

**ECU for
NISSAN GTR**



Racing Data Power

INTRODUCTION

AIM has developed special applications for many of the most popular ECU: 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 “Nissan” and Model “GT-R-Skyline”

For any further information concerning ECU firmware/software settings and/or upgrading it is always recommended to address to the ECU dealer.

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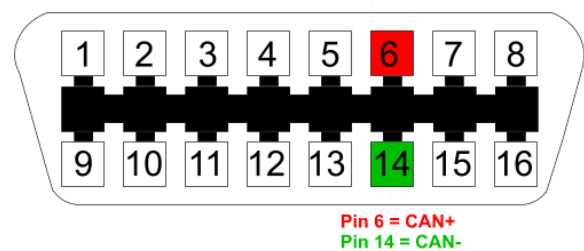
Chapter 1 – Car models

GTR Skyline car models supported by AIM loggers are:

- Nissan GTR – 2008
- Nissan GTR – 2009
- Nissan GTR – 2010
- Nissan GTR – 2011

Chapter 2 – CAN communication setup

Nissan GTR is equipped with a CAN communication protocol used to communicate with an external logger. To make Nissan GTR ECU communicate with AIM loggers it is possible to use the OBDII connector placed under the steering column.



To connect AIM logger with the OBDII connector (shown here above on the right):

- connect **AIM cable labelled CAN+** to **pin 6 of OBDII connector**;
- connect **AIM cable labelled CAN-** to **pin 14 of OBDII connector**.

Chapter 3 – Nissan GTR communication protocol

Channels received by AIM loggers connected to Nissan GTR ECU are:

ID	CHANNEL NAME	FUNCTION
ECU_1	GTR_RPM	Engine speed sensor
ECU_2	GTR_VEH_SPEED	Vehicle Speed
ECU_3	GTR_PPS	Pedal Position sensor
ECU_4	GTR_GEAR	Engaged Gear
ECU_5	GTR_BRAKE_SW	Brake switch
ECU_6	GTR_BRAKE_POS	Brake Position
ECU_7	GTR_BOOST	Boost Pressure
ECU_8	GTR_SPEED_FR	Front right wheel Speed sensor
ECU_9	GTR_SPEED_FL	Front Left Speed sensor
ECU_10	GTR_SPEED_RL	Rear Left Speed sensor
ECU_11	GTR_SPEED_RR	Rear Right Speed sensor
ECU_12	GTR_PPS2	Pedal position 2
ECU_13	GTR_BRAKE_SW2	Brake Switch 2
ECU_14	GTR_GEAR_AUTOM	Automatic Gear mode active
ECU_15	GTR_ECT	Engine coolant temperature
ECU_16	GTR_OILT	Temperature sensor
ECU_17	GTR_GEARBOX_T	Gearbox oil Temperature
ECU_18	GTR_OILP	Oil Pressure
ECU_19	GTR_STEER_ANG	Steering angle
ECU_20	GTR_STEER_SPD	Steering angle speed
ECU_21	GTR_ACC_LONG	Longitudinal accelerometer
ECU_22	GTR_ACC_LAT	Lateral accelerometer
ECU_23	GTR_DIFF_CTRL	Differential Control
ECU_24	GTR_TC_OFF	Traction Control OFF
ECU_25	GTR_SUSP_CAL	Suspension setup