

WHELEN[®]

ENGINEERING COMPANY INC.

Route 145, Winthrop Road,
Chester, Connecticut 06412

Phone: (860) 526-9504

Fax: (860) 526-4078

Internet: www.whelen.com

Sales e-mail: autosale@whelen.com

Canadian Sales e-mail: autocan@whelen.com

Customer Service e-mail: custserv@whelen.com

Installation Guide: WPPSC692 Strobe Power Supply

WARNING: The Strobe Light Power Supply is a high voltage device. Do not touch or remove tube assembly in strobe light head assemblies while in operation. Wait 10 minutes after disconnecting the unit from its power source before starting work or troubleshooting on power supply or system.

Mounting your WPPSC692...

Caution: As it will be necessary to drill holes into the mounting surface, the installer **MUST** be sure that no vehicle components or other vital parts could be damaged by the drilling process. Check both sides of the mounting surface before drilling begins!

1. Position the WPPSC692 in its proposed mounting location to ensure that it fits properly. With the WPPSC692 in place, insert an awl or other suitable tool into the mounting screw area of the power supply and scribe the areas that are to be drilled.
2. Remove the WPPSC692 from its mounting area and, using an appropriately sized drill bit, drill a hole in each of the areas scribed in the previous step.
3. Return the WPPSC692 to its mounting location and using appropriately sized hardware, secure the WPPSC692 to its mounting surface.

Wiring your WPPSC692...

1. Locate the 8 position **Input Harness Plug** and connect as indicated in Fig. 1. Extend the BLACK and RED wires from the **Input Harness Plug** towards the battery.
2. Connect the RED wire to a fuse block (customer supplied) and then to the POSITIVE terminal on the battery.

NOTE! Although a 15 amp fuse (customer supplied) is required to be used in the fuse block, do not install the fuse until all of the wire connections are completed.

3. Connect the BLACK wire to the factory chassis ground adjacent to the battery.

IMPORTANT! The Deutsch water-proof connector will not function properly unless it is connected exactly as the manufacturer intended. A Deutsch crimping tool (Whelen p/n 66T0516435119C) is required for proper terminal crimping and should be used whenever possible.

Whelen Engineering does not recognize the use of a non-Deutsch crimping tool, therefore any resulting damage would void the warranty.

Assembly...

1. Locate the 3-conductor cable (customer supplied) that will be used to connect Lamps L1 & L2 to Plug #1 of the WPPSC692.
2. Crimp the "pin"-style wire terminals (included) onto the power supply end of the wires.
3. Using the Plug #1 table as a wiring guide, insert the terminals into one of the receptacles (included). Note: The wire colors shown connected to the receptacles (in the wiring diagram), represent the Whelen color codes for their strobe lamps. Make sure to use the wire **function** as a guide to proper terminal location.
4. Hold the receptacle so that the rear grommet is facing you.
5. Push the pin straight into the grommet until a "click" is felt. A gentle tug will confirm that it is properly locked into place.
6. Once all the pins are installed, insert the orange wedge into the receptacle.
7. Repeat the above procedure for plugs #2 and #3.

NOTE: Although the above text outlines the procedure for assembling the strobe plug receptacles, the same procedure is used for the Input Control plug. The plug section utilizes a faceplate instead of a wedge. It can be removed with a small screwdriver.

8. Locate the 7 conductor cable (customer supplied) that will be used to connect the WPPSC692 to its control switches and to a power source (12VDC).
9. Crimp the "socket"-style wire terminals (included) onto the power supply end of the wires.
10. Using the input control table as a guide, insert the terminals into the Input Control Plug (included). Note: The wire colors shown connected to the Input Control Plug (in the wiring diagram), represent the Whelen colors & functions found in the input control harness. Make sure to use the wire **function** as a guide to proper terminal location and wire connection.

PLUG #1

Pin#	Color	Function
1	ORANGE	Anode
2	BLKWHT	Cathode
3	WHITE	Trigger (L1)
4	GREEN	Trigger (L2)
5	BLKWHT	Cathode
6	ORANGE	Anode

PLUG #2

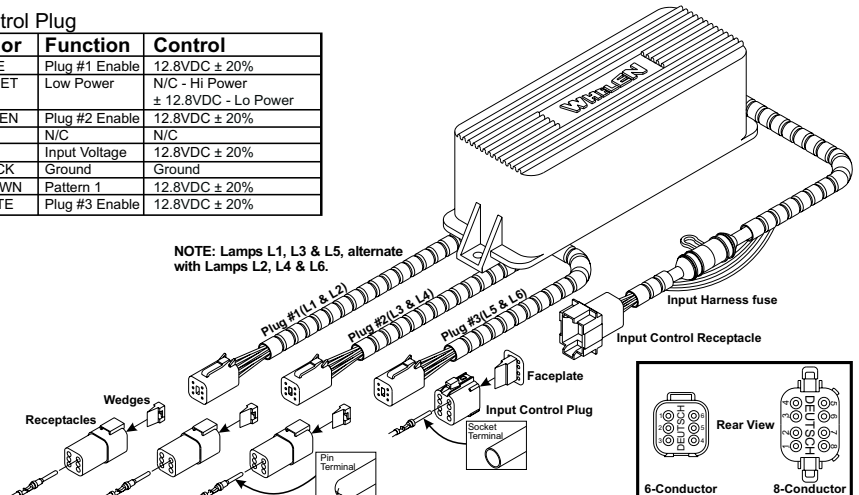
Pin#	Color	Function
1	ORANGE	Anode
2	BLKWHT	Cathode
3	RED	Trigger (L3)
4	BLUE	Trigger (L4)
5	BLKWHT	Cathode
6	ORANGE	Anode

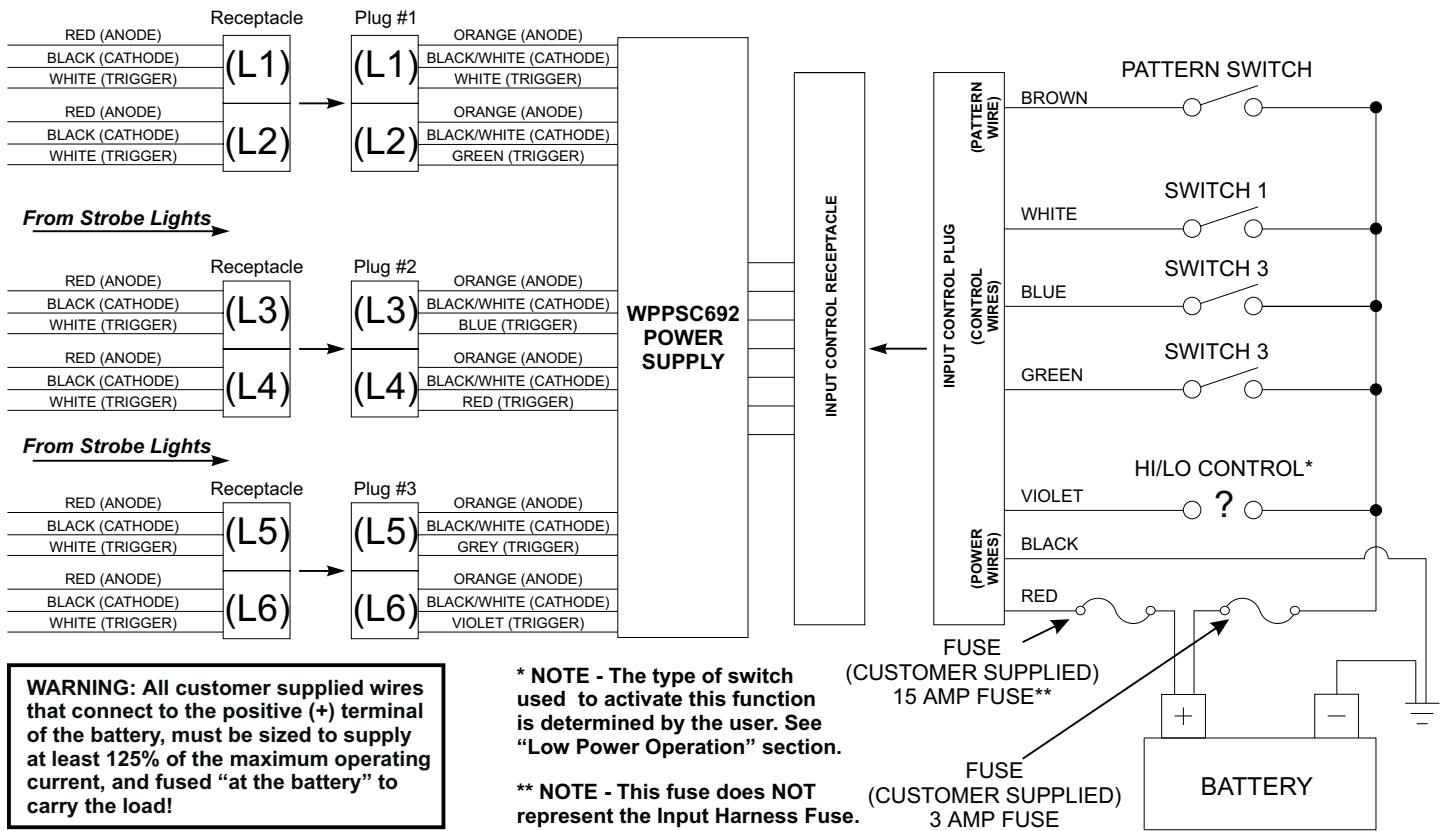
PLUG #3

Pin#	Color	Function
1	ORANGE	Anode
2	BLKWHT	Cathode
3	GREY	Trigger (L5)
4	VIOLET	Trigger (L6)
5	BLKWHT	Cathode
6	ORANGE	Anode

Input Control Plug

Pin#	Color	Function	Control
1	BLUE	Plug #1 Enable	12.8VDC ± 20%
2	VIOLET	Low Power	N/C - Hi Power ± 12.8VDC - Lo Power
3	GREEN	Plug #2 Enable	12.8VDC ± 20%
4	N/C	N/C	N/C
5	RED	Input Voltage	12.8VDC ± 20%
6	BLACK	Ground	Ground
7	BROWN	Pattern 1	12.8VDC ± 20%
8	WHITE	Plug #3 Enable	12.8VDC ± 20%





Switch Operation Table

Pattern Control Switch		Outlet Control (Switches 1, 2 & 3)	
Switch 1 Disabled	Comet Flash Pattern	Switches 1, 2 & 3 Disabled	No Strobe Plugs Active
Switch 1 Enabled	Action Flash Pattern	Switch 1 Enabled	Strobe Plug 1 Active
		Switch 2 Enabled	Strobe Plug 2 Active
		Switch 3 Enabled	Strobe Plug 3 Active

Lo Power Operation

The WPPSC692 has been designed to enable Lo power operation in two different ways:

- 1) Latched mode - Applying 12.8VDC to the VIOLET wire (via user supplied switch) for less than 1 second places the WPPSC692 into Lo power mode until the unit is turned off.
- 2) Momentary mode - Applying 12.8VDC to the VIOLET wire (via user supplied switch) for more than 1 second places the WPPSC692 into Lo power mode until the voltage to this wire is removed.

WPPSC692 SPECIFICATIONS:

INPUT VOLTAGE	- 12.8 VDC ± 20%
INPUT CURRENT (OFF)	- 0 AMPS
INPUT CURRENT (30 WATTS)	- 3 AMPS (TYP)
INPUT CURRENT (60 WATTS)	- 6 AMPS (TYP)
INPUT CURRENT (90 WATTS)	- 9 AMPS (TYP)
FLASHRATE COMET	- 75 FPM (PER LAMP) @ 85 ms
FLASHRATE SEQUENTIAL	- 3 CYCLES (COMET) - 4 CYCLES (SF)
INPUT CONTROL VOLTAGE	- 12.8 VDC ± 20%
INPUT CONTROL CURRENT	- 50 MA (TYP)
ENERGY 60 WATT MODE	- 26.5 JOULES (TOTAL) 11.5 / 5 / 5 / 5 JOULES
ENERGY 90 WATT MODE	- 36 JOULES (TOTAL) 15 / 7 / 7 / 7 JOULES
ENERGY LO POWER MODE	- 10 JOULES (TOTAL) 2.5 / 2.5 / 2.5 / 2.5 JOULES