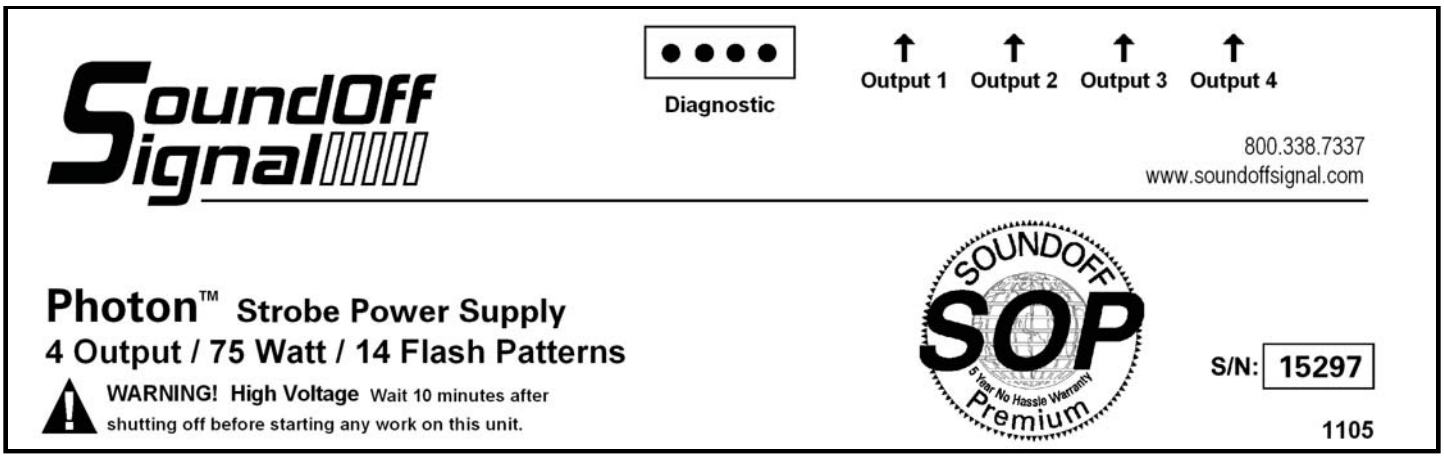
3900 Central Parkway
Hudsonville, MI 49426
toll free 800.338.7337
office 616.896.7100
techsupport@soundoffsignal.com
www.soundoffsignal.com

PHOTON STROBE POWER SUPPLY

MODEL # : ETPN475 / ETPN475WP



⚠ WARNING

PERSONAL INJURY HAZARD

Mounting this device in an improper location may impair the designed safety characteristics of the vehicle in the event of a collision.

Consult the vehicle manufacturer before installing this or any other aftermarket device to determine its proper mounting location.

Failure to consult and follow the vehicle manufacturer's mounting recommendations may result in serious personal injury or death.

WARNING

High Voltage! Please wait 5 minutes after shutting this unit OFF before attempting service. Warranty void if seal is broken.

STROBE POWER SUPPLY SPECIFICATIONS

Voltage	8-30 Vdc
Current	5.8 Amps @ 12.8 Vdc
Power	75 Watts
Fuse	15 Amp
Number of Heads	4

INSTALLATION

1. First, install the Strobe Power Supply in a protected location using the power supply itself as a template. THE POWER SUPPLY MUST BE MOUNTED TO A METAL SURFACE. Make sure all connectors are easily accessible.

2. Install the strobe light heads in the preferred locations.

3. String the 3 conductor cables between the lights and the power supply. Make sure the cable is secure along the chosen routing inside the vehicle to prevent it from damage by chafing or binding. Be sure to keep the cable away from engine hot spots.

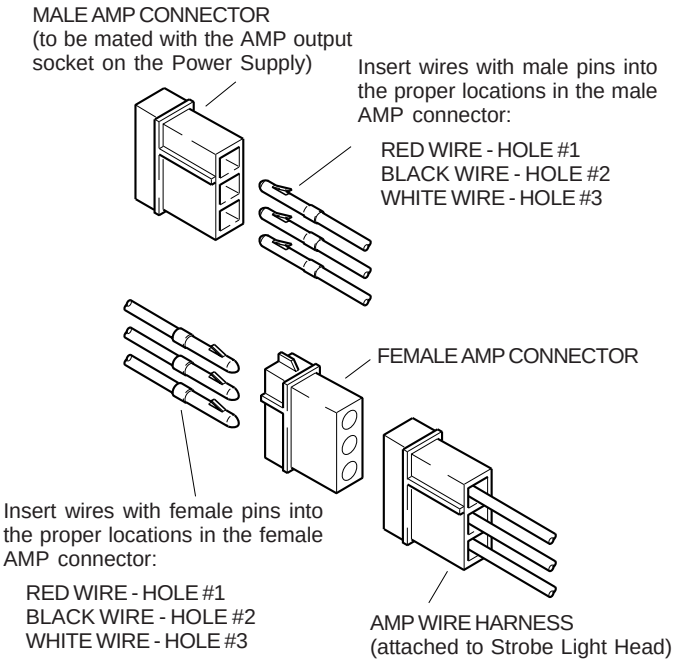
WARNING

Strobe tube cables with 500V insulation resistance must be used. Automotive cable is not suitable and should not be used.

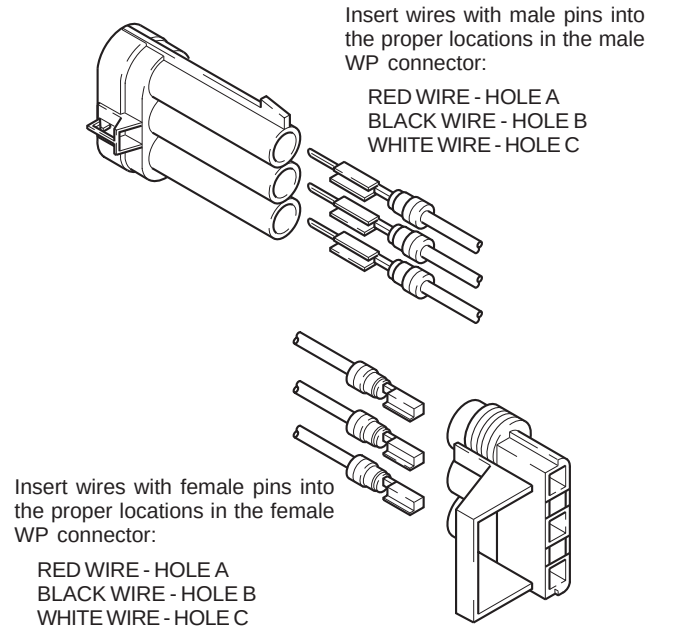
NOTE

When routing the cable, make sure the end with the closed tip terminals (male pins) is toward the power supply and the end with the open tip terminals (female pins) is toward the light head.

4. Insert the pins on each end of the cables into the connectors. Each end of these cables has a factory crimped pin on each of the three wires, see Figure A.



ETPN475 - Amp Connectors



ETPN475WP - WP Connectors

Figure A.

NOTE

It is important to follow the correct color code when inserting the pins into the connectors.

5. Connect the cables to the strobe light heads.

6. Next, plug the other end of the cable into the Light Head Output Socket on the Strobe Power Supply.

7. Using Figure E, select a flash pattern and determine which flash control wires will need to be used. The grey(brown) wire controls the day/night (high/low) intensity feature of the power supply, see Figure C. The high/low intensity feature allows the strobe lights to be switched into low power or reduced intensity. This feature is useful for night time use. When the grey(brown) wire is powered, the power supply is switched to low intensity. When the power is removed, the power supply switches to high intensity mode. Use 18 gauge wire to extend the flash control wires to a customer supplied switch as shown in Figures B, C and D.

8. Connect the red wire to the positive (+) side of the battery making sure to place a customer supplied 15 Amp fuse at the battery. Connect the black wire to the negative (-) side of the battery or to the vehicle chassis.

NOTE

To extend the power (+) and ground (-) wires, use the following as a guide.

1 to 10 ft. use 16 AWG wire
10 to 20 ft. use 14 AWG wire
20 to 30 ft. use 12 AWG wire
30 to 50 ft. use 10 AWG wire

Figures B, C and D show some of the standard switch control options that can be easily wired to complete a Strobe Light System.

Figure B shows a high/off control system that quad flashes all heads.

Figure C shows a high/low control system that quad flashes all heads.

Figure D shows how any flash option could be installed depending on which flash control wire(s) are attached to the switch.

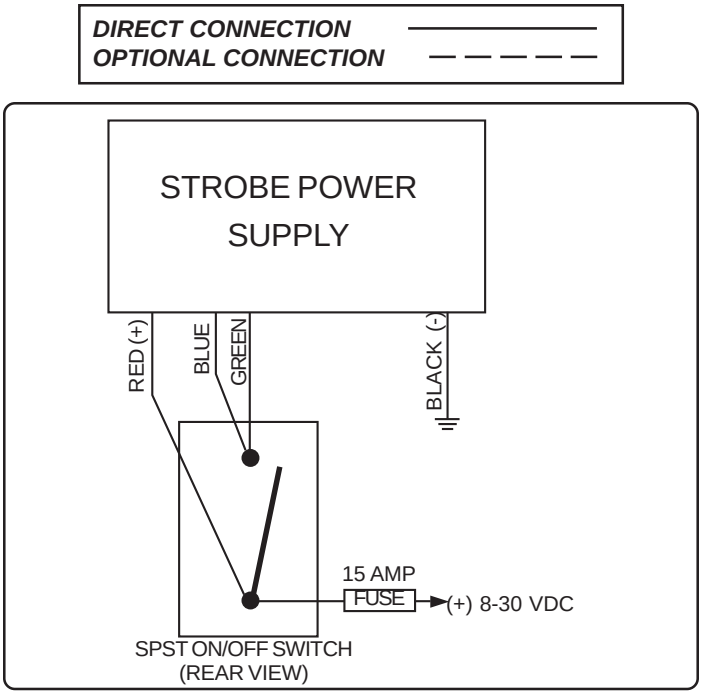


Figure B.
Quad Flash All Heads High/Off Switching

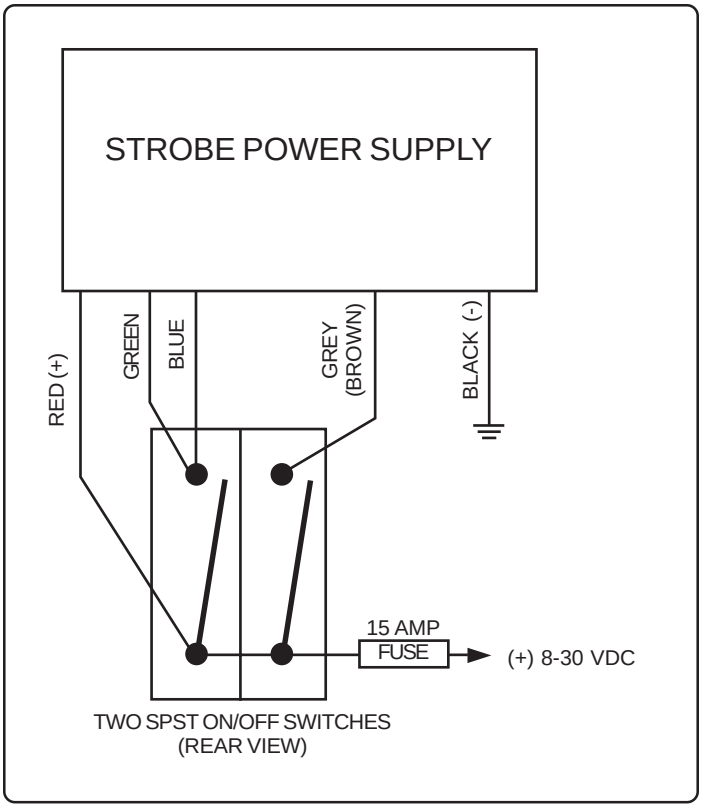


Figure C.
Quad Flash All Heads High/Low Switching

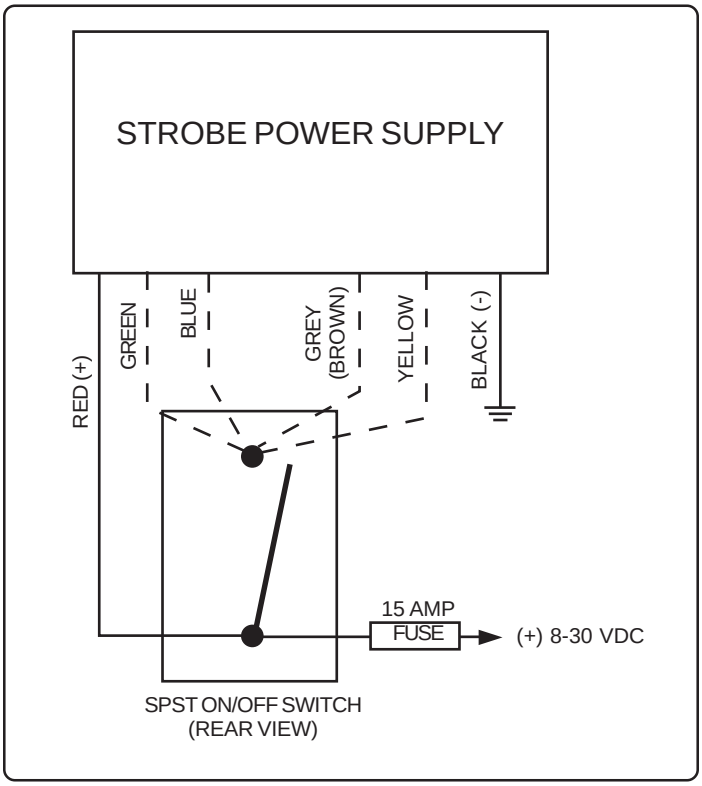
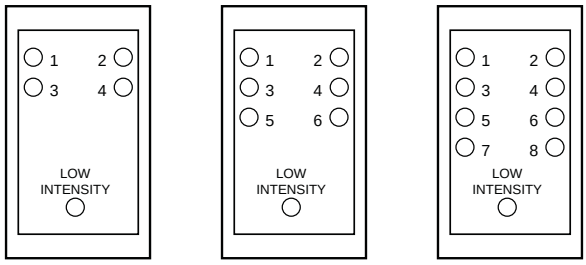


Figure D.
Special Pattern Options On/Off Switching

OPTIONAL STROBE POWER SUPPLY DIAGNOSTIC PANEL

FOR USE WITH DIAGNOSTIC EQUIPPED POWER SUPPLIES ONLY



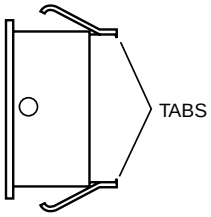
4 - HEAD
PEDIPNL4/
PEDIPNL4WP

6 - HEAD
PEDIPNL6/
PEDIPNL6WP

8 - HEAD
PEDIPNL8

MOUNTING OPTIONS:

1. Display will snap into any existing panel with a 22.5mm x 40mm hole.
2. Remove tabs from the back of display and adhere to mounting surface using double sided tape.



INSTALLATION:

Plug the RJ11 end of the cable into the Diagnostic Display. Route the other end of the cable to the Power Supply and connect the 4-pin Amp Connector.

OPERATION:

Each numbered LED will flash with the corresponding numbered Strobe Tube showing everything is operational. If an LED light stay ON, instead of flashing, there is a problem with that particular Strobe Tube or Strobe Cable. Low Intensity LED will indicate when the Power Supply is low power.

To Reduce EMI emissions, ONE end of the shield (drain wire) of the extension cable connecting the output of the power supply to the Lighthead should be connected to ground. Make sure ONLY ONE END of the shield is tied to ground. The other end needs to be taped or cut.

WARRANTY

SoundOff Signal warranties the Photon Strobe Power Supply for five (5) years from the date of purchase to the original purchaser against any manufactured defects or workmanship. This warranty is a 100% replacement value warranty. It applies only to units installed according to manufacturer's installation instructions and operated within the units specifications.

Warranty is void if the unit was installed incorrectly or maliciously damaged.

All warranty claims must be accompanied by a dated proof of purchase.

SoundOff Signal retains the right to be the sole mediator of what constitutes defects in performance or manufacturing.

FIGURE E. To select any one of the different flash modes, simply connect the Blue, Green, Yellow, and Grey wires to a switch in the following combinations. Connect the wires marked “POWER” to (+) 10-30 Vdc and remove the unused wires or connect them to (-) ground.

Pattern	Grey	Yellow	Green	Blue	Function	Flash Rate
1				POWER	Quad Flash Heads 2 Alt. 3 High Power	140 FPM
2			POWER		Quad Flash Heads 1 Alt. 4 High Power	140 FPM
3			POWER	POWER	Quad Flash Heads 1,3 Alt. 2,4 High Power	140 FPM
4		POWER			Inter-Cycle™ Flash Heads 2 Alt. 3 High Power	-
5		POWER		POWER	Inter-Cycle™ Flash Heads 1, 3 Alt. 2, 4 High Power	-
6		POWER	POWER		Inter-Cycle™ Flash Heads 1 Alt. 4 High Power	-
7		POWER	POWER	POWER	Quint Flash Heads 1,3 Alt. 2,4 High Power	140 FPM
8	POWER			POWER	Quad Flash Heads 2 Alt. 3 Low Power	140 FPM
9	POWER		POWER		Quad Flash Heads 1 Alt. 4 Low Power	140 FPM
10	POWER		POWER	POWER	Quad Flash Heads 1,3 Alt. 2,4 Low Power	140 FPM
11	POWER	POWER			Inter-Cycle™ Flash Heads 2 Alt. 3 Low Power	-
12	POWER	POWER		POWER	Inter-Cycle™ Flash Heads 1, 3 Alt. 2, 4 Low Power	-
13	POWER	POWER	POWER		Inter-Cycle™ Flash Heads 1 Alt. 4 Low Power	-
14	POWER	POWER	POWER	POWER	Warp Flash Heads 1,3 Alt. 2,4 High Power	700 FPM

NOTE: All other Matrix’s are OFF’s.