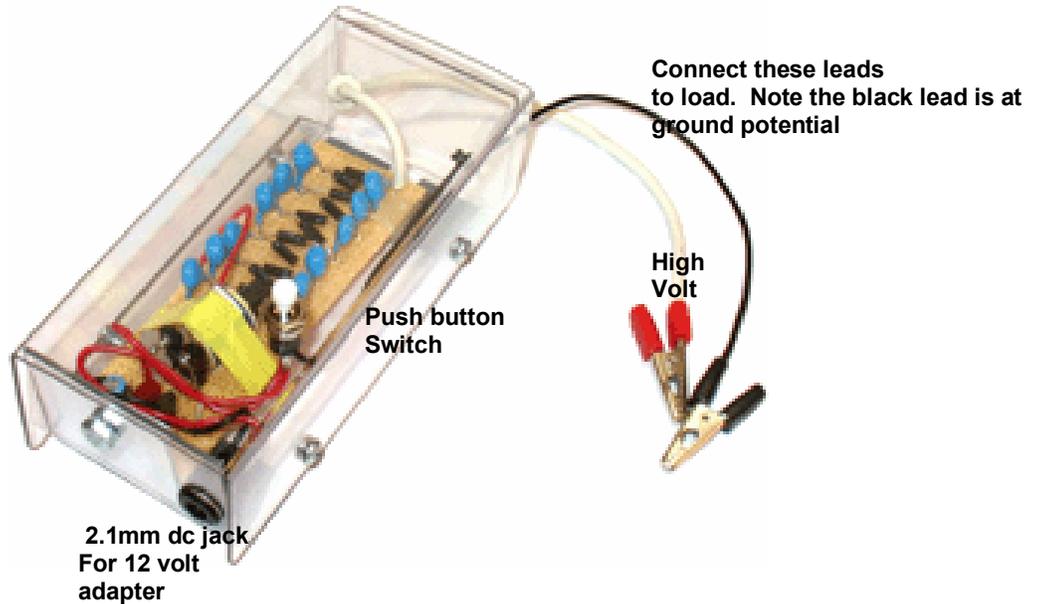


PBK50 Operating Instructions



This handy charger produces an open circuit voltage of 20 kv at a short circuit current of 400 ua.

Alligator clips are used for connecting the output to the load. The white lead is the high potential lead usually plus unless designated otherwise. The black lead is the HV return and may be earth grounded.

A pushbutton switch is used to prevent over charging a capacitor or as a quick release for small values of capacity. This switch may be replaced by a small SPST toggle switch.

*A high resistance voltmeter should be used to monitor the charge voltage from over volting. NOTE: It is very easy to over charge small value capacitors..Use caution!

DANGER a charged capacitor of 50 Joules or more can be lethal!!

The input to this unit is 12 volts dc and may be a small 100 to 500 ma adapter and may be optionally purchased as noted on web site

*A 12 volt battery pack may also be used by using a mating plug and connecting into the 2.1mm jack. Note that 8 AA batteries can produce over 100,000 joules!! **This is a small explosion**

This unit is short circuit proof and may be openly spark discharged for short periods of time. It can also be used as a source of unregulated high voltage DC for flocking, lons, Igniting trigger, shocker etc. You may want to change the push button switch to a SPST toggle switch.

To calculate Joules: SQUARE the VOLTAGE, MULTIPLY that AMOUNT by the CAPACITY in MICROFARADS, and DIVIDE this AMOUNT by 2,000,000. This is the energy stored in the capacitor.

*It is suggested to use a 40kv high voltage probe meter such as HV44 sold by MCM ELECTRONICS

* Radio shack is a good source for these parts