Zytek ECU

INTRODUCTION

AIM has developed special applications for many of the most common ECUs: by special applications we mean user-friendly systems which allow to easily connect your ECU to our hi-tech data loggers: user need only to install harness between the **logger** and the ECU.

Once connected, the logger displays (and/or records, depending on the logger and on the ECU data stream) values like RPM, engine load, throttle position (TPS), air and water temperatures, battery voltage, speed, gear, lambda value (air/fuel ratio), analog channels..

All AIM loggers include – free of charge – **Race Studio 2** software, a powerful tool to configure the system and analyze recorded data on your PC.

Warning: once the ECU is connected to the logger, it is necessary to set it in the logger configuration in Race Studio 2 software.
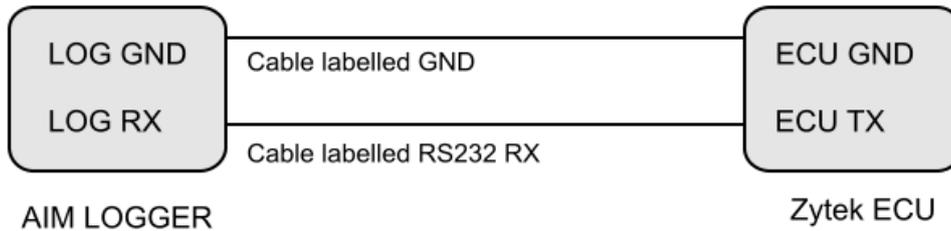**Select Manufacturer "ZYTEC" and Model "EMS4 F3000 (BETA Ver)".**
Refer to Race Studio Configuration user manual for further information concerning the loggers configuration.

Warning: it is strongly recommended to always verify whether the ECU needs specific software settings to export data.

1 – Serial Communication Setup

Zytek ECU has a serial communication protocol and is equipped with 2 male connectors used to communicate with an external logger and to configure the ECU itself.

2 – Connection to AIM loggers

To connect Zytek (ECU Chassis) to AIM loggers connect:

- AIM cable labelled RS232RX to ECU TX (pin 35)
- AIM cable labelled GND to ECU GND (pin 45)

Here below the connector of the ECU:

AS6 18 35SN (17)
RS232TX (pin 35)
GND (pin 45)

PIN	FUNCTION
35	RS232TX
45	GND

3 – Communication protocol

Channels received by AIM loggers connected to Zytek ECU are:

ID	FUNCTION	COMMENTS
ECU_1	ZY_RPM	RPM
ECU_2	ZY_ABS_MAX_RPM	Absolute Max RPM
ECU_3	ZY_VAL_MAX_RPM	Validated Max RPM
ECU_6	ZY_ENGINE_RUNT	Engine Runtime
ECU_7	ZY_THROTTLE	Throttle
ECU_8	ZY_THROTTLE_V	TPS Voltage
ECU_9	ZY_BATT_VOLT	Battery voltage
ECU_10	ZY_WATER_TEMP	Water temperature
ECU_11	ZY_AIR_TEMP	Air temperature
ECU_13	ZY_OIL_TEMP	Oil temperature
ECU_15	ZY_FUEL_PRESS	Fuel pressure
ECU_16	ZY_OIL_PRESS	Oil pressure
ECU_17	ZY_FUEL_USED	Fuel consumption
ECU_19	ZY_ENGINE_ID	Engine ID