

PVM12 OPERATING INSTRUCTIONS FOR VARIABLE HIGH VOLTAGE HIGH FREQUENCY SINGLE ENDED PLASMA DRIVER

FEATURES

OUTPUT: Variable 1 to 15kV

FREQUENCY: Variable 20 to 50kHz

CURRENT: Reactance limited

INPUT: 12 VOLTS DC @ 3 Amps MAX

SAFETY: Short-Circuit Protected with Auto 4 Amp Fuse Blown when Overloaded



INSTRUCTIONS

1. Connect HV lead to display—CAUTION: lead must not be near any conductive objects.
2. Connect up to power and click POWER SWITCH to “on.” Slowly adjust POWER CONTROL clockwise for desired effect. You will note a point where the input current peaks indicating system resonance. Maximum power output and display effect now occurs.
3. Allow to run for 1 hour and note unit is slightly warm.
4. Turn lights “off” to see and eliminate any corona.
5. Check display for excessive heat. Turn power down if necessary as it is possible to overpower. Unit has a 3 to 4 amp fuse and will blow if severely overloaded.

PRECAUTIONS:

Do not use near pacemakers or other similar electronic equipment. Energized display may radiate RF energy into nearby objects—including people! This may produce annoying burns and shocks. Product must be installed by experienced personnel.

SPECIAL NOTES:

1. Undersized displays of smaller electrical capacity may cause overload due to excessive output voltage. It is suggested to use our MODEL #NEON21 for these smaller displays.
2. The over voltage is a result of high Q currents. A suitable load will add resistance reducing this circuit Q. Undersized loads may cause premature transformer failure.
3. Unit contains an internal factory set power limit control. Do not adjust without consulting factory—**warranty will be voided.**

PLASMA JAR EXPERIMENT

Jar is sealed via a small washer pinching the folded rubber hose. This method provides an excellent temporary seal that is easily removed for repumping, etc.

Connection is made to copper tube via clip or tight wire twist.

Metal base plate is necessary to provide electrical capacity for sustaining plasma current.

Adjust power control knob for maximum display. Note sharp peak in adjustment.

Do not leave on for extended periods of time until you check for heating of supply and jar.

Hold a household fluorescent lamp near the jar and note it lighting! This is a neat demonstration for a science project.

It is suggested to use a variable voltage supply capable of producing up to 16 volts at 2 amps for powering plasma jars obtained from the factory. 12 volts may not provide the proper effect without repumping the jar.

A pumped ready to use 1 gallon jar is available. Call for price and availability.

