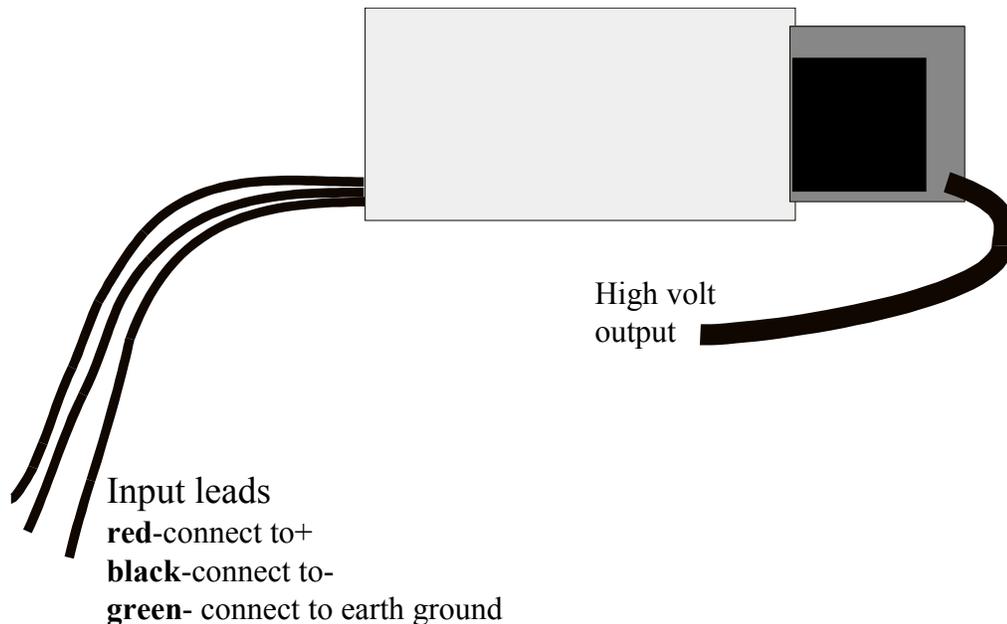


NEON21 + MINIMAX5/7 INSTRUCTIONS

This unit is intended for single electrode gas discharge displays involving neon, art sculpture etc. It can power up to 12 feet of 12mm straight tubing.

Caution: Connecting other end of tube may overload unit causing excessive heating, reduction in output and eventual catastrophic failure. Call us if you have a problem.



1. Install unit into enclosure. OUTPUT TRANSFORMER and bottom of circuit board must be separated with 1/8" plastic or similar material from any conductive surface.
2. Connect the single black or green wire lead to receptacle socket plate screw or other known ground point. FAILURE TO PROPERLY GROUND THIS LEAD WILL VOID WARRANTEE AND WILL CREATE A ANNOYING SHOCK AND BURN HAZARD. Note that a special grounded wall adapter is available for those who wish to eliminate this unsightly lead to earth ground.
3. Connect HV output lead to tube electrode and keep as short as possible and clear of any conductive objects. Verify proper clearances and that there is no corona around lead or connections as observed in the dark.
4. Connect a wall adapter or other source of 12 volts dc capable of supplying 1 amp to the input leads and secure via wirenuts tape etc. It is important that the proper polarity be observed as serious damage to the unit will occur it reversed wired for any period of time. When in doubt quickly make contact holding leads and verifying display lighting.
5. Allow to run for 1 hour and note neither y hot to touch.

Information Unlimited

P0 Box 716 Amherst, N.H. USA 03031 1 603 673 6493 or 4730

FAX at 1 603 672 5406

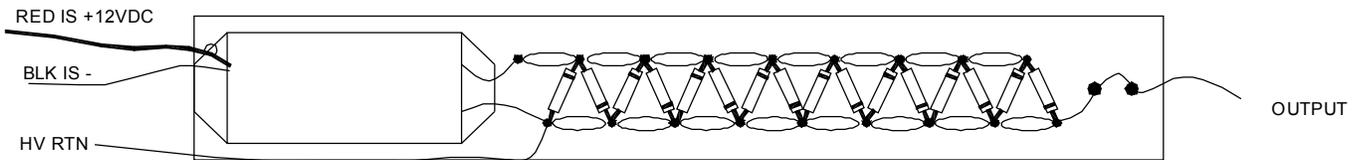
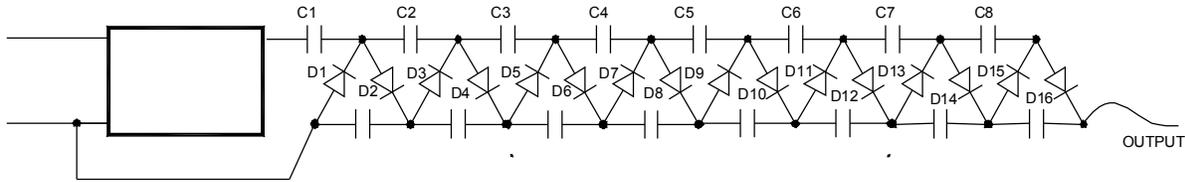
Email at <tech@amazing1.com>

See our web site www.amazing1.com

8-STAGE CHARGE SERIES HV POWER SUPPLY AND CHARGER

Danger!! Danger!! Charging External Capacitors to Over 50 Joules of Energy Exposes The Experimenter To A Potentially Deadly Electrocutation Device.

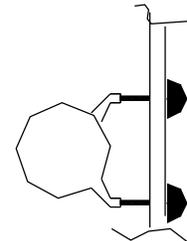
It is assumed the user of this equipment is experienced in high voltage applications and the associated hazards involved.



ASSEMBLY STEPS FOR KITS: NOTES ON OPERATION

1. Identify kit parts:
 - *MINIMAX3/4/7 Module
 - 5 x 1/12" piece of perf board.
 - #500/10KV ceramic capacitors
 - #VG12 HV rectangular diodes-*positive ends identified by blue dye on lead*
 - (24") of #20 hook up wire
2. Attach a 5 x 1 1/2" piece of perfboard to module using RTV silicon rubber.
3. Insert components as shown along with connecting leads.
4. Solder leaving large, round, smooth globular joints. This is contrary to normal soldering techniques but is necessary in high voltage wiring to reduce corona and leakage.
5. Connect a source of 12 VDC capable of supplying 1 amp to input leads. Note a bright energetic spark occurring at output leads. Input current should not exceed 1 amp when delivering power.

Use 1/8-3/16 wide smooth globular solder joints for connections to capacitors, diodes, R1 and HV output points. This is contrary to normal soldering but is necessary to prevent corona leakage.



Always connect a 2000 to 5000 ohm resistor in series with HV output lead when charging capacitors.

Unit may be battery or solar powered for portable or field use.

Output may be used for insect killing grids, shocking supplies, ozone and air purification, ion generation, spark gaps etc.

Basic system is shown as a multiple stage voltage doubler driven by our #MINIMAX3 producing 4000 volts. You may connect up to 8 stages for generating up to 35,000 volts. If you used our MINIMAX7 with the above you could generate up to 50,000 volts!

An excellent science project is possible using this higher voltage module for driving a high speed ion motor

For those who intend to use this device as an animal shocker or anti-personal deterrent, it is suggested to obtain our #HEC1 plans showing "how to electrify objects, vehicles, areas etc.