

Weldon Technologies, Inc. 3656 Paragon Drive, Columbus, OH 43228 Tel: (614)529-7230 Fax: (614)527-3547

# **INSTALLATION SHEET**

# 7408-0120-00

120 WATT, 8 OUTLET STROBE POWER SUPPLY

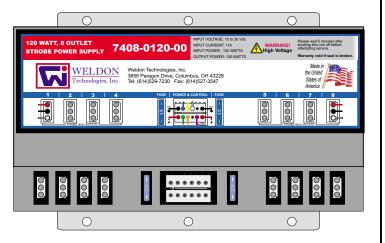


IMPORTANT! This product is NOT waterproof. It must be mounted to a metal surface in a clean dry area.

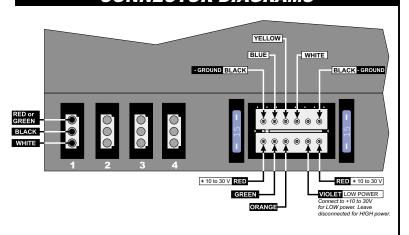


# **TECHNICAL SPECIFICATIONS**

INPUT VOLTAGE	10 to 30 Vdc
INPUT CURRENT	11A at 12.8V, 5.2A at 25.6V
INPUT POWER	150 Watts
OUTPUT POWER	120 Watts
OUTPUT ENERGY	103 Joules
FLASH RATES	
Double Flash:	170 flashes per minute.



#### **CONNECTOR DIAGRAMS**



STROBE HEAD EXTENSION CABLE



# INSTALLING THE 7408-0120-00

## 1. Mounting Considerations

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 baseplate must be connected to chassis ground (GND) to reduce radio interference.

#### 2. Strobe Head installation

Plug the strobe light heads into the outlets. The *Flash Pattern Table* on the next page describes which heads flash at the same time, etc.

## 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 WIRING:**

- Connect the RED wires to battery positive (+) or a fuse panel circuit rated for at least 20 AMPS.
- Connect the BLACK wires 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 35 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 power, leave VIOLET disconnected for HIGH power.

#### **CONTROL WIRING**

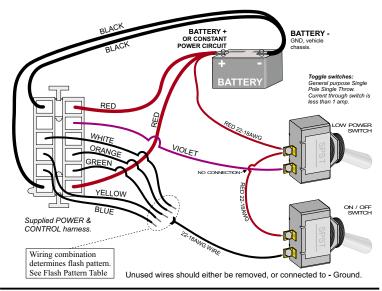
• YELLOW, GREEN, BLUE, WHITE, and ORANGE wires select the flash pattern and also control which strobe head outlets are activated. A wire is 'selected' when connected to +12/24V. When all control wires are unconnected the power supply is in a low current SHUTDOWN MODE (Current is typically 25ma).

See the *Flash Pattern Table* on the next page for a complete list of functions.

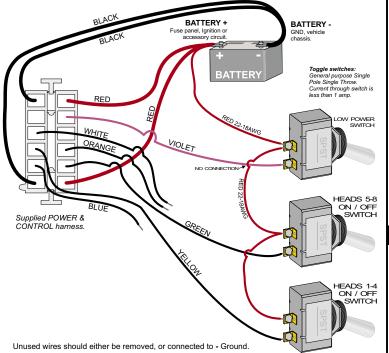
Note: VIOLET, YELLOW, GREEN and BLUE are all Low Current circuits and can be wired with a minimum of 22AWG wire.

#### WIRING/CONNECTION DIAGRAMS

**DIAGRAM (1):** ON/OFF and Low Power using two toggle switches. Fixed flash pattern. Choose from table.



**DIAGRAM (2):** Selective switching of Heads 1-4 and Heads 5-8 using toggle switches. Low power control. Flash pattern is: Quintuple Flash.



#### 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.

Flash Pattern Table

#	WHITE	ORANGE	YELLOW	GREEN	BLUE	FLASH PATTERN
0						Shutdown
1				POWER		Quintuple Flash, Heads 5+7 ALT 6+8
2				POWER	POWER	Quad Flash, Heads 5+7 ALT 6+8
3			POWER			Quintuple Flash, Heads 1+3 ALT 2+4
4			POWER		POWER	Quad Flash, Heads 1+3 ALT 2+4
5			POWER	POWER		Quintuple Flash 1+3+5+7 ALT 2+4+6+8
6			POWER	POWER	POWER	Quad Flash, Heads 1+3+5+7 ALT 2+4+6+8
7		POWER				Mega! Flash, Heads 5+7 ALT 6+8
8	POWER					Mega! Flash, Heads 1+3 ALT 2+4
9	POWER	POWER				Mega! Flash, Heads 1+3+5+7 ALT 2+4+6+8
10	POWER	POWER		POWER		Double Flash, Heads 5+7 ALT 6+8
11	POWER	POWER	POWER			Double Flash, Heads 1+2+3+4
12	POWER	POWER	POWER	POWER		Double flash, Heads 1+3+5+7 ALT 2+4+6+8

#### TROUBLESHOOTING

*Blown Fuse*: The 7408-0120-00 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.

Erratic behavior (and/or) shutdown: The 7408-0120-00 will shut down if there is a short circuit condition on any one of the strobe heads. If the electrical conductors connecting the power supply to the strobe heads are exposed to water a short circuit will result. The first sign is intermittent operation, followed by complete shutdown of the strobe system. To find the short circuit, unplug all strobe head cables from the 7408-0120-00. Test **one** cable/head at a time until the problem is found.

#### **ACCESSORIES**

The following accessories are available to make the installation of the 7408-0120-00 power supply even easier:

#### ON/OFF - LOW POWER SWITCH PANEL

A Fully assembled switch panel which provides simple On/Off and Low power control. Provides the same functions as shown in Diagram (1)

# SELECTIVE SWITCHING PANEL

A Fully assembled switch panel which allows selective switching of strobe head pairs and also includes Low power control. Provides the same functions as shown in Diagram (2)

#### ROTARY SWITCH PANEL

A fully assembled switch panel which provides full selection of all flash patterns as well as On/Off and Low Power control.

All panels are pre-wired with 15'(standard) of cabling.