

70-260V Mains Auto Transformer

By G8MNY

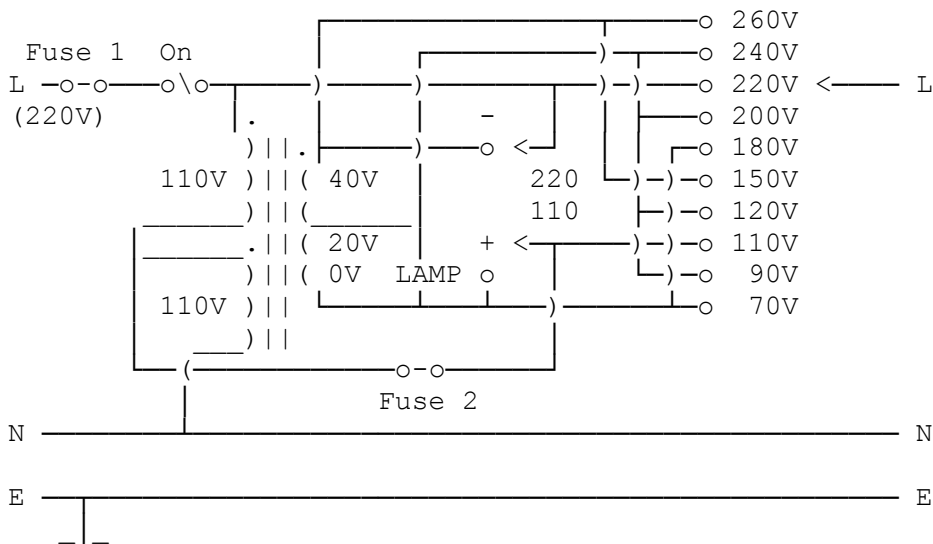
(New Jul 11)

(8 Bit ASCII graphics use code page 437 or 850, Terminal Font)

This is a poor variac substitute, but made with a suitable transformer & large wafer switch, it can provide useful mains test voltages.

Voltages shown are for simplicity of calculation only!

CIRCUIT



Here the 110/220V switching & phase reverse switching (+ or -) of the 40V secondary is not shown. If a good multi wafer switch is not available, then a plug board may be more suitable.

SAFETY

To stop switch arcing or shocks on a plug board, only change voltage with the mains OFF! The inclusion of a 20V lamp (not accessible!) is useful to remind you!

All housing & wiring etc. should be up to mains standards & also let heat out.

The power rating of the transformer will set the max current at a voltage...

VOLTS	MAX LOAD CURRENT	e.g. 80W Transformer
260	Full Secondary	2A
240	1.5 x Secondary	3A
220	Infinite	Fuse Limit
200	1.5 x Secondary	3A
180	Full Secondary	2A
150	2x Transformer rating	0.6A (220/80 x2)
130	2x Transformer rating	0.6A
110	2x Transformer rating	0.6A
90	2x Transformer rating	0.6A
70	2x Transformer rating	0.6A

So for an 80W transformer Fuse 1 can be 2 or 3A, & Fuse 2 a 1A.

See also my tech bul on "Maplin Mains Meter 2000MU-UK", "Mains Power Protection" & "Saveplug Motor Economiser".

Why don't U send an interesting bul?

73 De John, G8MNY @ GB7CIP