## **AIRMATE-USB TELCO MODIFICATION**

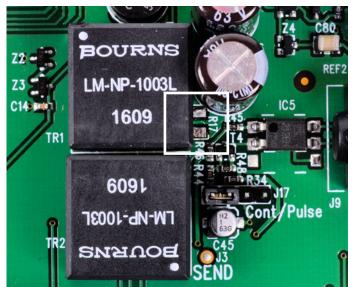
In some countries the ring voltage could be up to 150 volts which can destroy certain resistors in the circuit resulting in malfunctioning of the Telco circuit, but we have a solution for that which is explained below. In short both resistors R17 = 604 Ohm (or 620 Ohm) and resistor R18 = 1kOhm need to be replaced by a higher power version. We will let you see below how. In case you do not succeed to do that we can always supply a finished version of the modification.



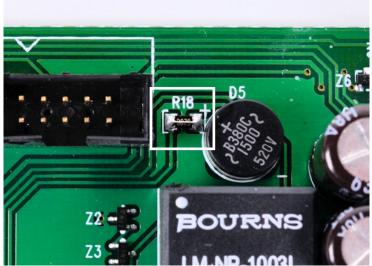
On the left you see both resitors that need to be replaced by heavy duty ones.

R17= 1k0 Ohm (along side the Bourns transformer. (A)

R18= 604Ohm along side the 10 pin connector (B)

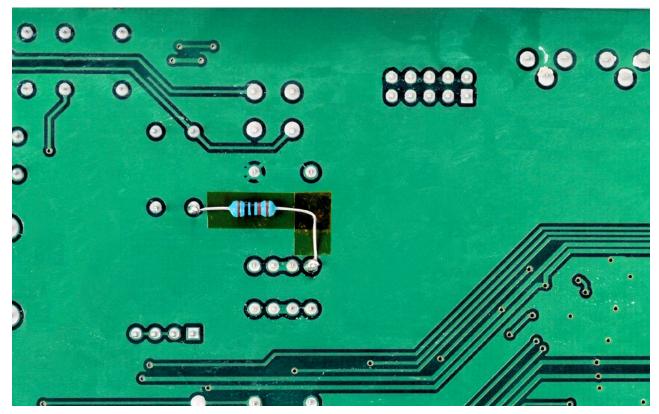


1. The first step to do is remove R17 entirely.

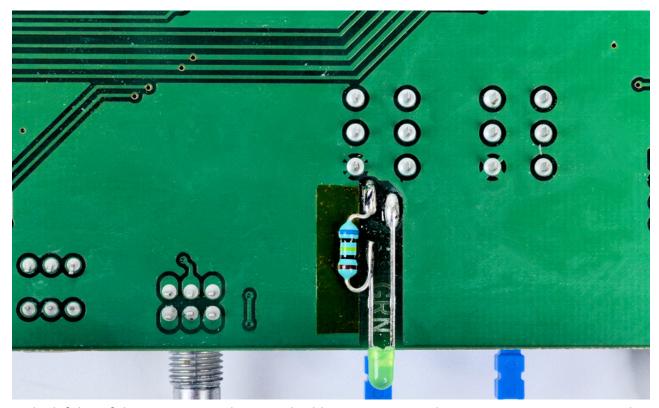


2. Then make a short on top of R18 with a small piece of wire.

Now turn the board up side down and look at the next page what to do.



Take a 1 watt 1Kohm resistor and solder it as seen above

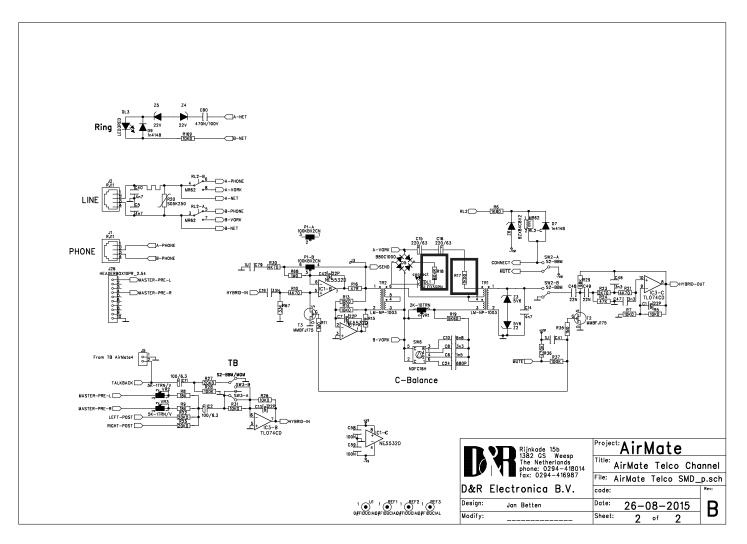


Cut the left leg of the LED as seen above and solder a 1 watt 620 Ohm resistor in series as seen above

Now you have replaced the existing 250mw smd resistors by 1 watt resistors that can easily handle extreme ring voltages.

## Note:

it is important to put capton tape underneath the 620 Ohm resistor or lift this resistor one milimeter from the pcboard to dissipate heat.



Schematic of the Hybrid with R17 and R18 to identify its place in the circuit.

