection time	The K line