AiM User Guide

Kit Solo 2DL for Microtec M206 ECU

Release 1.00

KIT

1
Supported models

This user guide explains how to connect Microtec M206 ECU to AiM Solo 2DL. Microtec M206 is an aftermarket ECU installed on Kawasaki and Suzuki bikes only. Please refer to Microtec website "www.microtec.cc" to know supported bike models.
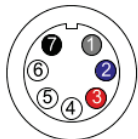
2
Installation notes

To install Solo 2DL on your bike you can use a bar pad. AiM provides the two optional bar pads shown below:
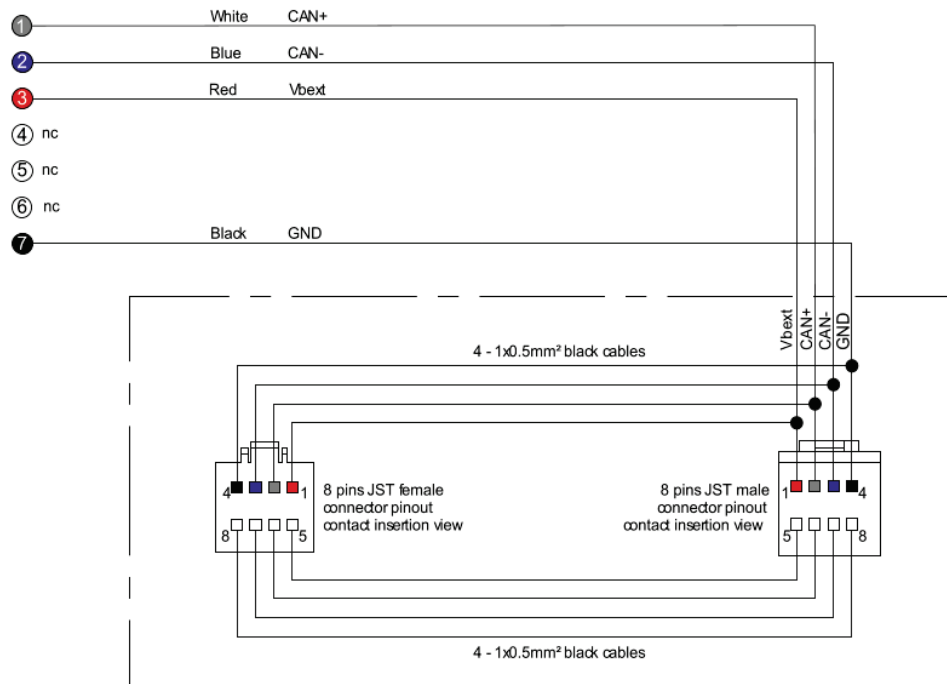

- bar pad for handle bar with cross brace – part number: **X47KPSOLO2T20** below on the left
- bar pad for handle bar without cross brace – part number: **X47KPSOLO2T10** below on the right

Microtec M206 ECU can be connected to Solo 2DL using the dedicated connection kit whose part number is: **V02569260**. Here below it is shown on top with the constructive scheme on bottom.

1	White	CAN+
2	Blue	CAN-
3	Red	Vbext
4	nc	
5	nc	
6	nc	
7	Black	GND

7 pins Binder 712
male connector pinout
solder termination view

Vbext
CAN+
CAN-
GND

4 - 1x0.5mm² black cables

8 pins JST female
connector pinout
contact insertion view

8 pins JST male
connector pinout
contact insertion view

4 - 1x0.5mm² black cables

M206 ECU is placed under the number plate as shown below. The connector used to communicate with external devices is highlighted here below on the right.
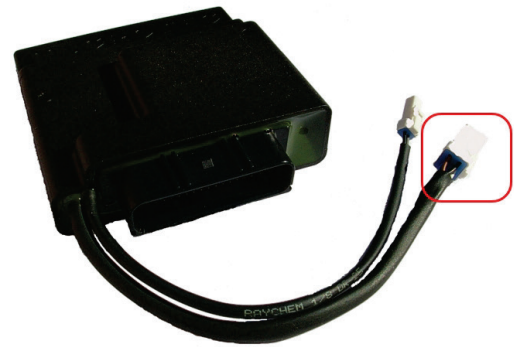
Please note: Microtec ECU powers Solo 2DL. It is thereby unnecessary to check Solo 2DL battery status.

In case Microtec ECU is already connected to an external device it is possible to maintain this connection using AiM connection kit as shown in the drawing below.
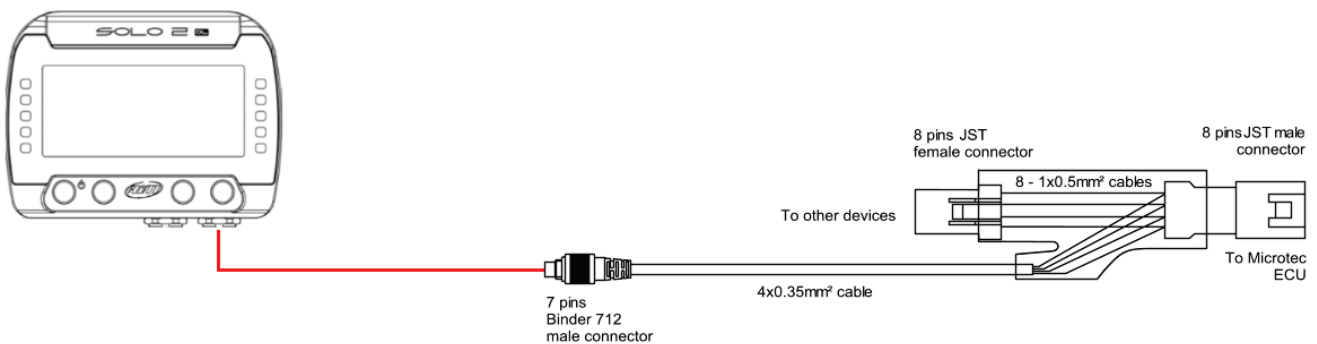
ECU connector has a cap on it. If the ECU is connected just to Solo 2DL remove the cap and place it on AiM kit female connector (labelled "to other devices" here above) and connect AiM kit male connector o the ECU female connector.

3
ECU Software setup

Before connection to Solo 2DL, Microtec ECU needs to be setup via MON software. ECU channel frequency is to be set on 50 or 100Hz value. Please refer to MON software user guide to know how to perform this operation. As an example we are showing here below Channel frequency setting page of MON172 software.
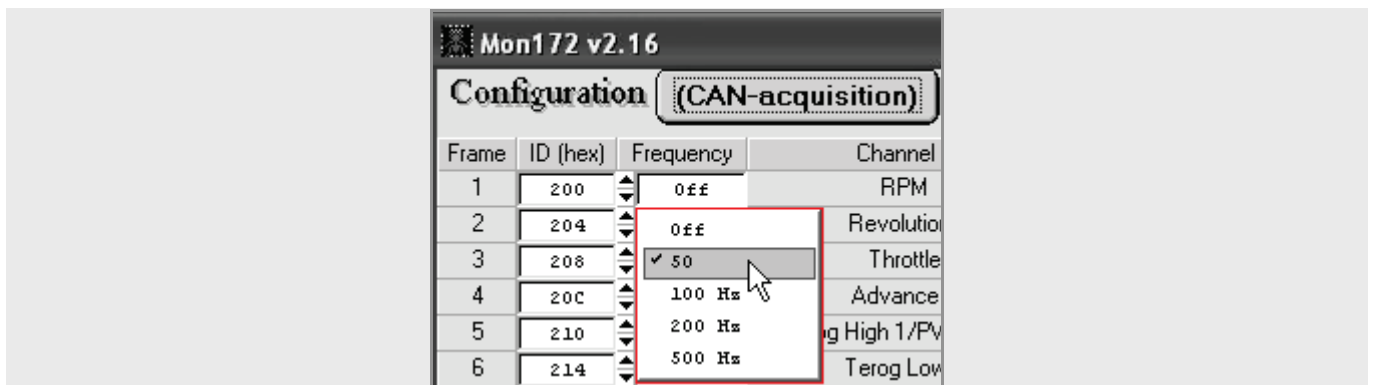
4
Race Studio 3 configuration

Before connecting Solo 2DL to the ECU, set it up using Race Studio 3 software. The parameters to select in the device configuration are:

- ECU Manufacturer: **Microtec**
- ECU Model: **M206**

5
"Microtec – M206" protocol

Channels received by Solo 2DL configured with "Microtec" "M206" protocol are:

CHANNEL NAME	FUNCTION
RPM	RPM
GEAR	Gear position
EngineTemp	Water temperature
AirTemp	Air temperature
RPMMean	Mean RPM
ProgRPM	Programmed RPM value
EngineAcc	Engine acceleration
TErog	Erogation time
TErogBase	Erogation time base
Advance	Ignition advance
TetaBase	Ignition base angle
KJTH20	Injection time correction from water temperature
KATH20	Offset advance from water temperature
KJTAIR	Injection time correction from air temperature
KATAIR	Offset advance from air temperature
KJPAIR	Injection time correction from air pressure
KAPAIR	Offset advance from air pressure
KJAUX	Injection time auxiliary correction
KAAUX	Auxiliary offset advance
KJGEAR	Injection time correction from gear
KAGEAR	Offset advance from gear
KJACC	Injection time correction from acceleration
KAACC	Offset advance from acceleration
KJCRANK	Injection time correction from Crank angle
OffsVBatt	Injection time offset from battery voltage

Dwell	Dwell time
DjdInRPM	Injection offset from RPM transient
DjdIntH20	Injection offset from engine cooling temperature
DjdInT	Total injection offset from transient
DadInT	Advance offset from ignition transient
InjTrans	Transient injection
AdvTrans	Transient advance
Phase	Injection phase
PhaseBase	injection phase base
Throttle	Throttle position
ThrotVar	Throttle variation
Lambda	Lambda value
BaroPres	Barometric pressure
Vacuum	Vacuum sensor
MinMapOn	Minimum manifold air pressure at power on
MaxMapOn	Maximum manifold air pressure at power on
MapSadOn	Manifold air pressure at power on
MapIndxOn	Manifold air pressure index at power on
RPMBaro	RPM Value corrected at barometric pressure
TPS_Baro	Throttle position at barometric pressure
RawBaro	Raw barometric pressure
RawBaroAd	Row barometric pressure AD
VCammError	error counter from virtual cam
VCammAcc	period of tooth during acceleration
VCammDec	period of tooth during deceleration

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.