

## **Frequently asked Questions about the PDM.**

### **Can I have the display start up from a Button on the can keyboard?**

The screen only comes alive when 12 V comes in from an external source to pin 23 on the grey connector.

You can use a workaround to get it to work. If 12v is externally applied to the Digital inputs 11 or 12 the dash remains off but the pdm can work. you could have a low power output work and give the ignition input 12 V as well as say the ecu.

The dash will light up because of the button that caused that output to come on.

### **Can I have multiple outputs work because of multiple presses on a button?**

Yes, you can, you can set all inputs as Digital Inputs which can have multi press and time press identities.

Can keyboards also can have multi identity values.

An analogue input can be used in status variables to have different voltage values set the status variable.

### **Can one input control multiple outputs?**

Yes, the PDM coding has the outputs ask the inputs if their condition is set so the output can operate.

### **Can I have the shift lights operate as a speedometer with speed limit markers for 30,40,50,60,70 mph?**

The shift lights are designed for optimum gear shifting or as Predictive lap indicators.

You can however use a math channel to multiply gps speed by 1 and have the output as an engine rpm. Using that math channel as the shift light rpm you have now got speed on the shift lights and you can set them for what indicators you want them to be.

### **How can I work with inductive loads on the PDM?**

Inductive loads can first appear as a short on the output of the pdm and can cause a pulse to be generated if shut off quickly. The inrush current can be up to 3 times the normal operating current. The best way to operate inductive loads is with soft start and soft stop of 2 seconds or more. This will apply the output power gradually and withdraw the power gradually and prevent the huge spikes that otherwise would occur.

### **I need more inputs to the PDM what can I do?**

The PDM has 12 inputs, 8 of which can be analogue or digital, 4 are digital only.

You can add can keyboards giving between 4 and 12 buttons, wireless wheels giving up to 8 buttons and 2 rotary inputs. , RIO modules which can give 8 high or low inputs 11 low only inputs, Can Expansions which can give 4 more analogue or digital inputs. You can have multiples of the last two.

### **Why is the PDM only a usb connection not a Wi-Fi connection?**

The PDM is designed to be in a vehicle all the time and be in control of the systems. It would not be prudent to have the technology accessible by wireless connection as it could result in the PDM being reprogrammed by hackers.

### **What connects to what can interface?**

The can 0 interface is used for aim equipment like GPS (08 or 09), Lambda controllers, Can Expansions, Gs Dash, Shift Module, Smarty Cameras and RIO units.

Can 1 is reserved for ECU connections only and nothing else is connected to this in case it conflicts with the ECU causing undesired operation.

Can 2 is used for ancillary devices like can keyboards, wireless keyboards, TPMS systems and other devices not manufactured by Aim and not an engine ECU.

### **I'M unsure how much current this device needs to operate how do I add it to the PDM?**

You can use a HBPO output temporarily and limit the current by selecting a lower current value these outputs can supply up to 35 amps. You can see the value needed in live measures when the device operates normally.

### **How can I have the PDM check my Bulbs are not blown?**

The pdm has on all outputs the possibility of adding a minimum current level. You can see how much current is drawn by an output when working and say it is 3.5a you could put a minimum current of 3a so if it takes less current when on the bulb is either missing or blown. Alarms can be set to show if the output is open circuit.

### **I want to use a few devices that are supposed to be on can2 how can I have them all work?**

You can get in touch with [sales@aimshop.com](mailto:sales@aimshop.com) who can arrange to have the multiple CAN streams combined onto one CAN2 protocol so that the devices can work together. If all the devices are bought from the aimshop this will be free but there may be costs for adding protocols for devices sourced elsewhere. Some button functions may be removed to allow multiple devices to sit on the same bus because of bandwidth limitations.

**In a road legal car, I would like the indicators to auto cancel. Can this be done?**

Yes, you can use the inbuilt logger roll pitch and yaw for such a situation. The yaw increases when turning right and decreases when turning left. If you want the right indicator to cancel you can use a function with yaw less than -5 and to cancel left turn the function would have a yaw greater than 5.

**If My front wipers are on can I have my rear wipers come on when I select reverse to wash and have 3 wipes?**

Yes, you can code that into the PDM32. If the front wipers are on then that output will be true, if the reverse is also true have the rear wash work for a second and the wiper work for three seconds. The pdm could set up many automatic rules like this.

**I would like to have a can buttons unit and a wireless wheel control the lights is that possible?**

Yes, it is possible to do that, you can use status variables to combine inputs from multiple sources. Both Can protocols will need to be combined before it will work.

**The Remote Button Interface is not compatible with the PDM, Why?**

The remote button interface is compatible with the PDM, but its button functions are hard coded into the firmware as the side buttons of a dash which brings up the menu and navigates through the menu. It is not possible to change their function and use them to turn on and off outputs. You could use the RBI to have the side buttons for a 10-inch dash.