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## X-PAK 754



**IMPORTANT!** This product is **NOT** waterproof. It must be mounted in a clean, dry location.



### TECHNICAL SPECIFICATIONS

|                        |                              |
|------------------------|------------------------------|
| INPUT VOLTAGE .....    | 10 to 30 Vdc                 |
| INPUT CURRENT .....    | 7.0A at 12.8V, 3.5A at 25.6V |
| INPUT POWER .....      | 90 Watts                     |
| OUTPUT POWER .....     | 75 Watts                     |
| OUTPUT ENERGY.....     | 64 Joules                    |
| <b>FLASH RATES</b>     |                              |
| Double Flash: .....    | 170 flashes per minute.      |
| Quad Flash: .....      | 140 flashes per minute.      |
| Quintuple Flash: ..... | 140 flashes per minute.      |
| Mega Flash:.....       | 140 flashes per minute.      |

### QUICK REFERENCE

### INSTALLING THE X-PAK 754

#### 1. Physical Mounting

Mount the power supply in a clean, dry location. Mounting the unit to a flat metal surface will aid in heat dissipation. Use the power supply as a template to mark the hole locations. The mounting holes will accept up to a 1/4" bolt. *Note: The power supply base-plate must be connected to chassis ground (GND) to reduce radio interference.*

#### 2. Strobe Head installation

Plug the strobe light heads into the outlets. Keep the following in mind:

- Heads connected to outlets 1 and 3 flash at the same time.
- Heads connected to outlets 2 and 4 flash at the same time.
- Heads connected to 1 and 3 alternate with heads 2 and 4.

The output power divides equally between all strobe heads installed. Example: 90 Watts into 2 heads = 45 Watts per head. Consider this before selecting the number and type of strobe heads to install. Do not exceed the wattage rating of the head. *Note: This supply reduces output power when 2 outlets are activated.*

#### 3. Electrical Hookup

If you have purchased a pre-wired switch harness, follow the included instructions. If you are wiring the system yourself follow the instructions below and the diagrams on the next page.

#### POWER HARNESS:

- Connect the RED wire to battery positive (+) or a fuse panel circuit rated for at least 15 AMPS.
- Connect the BLACK wire to battery negative (-) or directly to vehicle chassis.

*Note: Use the correct size wire for power connections.*

*The length of the wires determines the size needed.*

*1 to 10 ft. use 18AWG wire.*

*10 to 20 ft. use 16AWG wire.*

*20 to 55 ft. use 14AWG wire.*

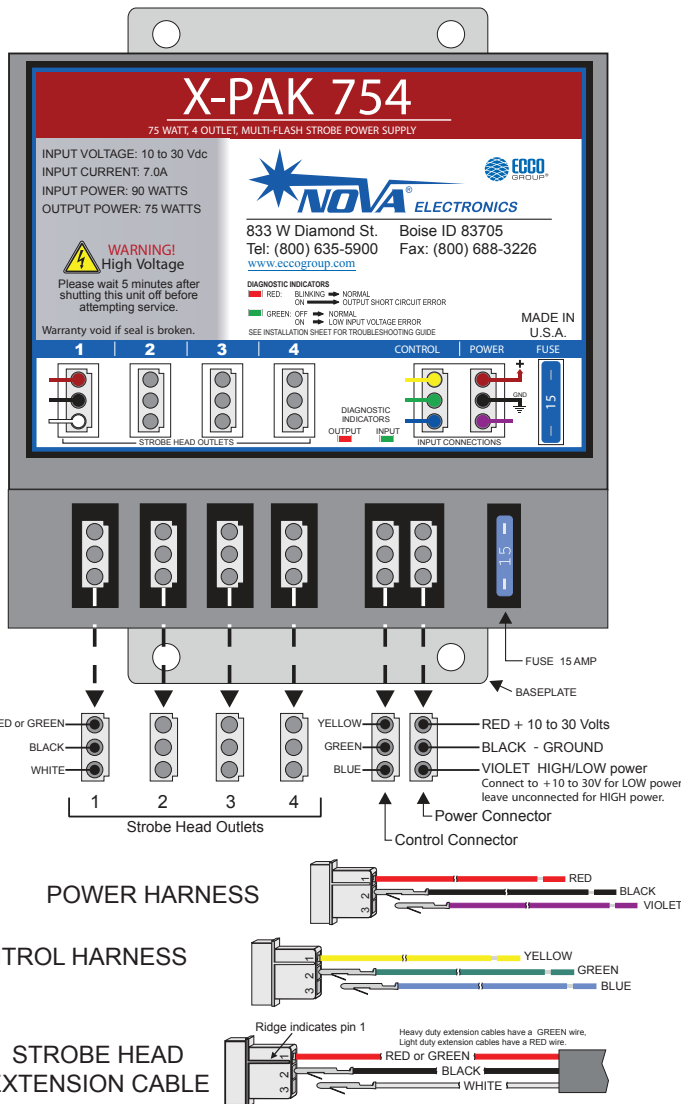
*35 to 50 ft. use 12AWG wire.*

- The VIOLET wire controls HIGH / LOW power. Low power limits the flash intensity for nighttime use. Connect VIOLET to +12/24V for LOW, leave VIOLET disconnected for HIGH.

#### CONTROL HARNESS:

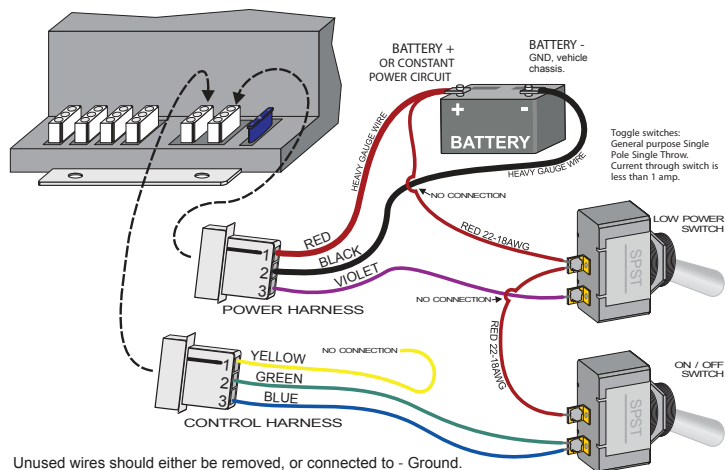
- YELLOW, GREEN, BLUE wires select the flash pattern and also control which strobe head outlets are activated. A wire is 'selected' when connected to +12/24V. When all control wires are unconnected the power supply is in a low current SHUTDOWN MODE (Current is typically 25ma). See the PATTERN TABLE on the next page for a complete list of functions.

*Note: VIOLET, YELLOW, GREEN, BLUE, WHITE, and ORANGE are all Low Current circuits and can be wired with a minimum of 22AWG wire.*



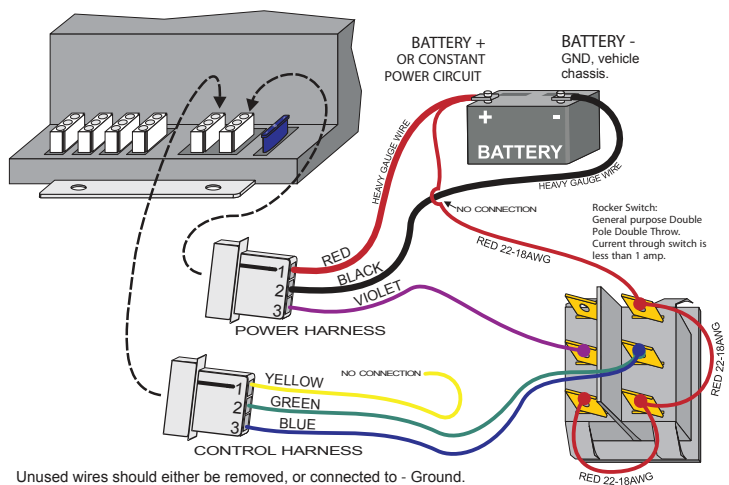
## WIRING/CONNECTION DIAGRAMS

**DIAGRAM (1): ON/OFF and Low Power using two toggle switches.**  
Flash pattern is: Quad Flash All Heads.



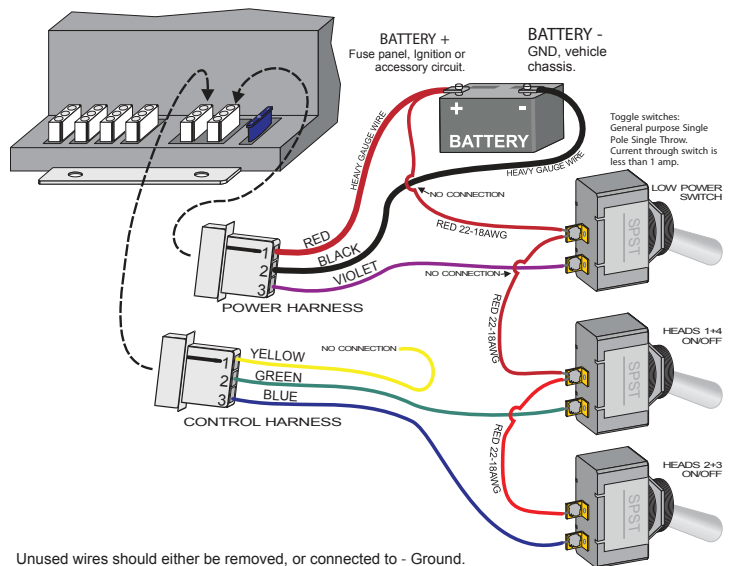
Unused wires should either be removed, or connected to - Ground.

**DIAGRAM (2): ON/OFF and Low Power using one DPDT rocker switch.**  
Flash pattern is: Quad Flash All Heads.



Unused wires should either be removed, or connected to - Ground.

**DIAGRAM (3): Selective switching of strobe head pairs. Low Power selection.**  
Flash pattern is: Quad Flash All Heads.



Unused wires should either be removed, or connected to - Ground.

## PATTERN TABLE

**Selecting a flash pattern:** In the table below, find the desired flash pattern. Connect the wires marked **POWER** to the 'load' side of the ON/OFF switch. Remove the remaining wires, or connect them to - Ground.

Example: Diagram 1 uses pattern #4 (Quad Flash, All Heads). To change this to pattern #6 (Mega flash, All Heads) connect the YELLOW and BLUE wires to the switch. Remove the remaining wires, or connect them to - Ground.

| PATTERNS | YELLOW       | GREEN        | BLUE         | FUNCTION  |
|----------|--------------|--------------|--------------|---|
| 1        |              |              |              | SHUTDOWN  |
| 2        |              |              | <b>POWER</b> | Quad Flash, Head 2 ATL 3                              |
| 3        |              | <b>POWER</b> |              | Quad Flash, Head 1 ATL 4                              |
| 4        |              | <b>POWER</b> | <b>POWER</b> | Quad Flash, Head 1&3 ATL 2&4                          |
| 5        | <b>POWER</b> |              |              | Mega Flash, Head 2 ATL 3                              |
| 6        | <b>POWER</b> |              | <b>POWER</b> | Mega Flash, Head 1&3 ATL 2&4                          |
| 7        | <b>POWER</b> | <b>POWER</b> |              | Mega Flash, Head 1 ATL 4                              |
| 8        | <b>POWER</b> | <b>POWER</b> | <b>POWER</b> | When in High Power: Quintuple Flash, Head 1&3 ATL 2&4 |
|          |              |              |              | When in Low Power: Double Flash, Head 1&3 ATL 2&4     |

ATL="Alternates With"

## TROUBLESHOOTING

**Blown Fuse:** The X-PAK 754 will blow a fuse if the input voltage is reversed. If this happens, first locate the wiring fault, then replace the fuse with one of the same rating.

### OUTPUT INDICATOR(RED)

**NORMAL:** The OUTPUT INDICATOR will light when ANY strobe head fires. It will blink in exact time with the flash pattern. When the X-PAK 754 is turned off the indicator may dimly blink for a few seconds. This indicates that the power supply is discharging itself.

**PROBLEM:** If the X-PAK 754 is activated but none of the strobe heads are firing, check the OUTPUT INDICATOR. If the light is blinking or on steady then it indicates that there is a short circuit on one or more of the strobe head outputs. To find the short circuit, unplug **all** strobe head cables from the X-PAK 754. Test one cable/head at a time until the problem is found. **Do not test with more than one cable/head installed.**

The problem is typically at the strobe head end of the cable. If there is a blue/green or black colored corrosion on the connector it is shorted. *Also check for a head or cable with a reverse wired connector.*

### INPUT INDICATOR(GREEN)

**NORMAL:** The INPUT INDICATOR should **NOT** be lit during normal operation. It may blink for a second when power is first applied to the X-PAK 754, or when power is removed but this does not indicate a problem with the power supply.

**PROBLEM:** If the X-PAK 754 is activated but none of the strobe heads are firing, check the INPUT INDICATOR. If it is ON then it indicates that the input voltage is too low (below 10V). There may be a bad connection to the battery or ground. If the X-PAK 754 is functioning but the INPUT INDICATOR is blinking or lit, it indicates that the voltage is too low and the power supply is not operating at full power. Check for bad connections and be sure the proper size wire was used for the + and - connections.