AiM InfoTech

IZZE RACING – SG AMP V2

Release 1.00

1
Software configuration

This document explains how to connect third party CAN expansion modules to AiM devices CAN2 bus.

The driver here documented allows to read four different Izze Racing Strain Gauge Amplifier modules SGAMP-V2 and one wireless StrainGauge Amplifier W-SGAMP-V2 at the same time. To correctly communicate with the AiM device, it is necessary to set them up using the following parameters. Refer to the manufacturer for additional details on the configuration procedure.

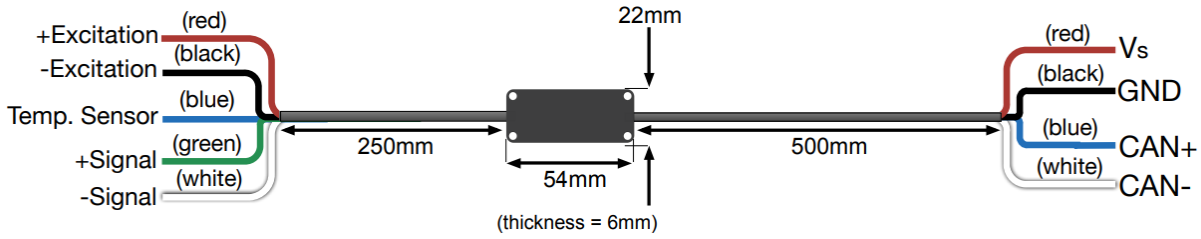
Baudrate: **1Mbit/s (1000kbit/s)**

CAN ID for Front Left (LF): **0x4E2**
CAN ID for Front Right (RF): **0x4E3**
CAN ID for Rear Left (RL): **0x4E4**
CAN ID for Rear Right (RR): **0x4E5**
CAN ID for Wireless module: **0x429**

Please note: In case this module is going to be used with different parameters, the user can set up a custom driver from the **CAN Protocols** section of the AiM configuration software Race Studio 3. Check the dedicated manual from the AiM website www.aim-sportline.com, Documentation – Firmware/Software area.

2
Wiring connection

These modules feature a bus communication protocol based on CAN, this data stream is accessible through their flying leads here pictured, following the connection table below.



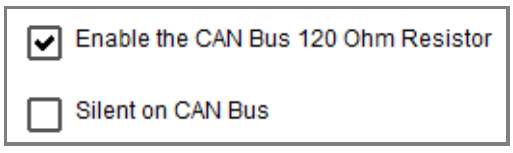
SG AMP V2 cable color	**Function**	**AiM wire label (optional harness)**
Blue	CAN High	CAN2 +
White	CAN Low	CAN2 –

3
AiM device configuration

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

- ECU manufacturer: **IZZE RACING**
- ECU Model: **SG AMP V2** (Only RS3 – CAN2 Stream)

If there is only the AiM device connected to this module, enable the CAN Bus 120 Ohm Resistor.



4
“IZZE RACING – SG AMP V2” protocol

Channels received by AiM loggers configured with “IZZE RACING – SG AMP V2” protocol are:

CHANNEL NAME	FUNCTION
Amp Temperature	Wireless module temperature
LF SGAMP T INTER	Internal temperature Front Left
LF SGAMP T EXTER	External temperature Front Left (optional)
RF SGAMP T INTER	Internal temperature Front Right
RF SGAMP T EXTER	External temperature Front Right (optional)
LR SGAMP T INTER	Internal temperature Rear Left
LR SGAMP T EXTER	External temperature Rear Left (optional)
RR SGAMP T INTER	Internal temperature Rear Right
RR SGAMP T EXTER	External temperature Rear Right (optional)
Amp Diff Volt	Wireless module differential voltage
Amp Battery Volt	Wireless module battery voltage
LF SGAMP RAW	Differential voltage Front Left
LF SGAMP CAL	Calibrated output Front Left
RF SGAMP RAW	Differential voltage Front Right
RF SGAMP CAL	Calibrated output Front Right
LR SGAMP RAW	Differential voltage Rear Left
LR SGAMP CAL	Calibrated output Rear Left
RR SGAMP RAW	Differential voltage Rear Right
RR SGAMP CAL	Calibrated output Rear Right
RSSI	Wireless module signal strength