AiM Infotech

Mercury CAN ECU

Release 1.02

ECU

1
Supported models and years

This user guide explains how to connect AiM devices to Mercury engines. Supported models are:
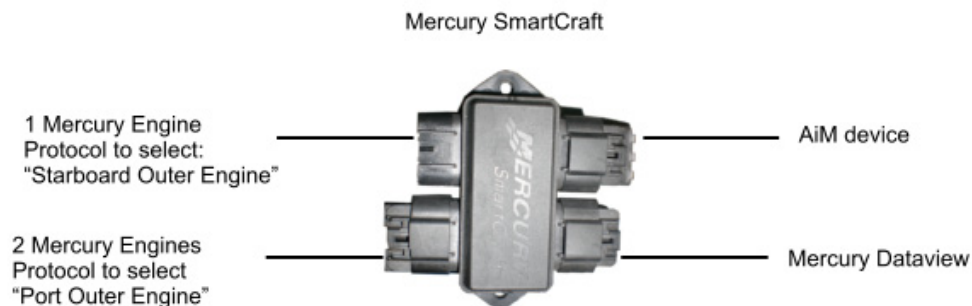
- Mercury SmartCraft engines.

2
Wiring

Boats can be equipped with one or two Mercury SmartCraft engines; in any case the stock Mercury Dataview system is needed.

According to the number of engines installed on the boat the protocol to be selected changes. Here below the wiring scheme and the driver to select are shown.

3
CAN connection

Mercury SmartCraft engines are equipped with a bus communication protocol based on CAN that can be reached on the 10 pins male connector. Here below you see the connector with the cables already plugged in on the left and the connector pinout on the right. Below is connection scheme.
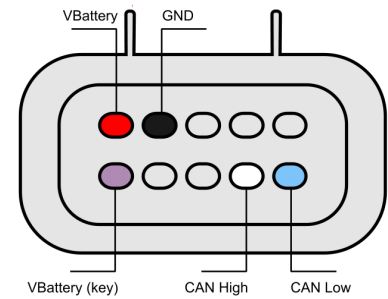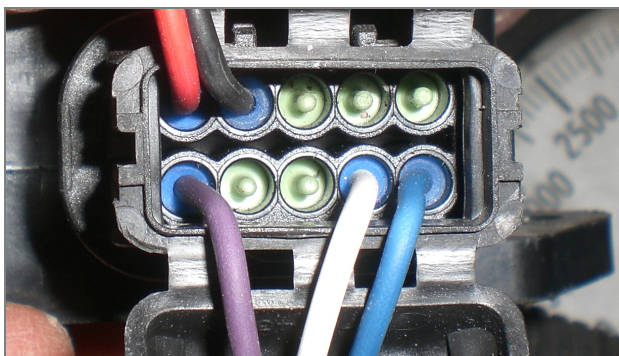
Cable colour	Pin function	AiM cable
White	CAN High	CAN+
Blue	CAN Low	CAN-

4
AiM device configuration

Before connecting the ECU to AiM device set this up using AiM Race Studio software. The parameters to select in the logger configuration are:

- ECU Manufacturer: "MERCURY"
- ECU Model:
    - "STARTBOARD_OUTER_ENGINE" if one engine is installed
    - "PORT_OUTER_ENGINE" if two engines are installed

5
Available channels

Channels received by AiM devices connected to "Mercury" "STARTBOARD_OUTER_ENGINE" and "PORT_OUTER_ENGINE" protocols are the same:

ID	CHANNEL NAME	FUNCTION
ECU_1	MY_RPM	RPM
ECU_2	MY_DTS_POS	Digital throttle and shaft position
ECU_3	MY_TPS	Throttle position sensor
ECU_4	MY_MAP	Manifold air pressure
ECU_5	MY_DTS_SEL	Digital throttle selected
ECU_6	MY_H2O_PRESS	Water pressure
ECU_7	MY_BOOST_PRESS	Boost pressure
ECU_8	MY_POS_TRIM	Trim position
ECU_9	MY_PROP_TRIM	Prop trim
ECU_10	MY_OIL_TEMP	Oil temperature
ECU_11	MY_OIL_PRESS	Oil pressure
ECU_12	MY_ENG_TEMP	Engine temperature
ECU_13	MY_BLOCK_PRESS	Block pressure
ECU_14	MY_BAP	Barometric pressure
ECU_15	MY_V_BATT	Battery supply
ECU_16	MY_FUEL_PRESS	Fuel pressure
ECU_17	MY_AVAIL_POWER	Available power