AiM Infotech

Pectel SQ6 for Formula Renault 2000 ECU

Release 1.00

ECU

This tutorial explains how to connect Pectel SQ6 for Formula Renault 2000 ECU to AiM devices. Supported years are:

- Pectel SQ6 for Formula Renault 2000 from 2011 onward

1 Wiring connection

Pectel SQ6 for Formula Renault 2000 from 2011 ECU features a data transmission bus based on CAN. To reach it use the 7 pins video connector you find under the driver seat. Here below are connector pinout and connection table.

Front connector pin	Pin function	AiM cable
4	CAN High	CAN+
5	CAN Low	CAN-

2
AiM device configuration

Before connecting AiM device to the ECU, set it up as follows:

Run Race Studio 2 software and select:

- Device Configuration –> Select the device you are using;
- select the configuration or press “New” to create a new one;
- select ECU manufacturer “Pectel” and ECU Model "SQ6_FR2000"
- transmit the configuration to the device pressing “Transmit”.

3
Available channels

Channels received by AiM devices connected to Pectel "SQ6_FR2000" protocol are:

ID	CHANNEL NAME	FUNCTION
ECU_1	FR_RPM	RPM
ECU_2	FR_VEH_SPEED	Vehicle Speed
ECU_3	FR_FL_SPEED	Front Left wheel speed
ECU_4	FR_FR_SPEED	Front Right wheel speed
ECU_5	FR_TPS	Throttle position sensor
ECU_6	FR_PPS	Pedal position sensor
ECU_7	FR_GEAR	Engaged gear
ECU_8	FR_BRAKE_F	Front brake sensor
ECU_9	FR_BRAKE_R	Rear brake sensor
ECU_10	FR_BRAKE_BAL	Brake balance
ECU_11	FR_MAP	Manifold air pressure
ECU_12	FR_OIL_PRESS	Oil pressure
ECU_13	FR_FUEL_PRESS	Fuel pressure

ECU_14	FR_IAT	Intake air temperature
ECU_15	FR_ECT	Engine cooling temperature
ECU_16	FR_OILT	Oil temperature
ECU_17	FR_BATT_VOLT	Battery supply
ECU_18	FR_STEER_ANGLE	Steering angle
ECU_19	FR_ACC_Y	Vertical accelerometer
ECU_20	FR_ACC_X	Horizontal accelerometer
ECU_21	FR_LAMBDA1	Lambda Value 1
ECU_22	FR_LAMBDA2	Lambda Value 2
ECU_23	FR_ROLL_mm	Rolling value in mm
ECU_24	FR_SUSP_F_mm	Front suspension in mm
ECU_25	FR_SUSP_LR_mm	Rear left suspension in mm
ECU_26	FR_SUSP_RR_mm	Rear right suspension in mm