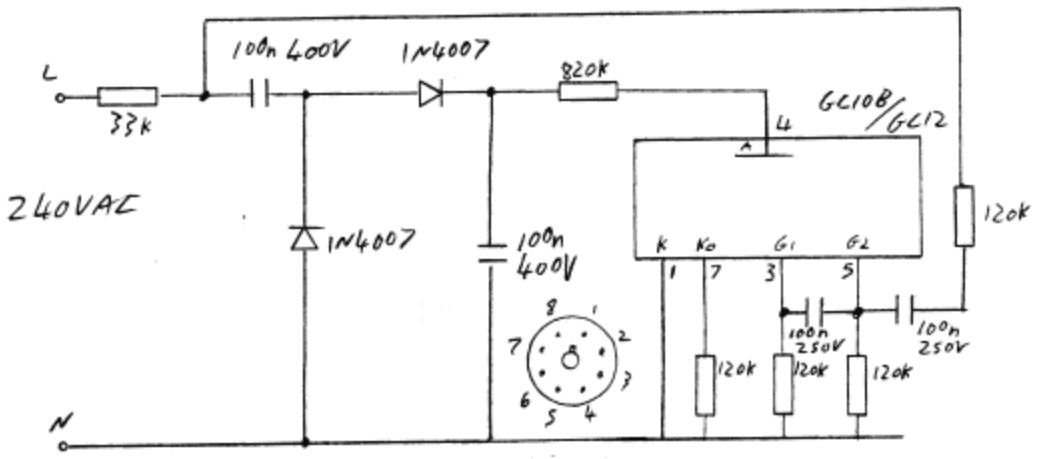
Page taken from: http://homepage.ntlworld.com/electricstuff/dspin.html

Dekatron spinner

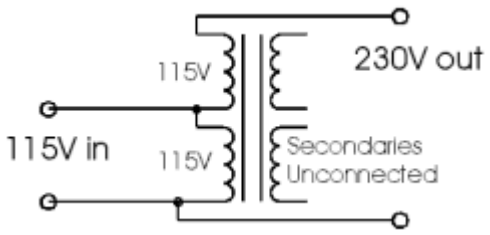
The simple circuit below will make a GC10B or GC12/4B dekatron light up and spin round when connected to the mains supply. It should also work with most other dekatrons, possibly with component adjustments. It can also be used with 'Selector' type tubes (identifiable by the larger number of pins, usually 13 or more) if all the cathodes are connected together externally to mains neutral. The 120K resistor to pin 7 is probably not needed - it should work with pin 7 connected to pin 1.



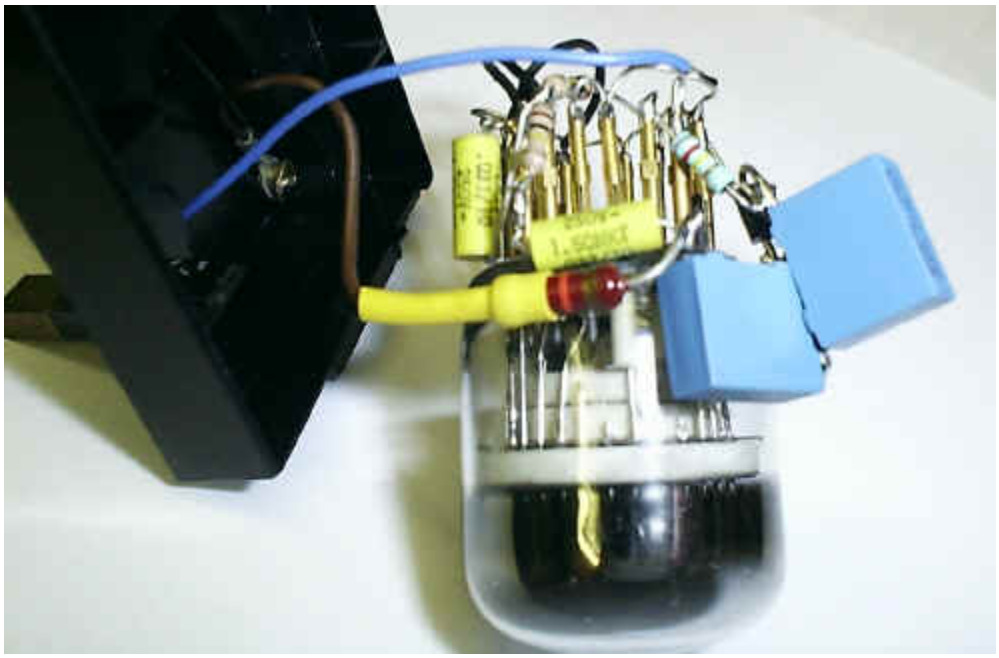
The octal base drawing is the underside view, i.e. looking at the pins. Component values are not too critical - I used what I had available. Resistors should be half-watt carbon film, or 1/4 watt metal-glaze to ensure that their voltage rating is sufficient.

Obviously the entire circuit is at mains voltage, so you should take all necessary safety precautions. Remember that the capacitors will hold a charge when the circuit is switched off, which although not very dangerous, can be a nasty surprise!

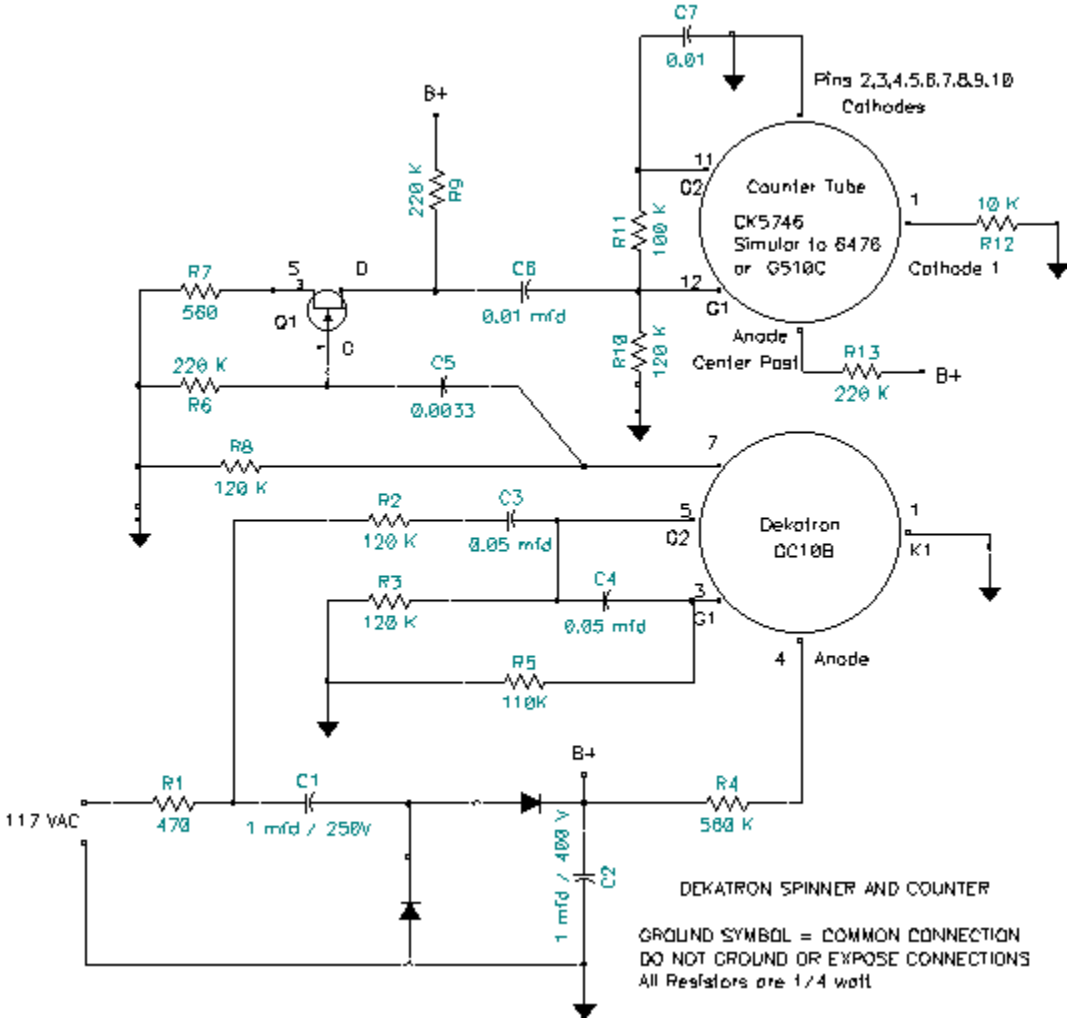
It is intended for a 200-250v mains supply - for 110/120v operation, you could either add another stage to the voltage doubler, or use the primary of a small dual-voltage mains transformer as an autotransformer to get 220-240VAC (Power consumption is negligible, so you can use the smallest transformer you can find).



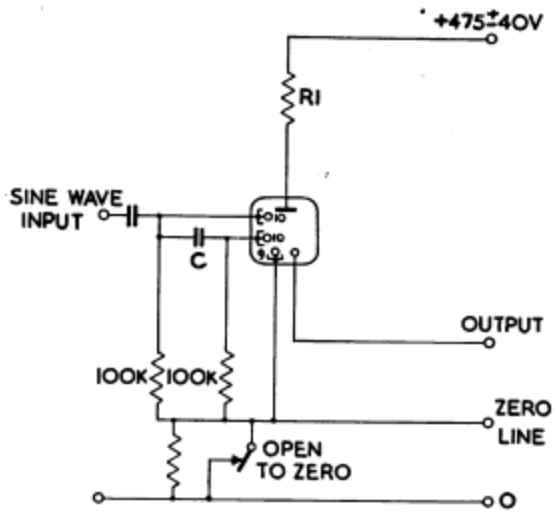
I recently obtained a miniature Hivac GS10H dekatron & built it into a small mains-adaptor case with the above circuit. To connect to the pins, I used socket contacts from a dismantled 'D' type connector. This tube is a 'Selector' type, which has all 10 cathodes brought out to the pins - you need to connect all of these pins to ground for the spinner circuit. The 120K resistor shown above from K0 to ground can be omitted - just connect K0 to ground.



2-stage dekatron spinner from Vaughn Wright. Q1 is a high-voltage N-Channel MOSFET - at least 500V rated.



General circuit for GC10B from [Ericsson data book]



Also see circuits in Elsta data sheets

Apex Electronics	Have lots of the special 13 pin sockets for GS10C,GS10C/S,GS10D and GS12D dekatrons. Apex probably don't know what they are for, so email them with this picture with enquiries.