MARELLI MF4 ECU

for Ducati 998 Racing

(no stock bike)

AiM

Racing Data Power

INTRODUCTION

AIM has developed special applications for many of the most popular ECUs; by special applications we mean user-friendly systems which allow to easily connect your ECU to our high tech data loggers: user needs 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 and configuration) 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 "Marelli" Model "MF4-998_RK".
Refer to Race Studio Configuration user manual for further information concerning the loggers configuration.

Warning: it is always suggested to verify if the ECU needs any software/firmware setting or upgrade to export data to an external logger.
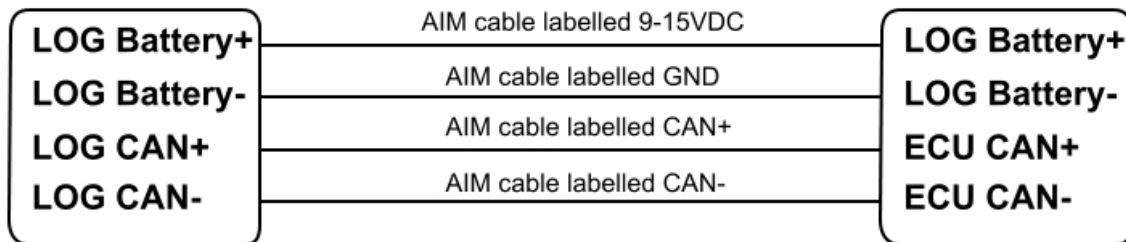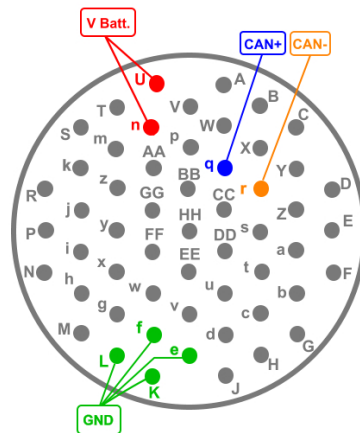
INDEX

Chapter 1 – CAN Communication setup

Magneti Marelli MF4 ECU for Ducati 998 Racing (no stock bike) championship is equipped with a CAN communication setup used to communicate parameters to an external logger and shown here below.

Chapter 2 – Connection with AIM loggers

Magneti Marelli MF4 ECU is equipped with a 55 pins connector shown here below.

To connect AIM logger to the ECU:

- connect AIM cable labelled CAN+ with pin "**q**" of 55 pins connector;
- connect AIM cable labelled CAN- with pin "**r**" of 55 pins connector
- connect AIM cable labelled GND with pin "**K**", "**L**", "**e**" or "**f**" of 55 pins connector;
- connect AIM cable labelled "VBatt" with pin "**n**" or "**U**" of 55 pins connector.

Chapter 3 – MF4 Ducati 998 Racing communication protocol

Channels received by AIM loggers connected to Magneti Marelli MF4 for Ducati 998 Racing (no stock bike) are:

ID	CHANNEL NAME	FUNCTION
ECU_1	MF4_RPM	RPM
ECU_2	MF4_THROTPOS	Throttle position
ECU_3	MF4_WATER_TEMP	Water temperature
ECU_4	MF4_AIR_TEMP	Air temperature
ECU_5	MF4_AIR_PRESS_SENSOR	Air pressure sensor