

# AERODIST PDM60

## POWER DISTRIBUTION MODULE

### OWNER'S GUIDE



Thank you for purchasing a PDM60. It is a fully solid state power distribution device that provides 6 circuits, with a combined total of 60 Amps of load handling capability. The unit is designed to be directly connected to a battery, efficiently dispersing and monitoring power through its 6 available circuits. The solid state circuit protection offered by the PDM60 works without traditional fuses.

The PDM60 eliminates the need to install relays for high amperage applications such as aftermarket lighting, etc. Each circuit has a preset amperage load rating. One may be controlled via an external switch (not provided), and the remaining five are turned on/off via the vehicle ignition switch. Two of the five ignition-switch-activated circuits have a pre-programmed, 180 second, time-out delay before turning off. This feature reduces the chance of an accidental battery run-down, while also providing an additional 3 minutes of power to the circuits once the ignition key switch is turned off.

The PDM60 features an ignition trigger input to enable the 5 primary circuits on the device. For applications where a direct ground connection is desired (as opposed to a standard chassis ground), eight ground buss positions are also provided. (To create a direct ground circuit, simply place/insert a ground wire into the open plug cavity, directly above the corresponding circuit output wire you wish to ground.) The PDM60 is an excellent power distribution solution for CanBus equipped motorcycles where current draw limits designed by the manufacturer do not support high Amperage loads.

The PDM60 is fully sealed and can be mounted anywhere without concern for moisture, dust and dirt intrusion.

### Connecting the PDM60:

Read all instructions before beginning installation. If you have any questions about your ability to install the PDM60 properly, seek assistance.

Locate a mounting point for the PDM60 module away from heat sources and potential pinch points. The module should be securely mounted and not allowed to move freely or make intermittent contact with hard surfaces.

The PDM60 is supplied with 18", 10 AWG (Gauge) power and ground leads, with attached 6mm ring terminals. Route all wires carefully to avoid high heat, sharp edges and friction. Connect the red wire to the positive terminal on your battery. Route the large black wire to the battery ground terminal or to a ground point on the chassis. Polarity when making connections is: (Red to (+) positive, Black to (-) negative)



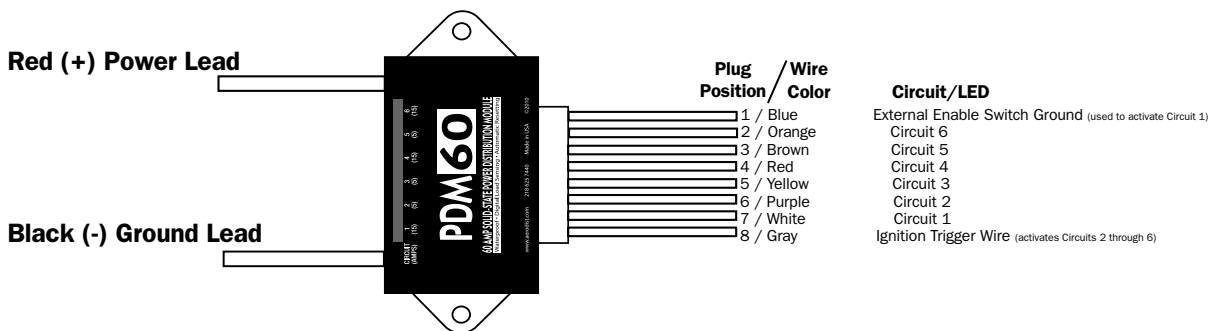
The modular plug supplied with the PDM60 is the accessory connection point. It serves as the interface between the PDM60 and the individual applications powered by the unit. The circuit values/functions, behaviors and wire colors are as follows:

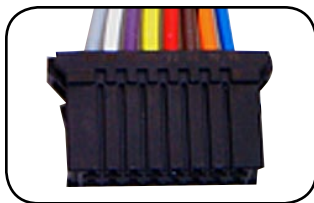
#### Input Wires

Plug position	Color	Purpose
1	Blue (-)	External switch-controlable ground input - connect to ground (using a switch is optional). 18 AWG
8	Gray (+)	Connect to positive side of battery or 12V source controlled by ignition. 18 AWG

#### Output Wires

Plug position	Color	Circuit/LED	Max AMP Load	Switched	Time Out	Wire Gauge
2	Orange (+)	6	15 Amps	Ignition	180 seconds	14 AWG
3	Brown (+)	5	5 Amps	Ignition	None - Instant Off	18 AWG
4	Red (+)	4	15 Amps	Ignition	None - Instant Off	14 AWG
5	Yellow (+)	3	5 Amps	Ignition	None - Instant Off	18 AWG
6	Purple (+)	2	5 Amps	Ignition	180 Seconds	18 AWG
7	White (+)	1	15 Amps	Externally Switched	None - Instant Off	14 AWG





### Connecting the PDM60 (continued):

Connect the respective output wires to the accessories you wish to power. If a direct ground circuit desired, also insert and connect a ground wire for the circuit.

The ignition trigger wire (#8/Gray) may be routed to any source of +12V DC that switches on with the ignition key. A good source on a motorcycle installation is the positive wire to the tail lamp. If your motorcycle is equipped with a CanBus wiring system, you may still use the tail light wire for this.

### Optional switch input:

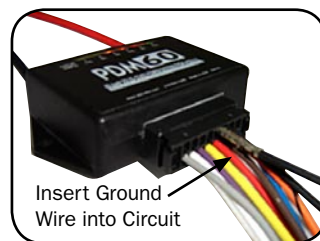
The optional switch input controls the #1 circuit and is for loads up to 15 AMPS. To enable the switch, simply route the blue wire (Connector Pin 1) to a low current SPST (Single Pole Single Throw - On/Off) switch. Route the other side of the switch to ground, preferable on the ground buss of the PDM60. Circuit 1 is not controlled by the ignition trigger wire. This circuit is intended for use with driving lamps or other accessories which you would not likely forget to turn off.

### Ground Buss:

As indicated, the PDM60 features a ground buss for those who wish to provide a "full circuit" installation rather than route circuits to a frame ground point. Simply insert the ground wires for the appropriate circuit. Wires for the ground buss are provided but are not installed in the modular plug. Orient the contact as shown and push the contact into the connector until you feel a positive click, indicating the contact has seated in the connector. When inserting terminals, the two small tabs on the terminal should be facing downward, towards the colored wires that are already installed.

### Using the PDM60:

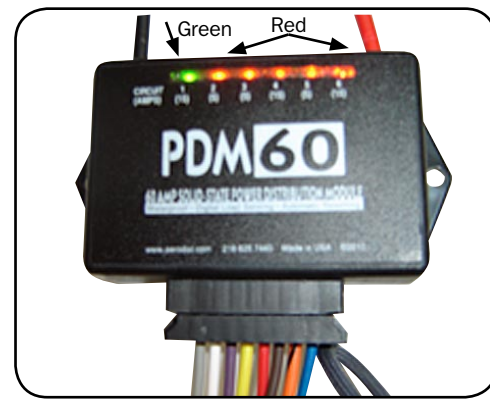
After installing the module and connecting all wires, turn on the ignition switch to accessory position. When power is applied, the LED indicators on the top of the PDM60 will illuminate, indicating power is present. Using the legend below, insure proper condition of each circuit by checking the color of the indicator.



Connect all wires, plug in and turn on ignition to check for proper installation.



All LED indicators illuminating the same color.



One circuit illuminating green to show on, the other circuits are red, indicating they are off.

### LED Illumination Legend:

Green - When a circuit is on, a green LED will be lit.

Red - When a circuit is off, either disabled by its switching mode or shut off due to an overcurrent fault, a red LED will be lit

Orange- If there is no load on a circuit, both the red and green LED's will be on, creating an orange color

### Resetting the PDM60:

If a circuit has a fault (overcurrent 'short') the LED will be red. When the short is eliminated, the PDM60 automatically resets itself.

**Questions? Call 218 722 1927 or e-mail: [service@aerostich.com](mailto:service@aerostich.com)**