

AiM InfoTech

CARROT C-32
ECU

Release 1.00



ECU



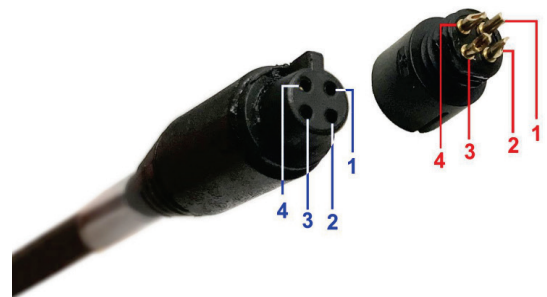
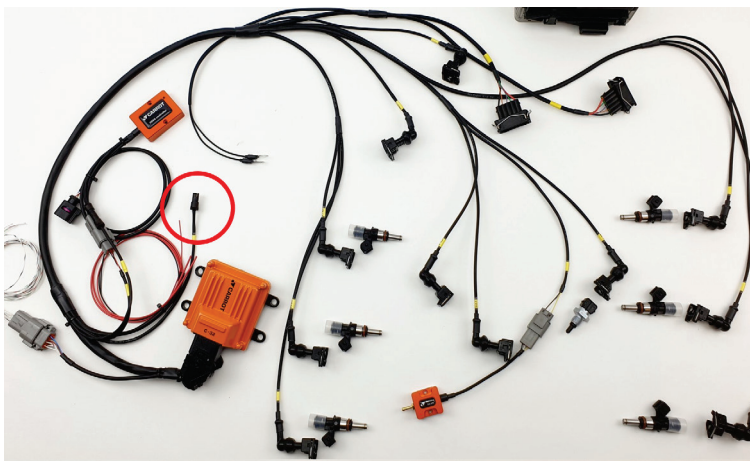
1 Supported models

This document explains how to connect AiM devices to the Engine Control Unit (ECU) data stream. Supported models and years are:

- CARROT C-32

2 Wiring connection

Carrot C32 ECU features a CAN communication, and it is possible to connect to AiM devices through the Binder 719 (4pin) male connector on their standard wiring loom. For this installation refer to the following Binder pinout and connection table.



Binder 719 (4pin)

3
4

Function

CAN High
CAN Low

AiM cable

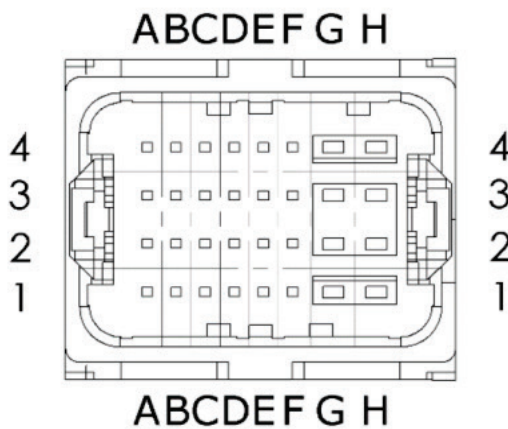
CAN +
CAN -

AiM color cable

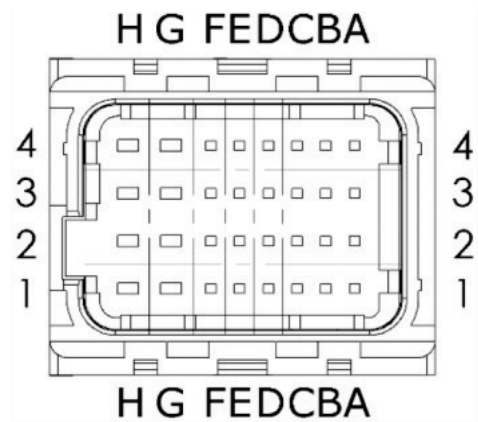
White
Blue

2.1 Wiring connection

Another alternative is the connection with the Molex CMC 64319 (32 ways) female main connector. For this installation refer to the following pinout of the Molex CMC (32 ways) connector and its connection table.



Front view



Rear view

Molex CMC (32 pin) connector

- 4A (White wire)
- 4B (Grey wire)

Function

- CAN High
- CAN Low

AiM cable

- CAN +
- CAN -

AiM color cable

- White
- Blue

3

Race Studio configuration

Before connecting the AiM device to the ECU, set all functions using AiM software Race Studio. The parameters to set in the device configuration are:

- ECU manufacturer: **CARROT**
- ECU Model: **CARROT C32** (only RS3)

4

“CARROT – CARROT C32” protocol

Channels received by AiM devices configured with "CARROT – CARROT C32" protocol are:

CHANNEL NAME	FUNCTION
RPM	Engine RPM
Gear	Gear position
Speed	Vehicle speed
WaterTemp	Water temperature
ExhTemp1	Exhaust gas temperature 1
ExhTemp2	Exhaust gas temperature 2
IntakeAirTemp	Intake air temperature
ETC	Electronic throttle control temperature
IgnitionBTDC	Ignition advance
OilPress	Oil pressure
MAP	Manifold air pressure
AtmPress	Atmosphere pressure
ALSActive	Anti-lag active status
AccRPMChange	Acceleration RPM change
Inj1Corr	Injection correction 1
Inj2Corr	Injection correction 2



IgnitionCorr	Ignition correction
IdleValve	Idle valve
BoostValve	Boost valve
WheelSlip	Wheel slip
TPS	Throttle position sensor
PPS	Pedal position sensor
Inj1Pulse	Injection pulse 1
Inj2Pulse	Injection pulse 2
VBatt	Voltage battery
Lambda1	Lambda value 1
Lambda2	Lambda value 2
SoftRPMLimit	RPM limiter cut
EngLoad	Engine load
BoostEngLoad	Engine load boost
Crank	Crank sensor
AuxOut2	Auxiliary output 2
BoostControl	Boost control
AuxOut3	Auxiliary output 3
TracionCtrl	Traction control
Als active	Anti-lag active status
Lambda1Status	Lambda 1 status
Lambda2Status	Lambda 2 status
SpeedLimiter	Speed limiter
FuelPump	Fuel pump relay control
AuxOut1	Auxiliary Output 1
LambdaControl	Lambda control
LambdaError	Lambda error
SensorSupply	Sensor supply
TractionMainSw	Traction main switch
LaunchRPM	Variable launch RPM
OverRun	Over run
PowerShiftIn	Power shift control



SpdCalR	Rear speed calculator
LaunchInput	Launch input
BoostLimit	Boost limiter
BLIP	Blipper position
Err	Error
SpdCalF	Front speed calculator
MapSwitchPos	MAP switch position
LaunchSwitchPos	Launch switch position

Technical note: not all data channels outlined in the ECU template are validated for each manufacture's model or variant; some of the outlined channels are model and year specific, and therefore may not be applicable.