AiM User Guide

Solo 2/ Solo 2 DL, EVO4S, XLog and ECULog kits for Yamaha YZF-R1 2004-2014 and Yamaha YZF-R6 2004-2016

Release 1.02

KIT

1
Models and years

This manual explains how to connect Solo 2 DL, EVO4S, XLog and ECULog to the bike engine control unit (ECU).

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 consequence that may result from the replacement of the original instrumentation cluster.

2
Kits content and part numbers

AiM developed different kits for Solo 2/Solo 2 DL and different connection cables for EVO4S, XLog and ECULog according to the bike model and year. While Solo 2 DL installation bracket is the same for all kits, ECU connection cable is both model and year dependent.

2.1
Bracket for Solo 2/Solo 2 DL

Part number of Solo 2 DL installation bracket kit for Yamaha – shown below – is: **X46KSYR16**.

The kit contains:
- 1 bracket (**1**)
- 2 spacers (**2**)
- 2 M6 self-locking nuts (**3**)
- 4 M6 washers (**4**)
- 2 M4 self-locking nut (**5**)
- 2 M4 washers (**6**)
- 2 M4x10mm Allen screws with flat head (**7**)
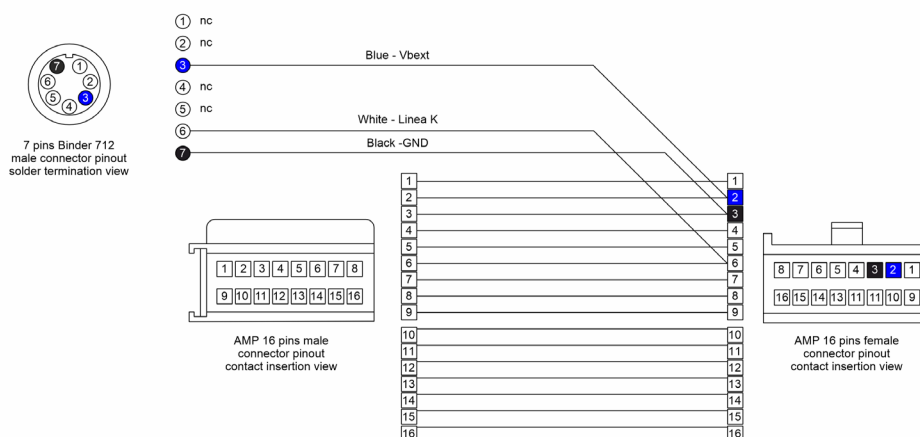- 2 M6x60mm Allen screws with rounded head (**8**)

2.2
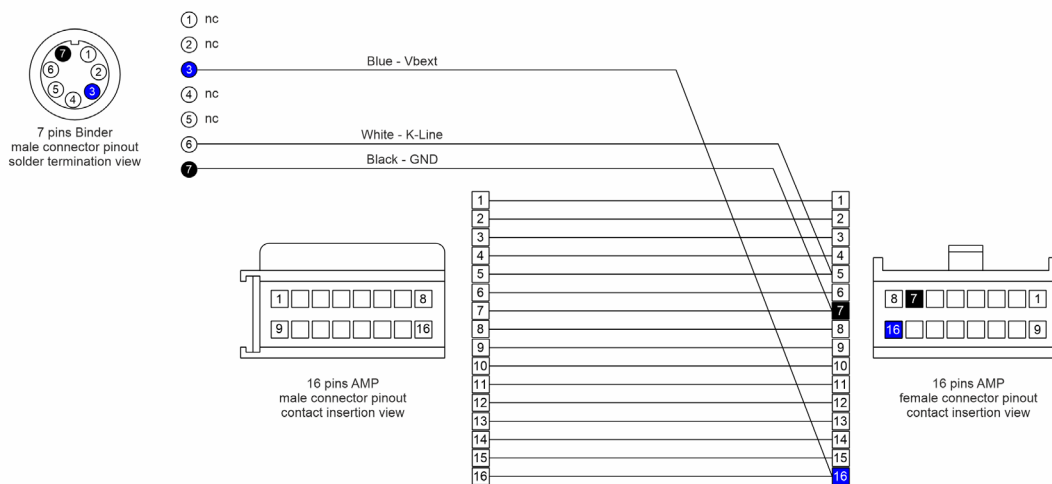## AiM K-Line cables for Solo 2 DL, EVO4S, Xlog and ECULog

According to the bike model and year different K-Line connection cables have been developed. They fit Solo 2 DL, EVO4S, XLog and ECULog. Please refer to the following table to know which cable is needed to connect your Yamaha bike. The images that follow the table show the cables and the related constructive schemes.

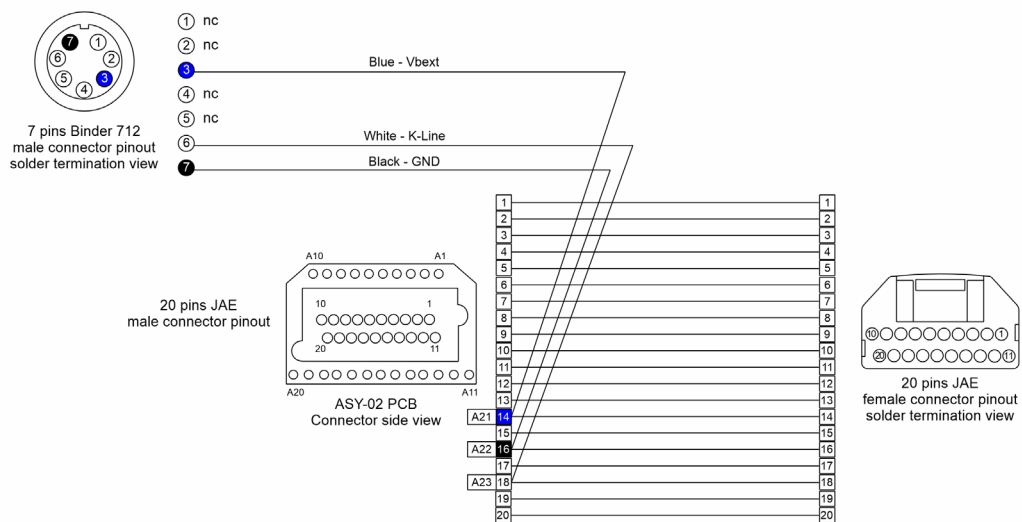|	V02569190	V02569200	V02569210
Yamaha YZF-R1 (YEC included) 2004-2008	✓		
Yamaha YZF-R6 (YEC included) 2006-2016	✓		
Yamaha YZF-R1 (YEC included) 2009-2014			✓
Yamaha YZF-R6 (YEC included) 2004-2005		✓	

K-line and power cable **V02569190** for Yamaha YZF-R1 2004-2008 and Yamaha YZF-R6 2006-2016 YEC included).

K-Line and power cable **V02569200** for Yamaha YZF-R6 2004-2005 (YEC included).

① nc	
② nc	
③	Blue - Vbext
④ nc	
⑤ nc	
⑥	White - K-Line
⑦	Black - GND

7 pins Binder
male connector pinout
solder termination view

16 pins AMP
male connector pinout
contact insertion view

16 pins AMP
female connector pinout
contact insertion view

K-Line and power cable **V02569210** for Yamaha YZF-R1 2009-2014 (YEC included).

2.3
AiM kits for Solo 2 DL (K-Line cable+ bracket)

Connection cables and installation bracket for Solo 2 DL can also be bought together. Please refer to the following table to know the related part numbers.

	V0256919CS	V0256920CS	V0256921CS
Yamaha YZF-R1 (YEC included) 2004-2008	✓		
Yamaha YZF-R6 (YEC included) 2006-2016	✓		
Yamaha YZF-R1 (YEC included) 2009-2014			✓
Yamaha YZF-R6 (YEC included) 2004-2005		✓	

3
Solo 2 DL, EVO4S, XLog and ECULog connection

Yamaha bikes communicates using the K-Line that can be reached on the rear connector of the original instrumentation cluster shown here on the right and covered by an windshield.

To connect AiM devices remove the windshield – as highlighted in the picture on the right – and unplug the connector.

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 7 pins Binder connector.

4
Configuring with RaceStudio 3

Before connecting AiM devices to the bike ECU, set all functions using AiM RaceStudio 3 software. The parameters to set in the device configuration ("ECU Stream" tab) changes according to the bike model and year:

- ECU Manufacturer: "**YAMAHA**"
- ECU Model:
  - **BIKE_R1_04_05_06**   Yamaha YZF-R1 from 2004 to 2006 included (RaceStudio 3 only)
  - **BIKE_R6_06_10**   Yamaha YZF-R6 from 2006 to 2016 included (RaceStudio 3 only)
  - **BIKE_R1_07_11**   Yamaha YZF-R1 from 2007 to 2014 included (RaceStudio 3 only)
  - **BIKE_R6_04_05**   Yamaha YZF-R6 from 2004 to 2005 included (RaceStudio 3 only)

5
Yamaha protocols

Channels received by AiM devices configured with Yamaha protocols are the same for all protocols but it is necessary to match each protocol to the bike model and year so to make the device 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