

ROUTE 145, WINTHROP ROAD
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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 WPPSC694...

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 WPPSC694 in its proposed mounting location to ensure that it fits properly. With the WPPSC694 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 WPPSC694 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 WPPSC694 to its mounting location and using appropriately sized hardware, secure the WPPSC694 to its mounting surface.

Wiring your WPPSC694...

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 7.5 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 WPPSC694.
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 screw-driver.

8. Locate the 7 conductor cable (customer supplied) that will be used to connect the WPPSC694 to its control switches and to a power source (vehicle battery).
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 (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	BLK/WHT	Cathode
3	WHITE	Trigger (L1)
4	GREEN	Trigger (L2)
5	BLK/WHT	Cathode
6	ORANGE	Anode

Input Control Plug

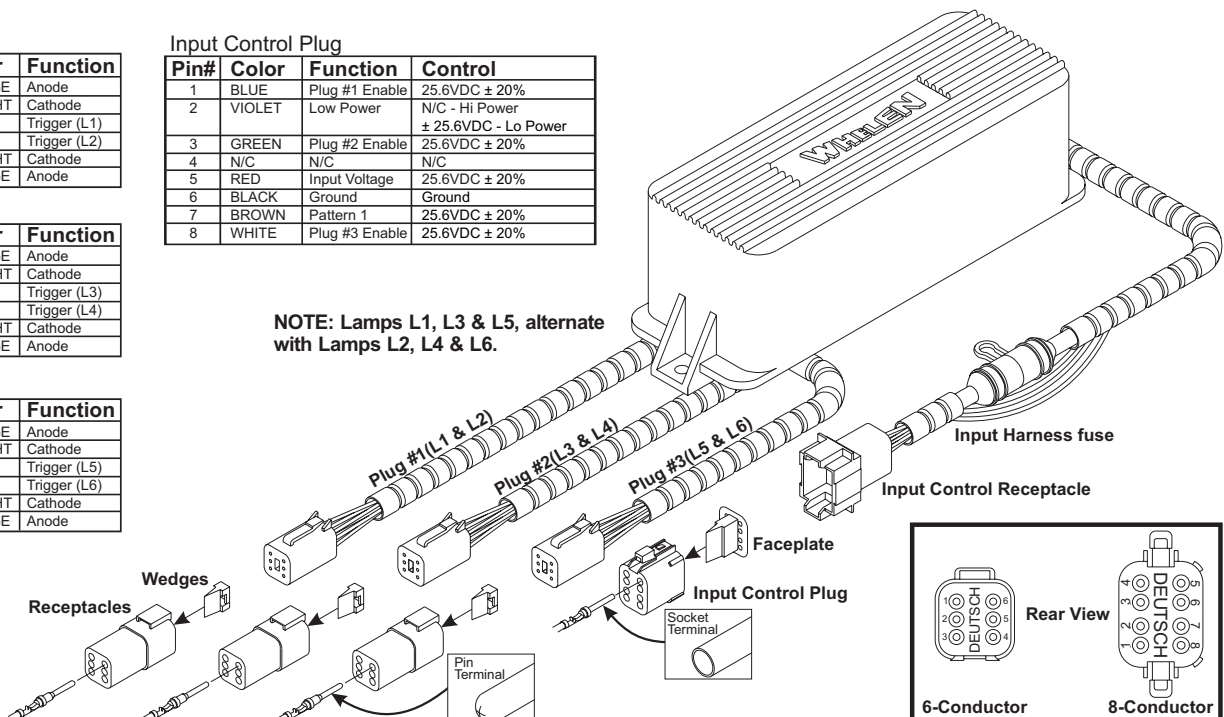
Pin#	Color	Function	Control
1	BLUE	Plug #1 Enable	25.6VDC ± 20%
2	VIOLET	Low Power	N/C - Hi Power ± 25.6VDC - Lo Power
3	GREEN	Plug #2 Enable	25.6VDC ± 20%
4	N/C	N/C	N/C
5	RED	Input Voltage	25.6VDC ± 20%
6	BLACK	Ground	Ground
7	BROWN	Pattern 1	25.6VDC ± 20%
8	WHITE	Plug #3 Enable	25.6VDC ± 20%

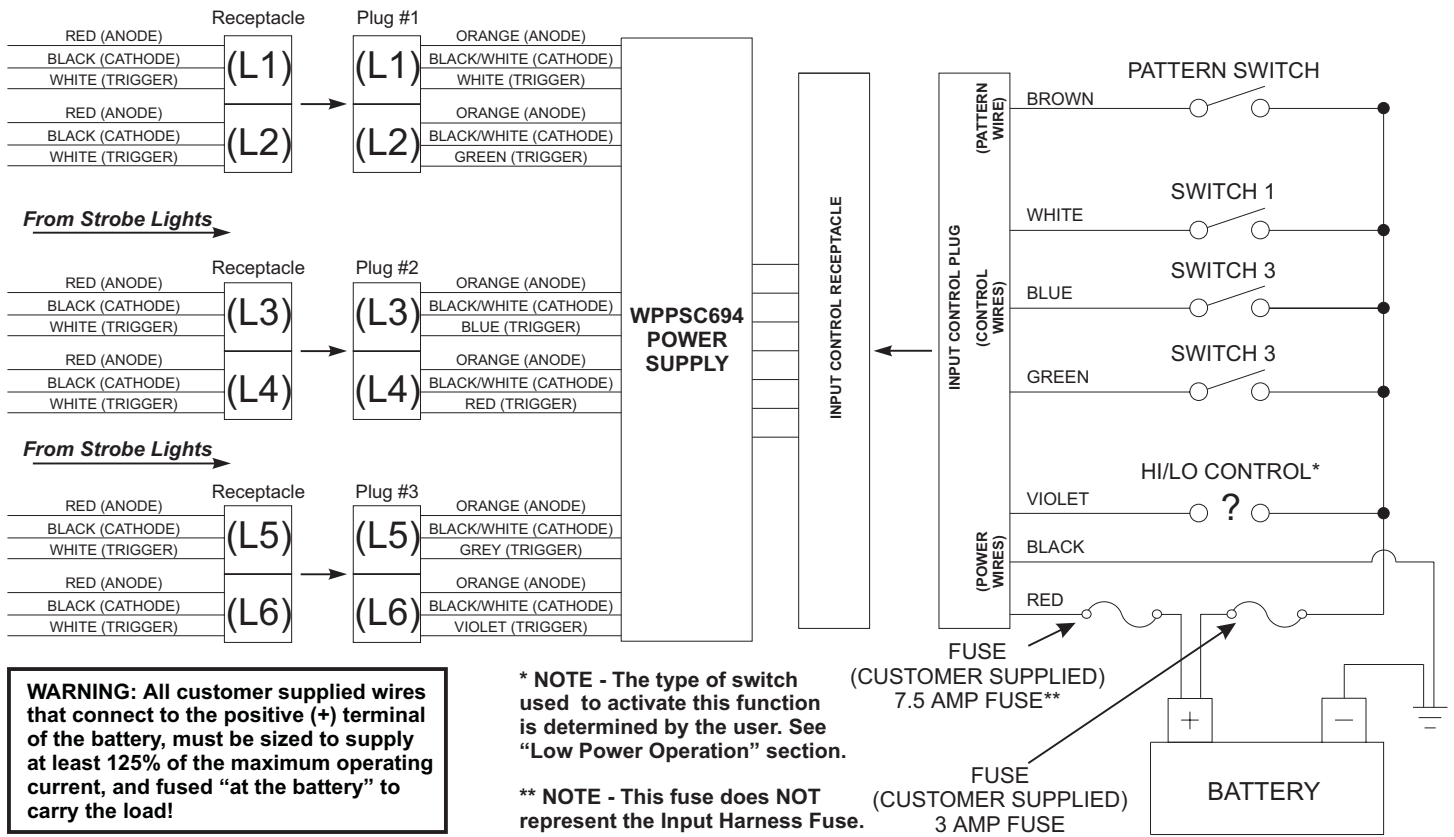
PLUG #2

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

PLUG #3

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





Switch Operation Table

Pattern Control Switch

Outlet Control (Switches 1, 2 & 3)

Switch 1 Disabled Comet Flash Pattern
 Switch 1 Enabled Action Flash Pattern

Switches 1, 2 & 3 Disabled No Strobe Plugs Active
 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 WPPSC694 has been designed to enable Lo power operation in two different ways:

- 1) Latched mode - Applying 25.6VDC to the VIOLET wire (via user supplied switch) for less than 1 second places the WPPSC694 into Lo power mode until the unit is turned off.
- 2) Momentary mode - Applying 25.6VDC to the VIOLET wire (via user supplied switch) for more than 1 second places the WPPSC694 into Lo power mode until the voltage to this wire is removed.

WPPSC694 SPECIFICATIONS:

INPUT VOLTAGE	- 25.6 VDC ± 20%
INPUT CURRENT (OFF)	- 0 AMPS
INPUT CURRENT (30 WATTS)	- 1.5 AMPS (TYP)
INPUT CURRENT (60 WATTS)	- 3 AMPS (TYP)
INPUT CURRENT (90 WATTS)	- 4.5 AMPS (TYP)
FLASHRATE COMET	- 75 FPM (PER LAMP) @ 85 ms
FLASHRATE SEQUENTIAL	- 3 CYCLES (COMET) - 4 CYCLES (SF)
INPUT CONTROL VOLTAGE	- 25.6 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