Important: Please read this manual to familiarize yourself with features and safety information.

Thank you for purchasing my 40-Watt High Voltage Nixie Power Supply on Tindie. This power supply was purposefully crafted for use with nixie tubes and similar display devices. Each power supply is hand assembled with brand new components and rigorously tested before shipping.

Before we get started on features, there is some important safety information we have to get out of the way. Power supplies in general can be dangerous if handled without care. Nixie tubes usually operate around 180 VDC, which is **dangerous or lethal** depending on the path of the current, if electric shock should occur.

BEFORE USING THE POWER SUPPLY UNIT

Be sure to read this instruction manual thoroughly before using this device.
Pay attention to all cautions and warnings before using this device.
Incorrect usage could lead to an electrical shock, damage to the unit or a fire hazard.

⚠DANGER

- Never use this device in locations where flammable gas or ignitable substances are present.

⚠INSTALLATION WARNING

- When installing, ensure that work is done in accordance with the instruction manual. When installation is improper, there is risk of electric shock and fire.
- Do not cover the device with cloth or paper etc. Do not place anything flammable around. This might cause damage, electric shock or fire.

⚠WARNING on USE

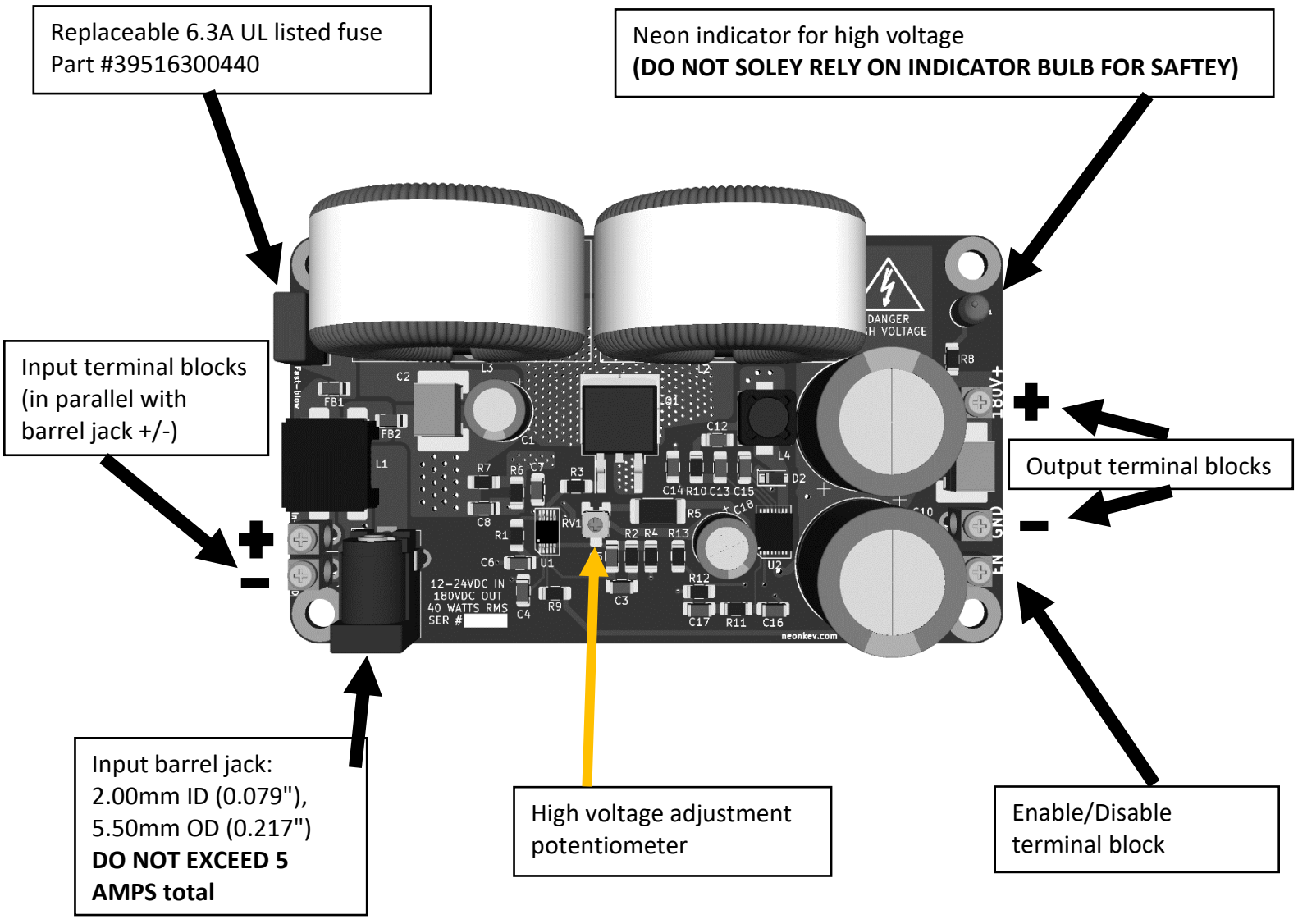
- Do not touch this device or its internal components while circuit in operation, or shortly after shutdown. You may receive a burn.
- While this device is operating, keep your hands and face away from it as you may be injured by an unexpected situation. For installations with no cover, do not touch them as there are high-voltage and high temperature parts inside. Touching them might cause injury such as electric shock or burn.
- There are cases where high voltage charge remains inside the device. Therefore, do not touch even if they are not in operation as you might get injured due to high voltage and high temperature. Touching the device while in operation may result in electric shock and/or burns. Do not solely rely on the neon indicator bulb as an indicator of hazardous voltages present in the device.
- Do not make unauthorized changes to this device as you might receive an electric shock or might damage the device.
- Do not use this device under unusual condition such as emission of smoke or abnormal smell and sound etc. Please stop using it immediately and shut off the device. It might lead to fire and electric shock. Do not attempt repair by yourself, as it is dangerous for the user.
- Do not operate and store these devices in environments where condensation occurs due to moisture and humidity. It might lead to fire and/or electric shock.
- Do not drop or apply shock to this device. It might cause failure. Do not operate these devices if/when mechanical stress is applied.

⚠CAUTION on MOUNTING

- Confirm connections to input/output terminals are correct as indicated in the instruction manual before switching on.
- Input voltage, Output current, Output power, ambient temperature and ambient humidity should be kept within specifications, otherwise the device will be damaged.
- Input line, please use wires as short and thick as possible.

- Do not use this device in special environment with strong electromagnetic field, corrosive gas or conductive substances and direct sunlight, or places where device is exposed to water or rain.
- Please shut down the input when connecting input and output of the device.

Now that we have that out of the way, lets discuss the connections and features of this unit:



Operating specifications of the supply are as follows:

Environmental: -20°C to 70°C, 20 ~ 90% RH non-condensing

Input: Between 12 to 24 VDC in
– 50 watt or greater UL listed adapter recommended

Output: Continuously adjustable between 170 to 190 VDC
– 200 milliamps (0.2 amps) of continuous high voltage output
– 91% efficiency at 12 volts in, 200 milliamps HV out
– Do not to exceed rated load (above) for extended period

The supply also features:

– Input and output short circuit protection

– Input EMI filtering and surge suppression

– Automatic restart/retry if output is overloaded

– Enable/disable pin which can be pulled above 1.2 VDC (10 volts max) relative to ground to turn high voltage off, without disconnecting input power (for energy saving when high voltage load is not active).

Warranty is as follows:

– Lifetime labor and technical support
– 3 years parts

For any questions or concerns, please do not hesitate to contact me at kevin424@protonmail.com

Thank you!