

PDM32

How to connect power and grounds

The main battery positive connector is on top of the unit and uses the supplied 120A Amphenol Surlok connector.

The main grounds are pins 13 and 14 of the grey connector.

Pin 23 requires an external 12 V to operate the PDM otherwise it will not operate or show any sign of life.

Pin 18 grey connector is a ground for the analogue (pins 26-33) and digital inputs(21-22) and pin 16 (+5V Reference) and pin 17(+12v Vbattery out).

Pin10 on the black connector is a ground for digital input 11 (pin 26) and digital input 12 (pin 27), and the CAN power outputs (pins 32 and 33).

The inputs and Can power have different grounds to prevent ground interference causing problems.

Digital Inputs 11 and 12 can power the PDM without powering the dash.

For example, if the hazard lights were a switched 12V on input 12 the hazard lights could operate without the ignition being on. However, all other outputs could also be powered. A way to prevent this from happening is to add an "AND" condition to all other outputs that "SAFE IGNITION" is on.

On a race car if the only external 12v applied is on the Ignition circuit if ignition is off then all outputs will be off.

Connecting a GPS08 Module and CAN Designations.

Gps 08 module is supplied with a male 712 Binder 5 pin plug which does not connect to the camera input on the PDM32.

It needs to connect to Can0 H (22) and Can0 L (11) with ground (10), +VBext(32) and +VBout (33)

A female 712 Binder inline socket is available from Aim Technologies and should be soldered as shown here.

Alternately if you don't like soldering you could opt for a 1-meter patch-lead and cut off the end (P-712-712-5-1) available from aimshop.com

The colour code of the cables in a patch lead or the gps lead is

Gnd	Black	Vb out	Red
Vb ext	Orange	CANH	White
CAN L	Blue		

Can 0 is the Aim Expansion Can

Can 1 is the ECU Can (only CAN H and CAN L used)

Can 2 is used for buttons and VIM modules.



1 - AIM CAN High
2 - Ground
3 - +Vb output CAN
4 - AIM CAN Low
5 - +Vb ext CAN