AiM User Guide

Kit EVO4S, SOLO 2/SOLO 2 DL for Yamaha YZF-R1 2004-2014 and Yamaha YZF-R6 2004-2016 (YEC included)

Release 1.00

KIT

1
Models and years

This manual explains how to connect EVO4S and SOLO 2 DL to the bike engine control unit (ECU) and how to install AiM SOLO 2/SOLO 2 DL on the bike steering plate.

Compatible models are:
- Yamaha YZF-R1 (YEC included)   2004-2014
- Yamaha YZF-R6 (YEC included)   2004-2016

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

2
Kit content and part numbers

Different SOLO 2/SOLO 2 DL and EVO4S kits are available according to the bike model and year. While SOLO 2 DL installation bracket is the same for all kits, the AiM ECU connection cable is both model and year dependent.

2.1
Kit for SOLO 2 DL and bracket for SOLO 2

AiM **SOLO 2 DL** kit part number for **Yamaha YZF-R1 2004-2008** and **Yamaha YZF-R6 2006-2016** – shown below – is: **V0256919CS.**

The kit contains:
1 bracket (**1**)
2 spacers (**2**)
2 self-locking nuts M6 (**3**)
4 washers M6 (**4**)
2 self-locking nuts M4 (**5**)
2 washers M4 (**6**)
2 allen screws with flat head M4x10mm (**7**)
2 allen screws with rounded head M6x60mm (**8**)
1 AiM connection cable with Yamaha YZF-R1 2004-2008 and Yamaha YZF-R6 2006-2016 (**9**)

AiM connection cable **(9)** and bracket **(1)** can be bought separately as spare parts:
SOLO 2 DL connection cable for Yamaha YZF-R1 2004-2008 and YZF-R6 2006-2016: **V02569190**
SOLO 2/SOLO 2 DL installation bracket for Yamaha YZF-R1 2004-2008: **X46KSYR16**

AiM **SOLO 2 DL** kit part number for **Yamaha YZF-R1 2009-2014** – shown below – is: **V0256921CS.**

The kit contains:
1 bracket (**1**)
2 spacers (**2**)
2 self-locking nuts M6 (**3**)
4 washers M6 (**4**)
2 self-locking nuts M4 (**5**)
2 washers M4 (**6**)
2 allen screws with flat head M4x10mm (**7**)
2 allen screws with rounded head M6x60mm (**8**)
1 AiM connection cable with Yamaha YZF-R6 2009-2014 (**9**)

AiM connection cable (**9**) and bracket **(1)** can be bought separately as spare parts:
SOLO 2 DL connection cable for Yamaha YZF-R1 2009-2014: **V02569210**
SOLO 2/SOLO 2 DL installation bracket for Yamaha YZF-R1 2009-2014: **X46KSYR16**

AiM **SOLO 2 DL** kit part number for **Yamaha YZF- R6 2004-2005** – shown below – is: **V0256920CS.**

The kit contains:
1 bracket (**1**)
2 spacers (**2**)
2 self-locking nuts M6 (**3**)
4 washers M6 (**4**)
2 self-locking nuts M4 (**5**)
2 washers M4 (**6**)
2 allen screws with flat head M4x10mm (**7**)
2 allen screws with rounded head M6x60mm (**8**)
1 AiM connection cable with Yamaha YZF-R6 2004-2005 (**9**)

AiM connection cable (**9**) and bracket (**1**) can be bought separately as spare parts:
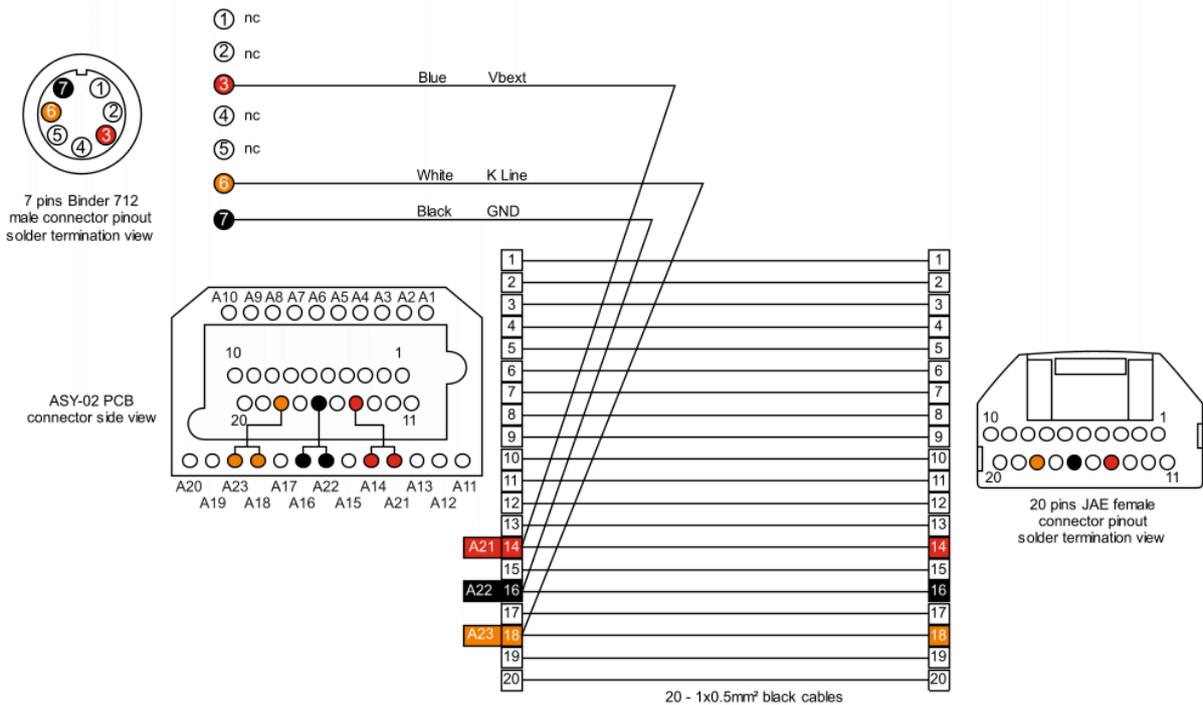**SOLO 2 DL connection cable** for Yamaha YZF-R6 2004-2005: **V02569200**
SOLO 2/SOLO 2 DL installation bracket for Yamaha YZF-R6 2004-2005: **X46KSYR16**

2.2
AiM cables for EVO4S/SOLO 2 DL

Different AiM connection cables for Yamaha are available, according to the bike model and year.

Part number for **EVO4S/SOLO 2 DL** connection cable for **Yamaha YZF-R1 2004-2008** ed **YZF-R6 2006-2016** – shown below – is: **V02569190**.

Following image shows the cable constructive scheme.

Part number for **EVO4S/SOLO 2 DL** connection cable for **Yamaha YZF-R1 2009-2014** – shown below – is: **V02569210**.

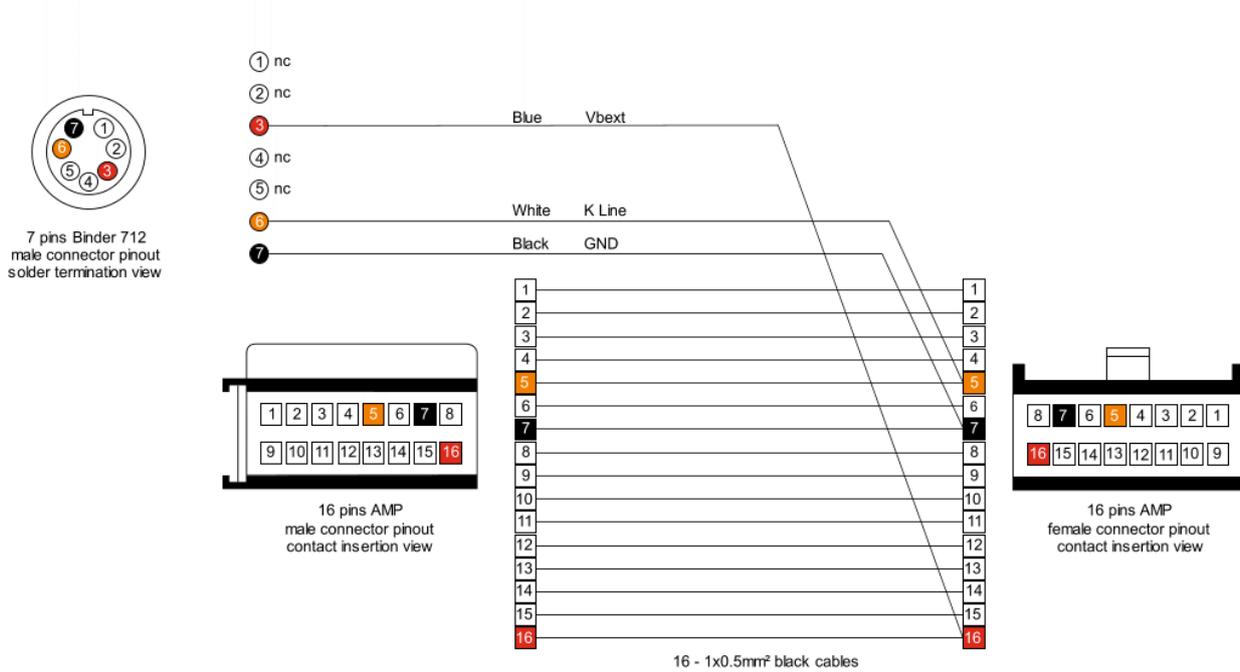Following image shows the cable constructive scheme.

Part number for **EVO4S/SOLO 2 DL** connection cable for **Yamaha YZF-R6 2004-2005** – shown below – is: **V02569200**.

Following image shows the cable constructive scheme.

3
EVO4S/SOLO 2 DL connection

To connect EVO4S/SOLO 2 DL to the bike ECU use the rear connector of the original instrumentation cluster.

Remove the windshield to uncover the original dashboard connector, highlighted in the picture on the right. Unplug the connector and connect it in its counterpart of the AiM cable.
Connect the second AiM cable connector to the original dashboard, then connect the AiM cable to the AiM device using the 7pins Binder connector.

4
Configuring with Race Studio 3

Before connecting EVO4S/SOLO 2 DL to the bike ECU, set all functions using the AiM software Race Studio 3. The parameters to set in the AiM device configuration section are ("ECU Stream" tab):

ECU Manufacturer: "YAMAHA"
ECU Model:

○	BIKE_R1_04_05_06	for Yamaha YZF-R1 from 2004 to 2006 included
○	BIKE_R1_07_11	for Yamaha YZF-R1 from 2007 to 2008 included
○	BIKE_R1_07_11	for Yamaha YZF-R1 from 2009 to 2014 included
○	BIKE_R6_04_05	for Yamaha YZF-R6 from 2004 to 2005 included
○	BIKE_R6_06_10	for Yamaha YZF-R6 from 2006 to 2016 included

5
Yamaha protocols

Received channels by EVO4S/SOLO 2 DL are the same for different Yamaha ECU communication protocols, but it is necessary to set the correspondent protocol to the bike model year to be able to correctly receive them.

CHANNEL NAME	FUNCTION
R1 RPM	RPM
R1 WH SPEED	Wheel speed
R1 ECU ERR	ECU Error
R1 WATER TEMP	Water temperature
R1 AIR TEMP	Air temperature