Maplin 13A Socket Mains Tester
By G8MNY (New Aug 14)
(8 Bit ASCII graphics use code page 437 or 850, Terminal Font)

This is a 230V AC 3 neon plug in safety tester. It can only detect simple wiring faults!

Inside there is 2 PCB with the Neons & 8 Rs.

Live-----------------------------+
   R1  DS1  R4  DS2  R7  DS3
   56K (=)  82K (=)  68K (=)   * * * Mains OK
+----;  +----;  +----;  
   R2         |         |  * * . No Earth
           |     |  
   R3         |         |  * . * Live or Neutral reverse
   33K        |   R8
+----------+  82K
   R6         |         |
   33K

Neutral-----;  68K |  .. * Live or Earth reverse
   R3         |         |
   R3         |         |  . . . No Live
Earth---------------------------+
   82K

I took mine apart after DS3 started to flicker and then went permently out!
On testing with an isolation transfomer fed from a variac. I found all worked properly on 260V. For some reasion the attenuation differences in DS1 and DS3 feed Rs seems to be wrong. Isolating the Rs they are all quite normal and swapping the neon around did not move the fault.

So I replaced R7 and R1 with 100Ks, and it all works correctly now all 3 neons extinguish near 210V, and the various fault indication function all tested.

See my tech bul, "Maplin Mains Meter 2000MU-UK"

Why don't U send an interesting bul?

73 De John, G8MNY @ GB7CIP