

Modification for display hourly shutdown

Rev 2.1

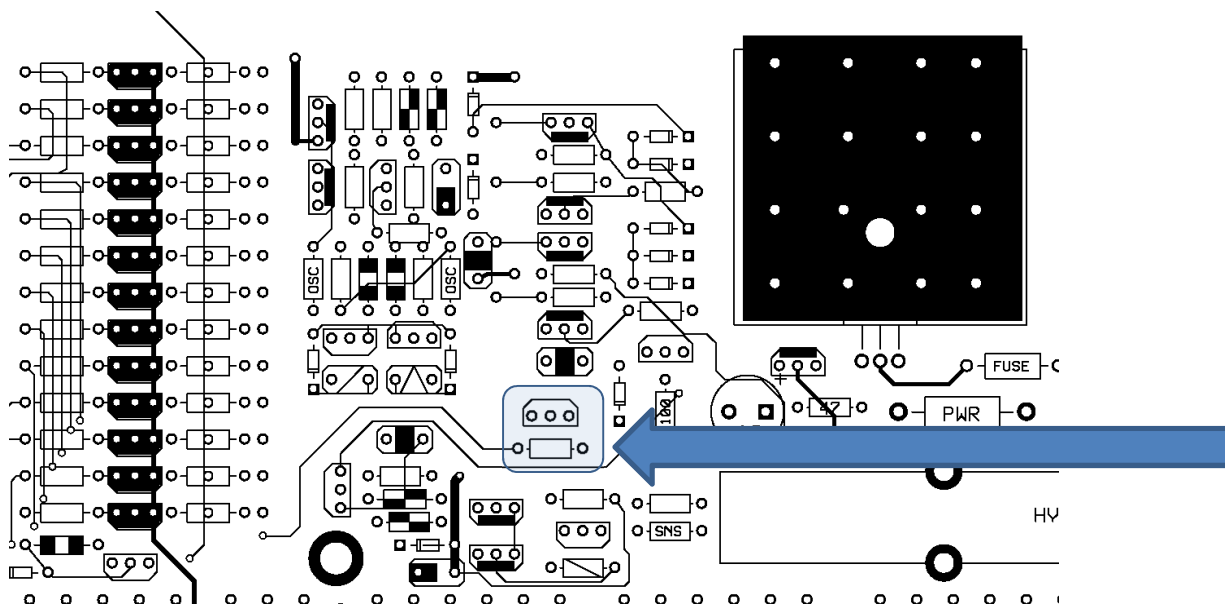
Applies to KABtronics Nixie clock PCB version 4 and earlier.

Page 26 of the manual mentions optionally loaded diodes to turn off the display for each hour.

If you plan to load any of the 24 diodes to shut down the display at specific hours, there is a modification needed, otherwise any diode loaded turns off the display for all hours.

A 4.7 volt zener diode needs to be placed in series with the 10K (R287) resistor connected to the base of Q125. These are shown in the schematic on manual page 11 which is on manual page 73.

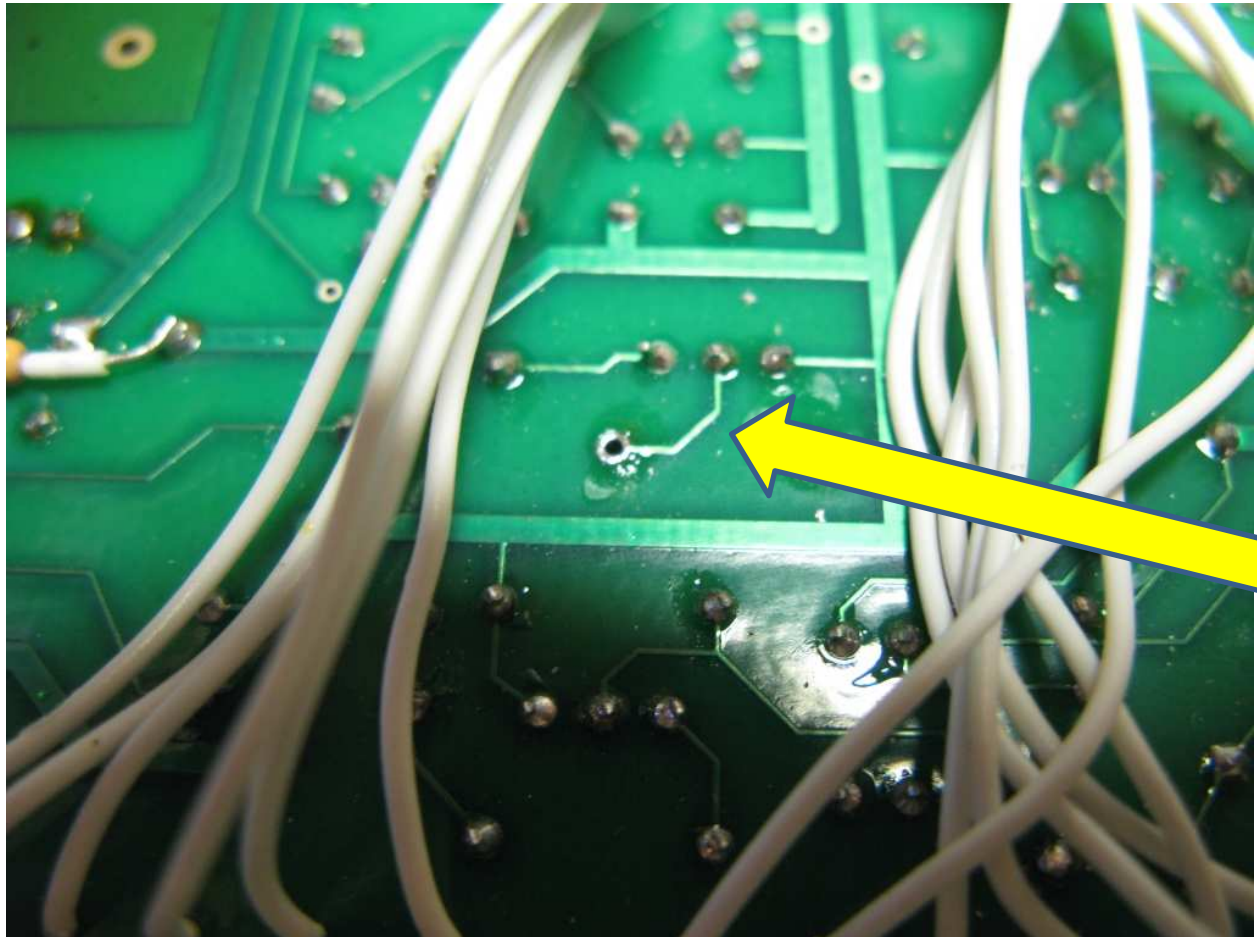
Below is the front of the board with Q125 and R287 indicated.



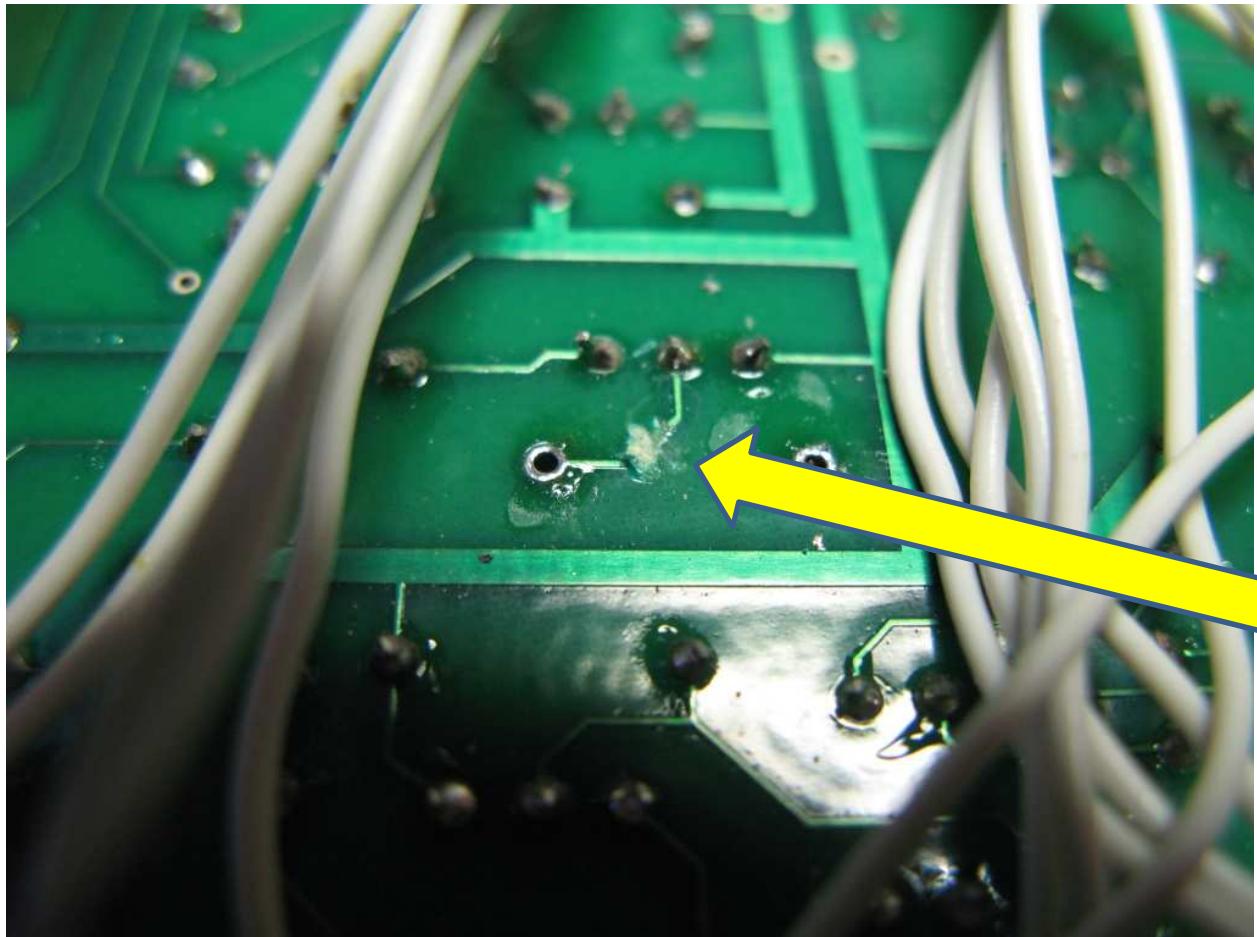
Look at the back side and find these two parts. You will notice that the right side of the above resistor connects to the base (middle pin) of the three leaded transistor. Use a knife to cut the trace between the base and resistor on the back of the board and solder the zener diode between the transistor and the resistor to replace the trace. The cathode (the line) connects to the resistor.

The following pages show the steps needed.

Below is the back of the board with the 10K removed. Note that you don't need to remove the 10K for this modification. The trace to be cut from the resistor to the base (middle lead of the transistor is indicated).



Below is the trace cut and the metal removed for a short section.



The 10K resistor has been installed and the zener diode has been placed and soldered. Note the band (cathode) is connected to the resistor.

