## NESS - Power Distribution Modules

## ELK-PD9HC 400mA rated outputs

These Power Distribution Modules conveniently distribute a single A.C. or D.C. input into nine individual outputs, for centrally powering Video Cameras, PIRs, Photobeams, etc. Each output is protected with an auto-resetting PTC to protect a shorted output from disabling the other outputs. A visual LED power indicator is provided for each output along with a single Master Power On/Off Switch. The modules accept a 6 to 30 Volt A.C. or
 D.C. power source (not included) which connects either to the input terminal block or the 2.1 mm D.C. power jack located on the module. Two or more outputs can be paralleled for additional current.

## Features

- Auto-Resetting (PTC) Overload Protection (NO FUSES to REPLACE).
- Master Power On/Off Switch.
- Visual LED Power Indicators on each Output.
- Convenient Test Points for measuring Total Current Draw.
- Lifetime Limited Warranty.
- Paintable White Plastic


## Specifications

- Max Current Draw: PD9HC $=400 \mathrm{~mA}$ from each output.
- Max Combined Current Draw: Not to Exceed Input Power Source.
- Input/Output Voltage: 6 to 30 Volts A.C. or D.C.
- Input Connection: Screw Terminals or 2.1 mm Plug-In D.C. Jack.
- Output Connection: Screw Terminals (POS and NEG) for each Output.
- Enclosure Size: $165 \mathrm{~mm} \times 109 \mathrm{~mm} \times 50 \mathrm{~mm}$.


## Instructions

## NESS-PD9HC

1. To remove the cover from the Power Distribution Module, use a small object like a screw driver to press into the slots located on the end of the cover. Insure that the power switch is off.
2. Using Table 1 or Table 2 below, select an AC or DC Power Source that provides enough current to power the number of devices to be used. The Power Source voltage must also match the device's voltage requirements. Mount the Power Distribution Module near the Power Source that will be used to power the devices.
3. Connect the Power Source to the Power Distribution Module via the two Input Power Screw Terminals or the 2.1 mm DC jack(J1) located to the right of the terminals.
4. Connect a two conductor cable from the Power Distribution Module's Output terminals to the devices to be powered. If desired, the total current draw can be measured at the Master Power Switch using an Ammeter while the switch is off.
5. Turn the Master Power Switch on, ensure all leds are on. Replace the plastic cover on the Power Distribution Module.

Table 1: Sizing the Power Supply
Calculate the total combined power consumption of all devices. Select a Power Supply which has a
Max. Available Power capacity that meets or exceeds the calculated total.

Ness-PD9HC

| Model \# | Voltage <br> Output | Max. Available Power |  |
| :---: | :---: | :---: | :---: |
|  |  | VA / Watts |  |
| Ness-624 | 12 VDC | 1 A | 12 |
| POW280 | 12 VDC | 2.5 A | 22 |
| POW290 | 12 VDC | 5 A | 45 |


| Model \# | Voltage <br>  Output | Max. Available Power |  |
| :---: | :---: | :---: | :---: |
|  |  | VA / Watts |  |
| Ness-624 | 24 VDC | $.8 A$ | 19 |
| POW290 | 24 VAC | 2 A | 40 |

Table 2: Quick Power Supply Selection by Number of Devices
Select a column that closely approximates the power consumption of each device. For the desired voltage, select the row that meets or exceeds the number of desired devices. The appropriate Power Supply Model \# is shown at left. NOTE: If a device consumes more than the max. rating of a single PD9 output then parallel two or more outputs together to achieve the desired capacity. Use additional PD-9's for every 9 devices or as required.

| @400mA <br> $(4.8 W)$ | @300mA <br> $(3.6 \mathrm{~W})$ | @250mA <br> $(3 W)$ | @200mA <br> $(2.4 W)$ | @150mA <br> $(1.8 W)$ | @125mA <br> $(1.5 W)$ | @100mA <br> $(1.2 W)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | 3 | 4 | 5 | 6 | 7 | 10 |
| 5 | 6 | 7 | 9 | 12 | 14 | 18 |
| 9 | 12 | 15 | 19 | 25 | 30 | 37 |


| @225mA <br> $(5.4 W)$ | @200mA <br> $(4.8 W)$ | @175mA <br> $(4.2 W)$ | @150mA <br> $(3.6 W)$ | @125mA <br> $(3 W)$ | @100mA <br> $(2.4 W)$ | @75mA <br> $(1.8 W)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | 4 | 4 | 5 | 6 | 8 | 10 |
| 7 | 8 | 9 | 10 | 12 | 17 | 21 |


| @400mA <br> (4.8Watts) | @300mA <br> $(3.6 \mathrm{Watts})$ | @250mA <br> (3Watts) | @200mA <br> (2.4Watts) | @150mA <br> $(1.8 \mathrm{Watts})$ | @125mA <br> (1.5Watts) | @100mA <br> $(1.2 \mathrm{Watts})$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |

Figure 2: Power Distribution Module(ELK-PD9)

