

AiM InfoTech

YAMAHA  
YXZ – YXZ SS

Release 1.00

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# 1 Supported models

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This document explains how to connect AiM devices to the vehicle Engine Control Unit (ECU) data stream.

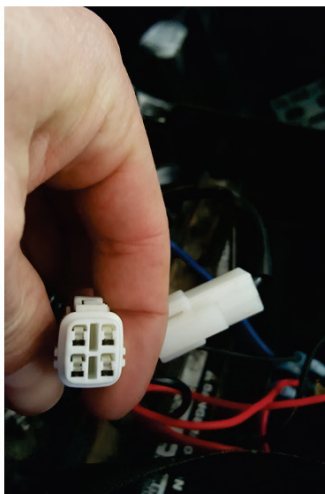
Supported models and years are:

- YXZ 1000R
- YXZ 1000R SS
- YXZ 1000R SS SE

# 2 Wiring connection

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These models feature a specific manufacturer protocol based on CAN, accessible through the Sumitomo MT090 4 pins female connector plug located under the central tunnel behind the passenger seats. For this installation refer to the following pinout and its connection table.



**Sumitomo connector**

Yellow / Red  
Black/ Light blue  
Red / White  
Black / White

**Function**

CAN Low  
CAN High  
V Battery  
Ground

**AiM cable**

CAN-  
CAN+  
V Batt  
GND

**AiM color cable**

Blue  
White  
Red  
Black

## 3

# Race Studio configuration

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Before connecting the AiM device to the ECU, set all functions using AiM software Race Studio. The parameters to set in the device configuration are:

- ECU manufacturer: **YAMAHA**
- ECU Model: **YXZ** standard gear position lever  
**YXZ SS** sport shifter – the vehicle with paddle shifters

## 4

# Protocols

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Channels received by AiM devices change according to the selected protocol.

## 4.1

# “YAMAHA – YXZ” protocol

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Channels received by AiM devices configured with “YAMAHA – YXZ” protocol are:

<b>CHANNEL NAME</b>	<b>FUNCTION</b>
RPM	Engine RPM
Throttle	Throttle position sensor
BatteryVolt	Battery voltage
IntakeAirTemp	Intake air temperature
MAP	Manifold air pressure
BaromPress	Barometric pressure
BrakeSw	Brake switch
OilPressureSw	Oil pressure switch
Gear	Engaged gear
VehicleSpeed	Vehicle speed
WaterTemp	Water temperature
ECU Error	ECU error
ECU MIL	Malfunction indicator lamp
ECU AWD	All wheel drive activation

**Technical note:** not all data channels outlined in the ECU template are validated for each manufacturer’s model or variant; some of the outlined channels are model and year specific, and therefore may not be applicable.

## 4.2

# “YAMAHA – YXZ SS” protocol

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Channels received by AiM devices configured with “YAMAHA – YXZ SS” protocol are:

<b>CHANNEL NAME</b>	<b>FUNCTION</b>
ECU RPM	Engine RPM
ECU Gear	Engaged gear
ECU VehSpeed	Vehicle speed
ECU CoolTemp	Water temperature
ECU IntakeAirT	Intake air temperature
ECU TPS	Throttle position sensor
ECU ClutchEngag	Clutch engaged
ECU BrkSw	Brake switch
ECU GearLevPos	Gear lever position
ECU Error	ECU error
ECU MIL	Malfunction indicator lamp
ECU AWD	All wheel drive activation

**Technical note:** not all data channels outlined in the ECU template are validated for each manufacturer’s model or variant; some of the outlined channels are model and year specific, and therefore may not be applicable.