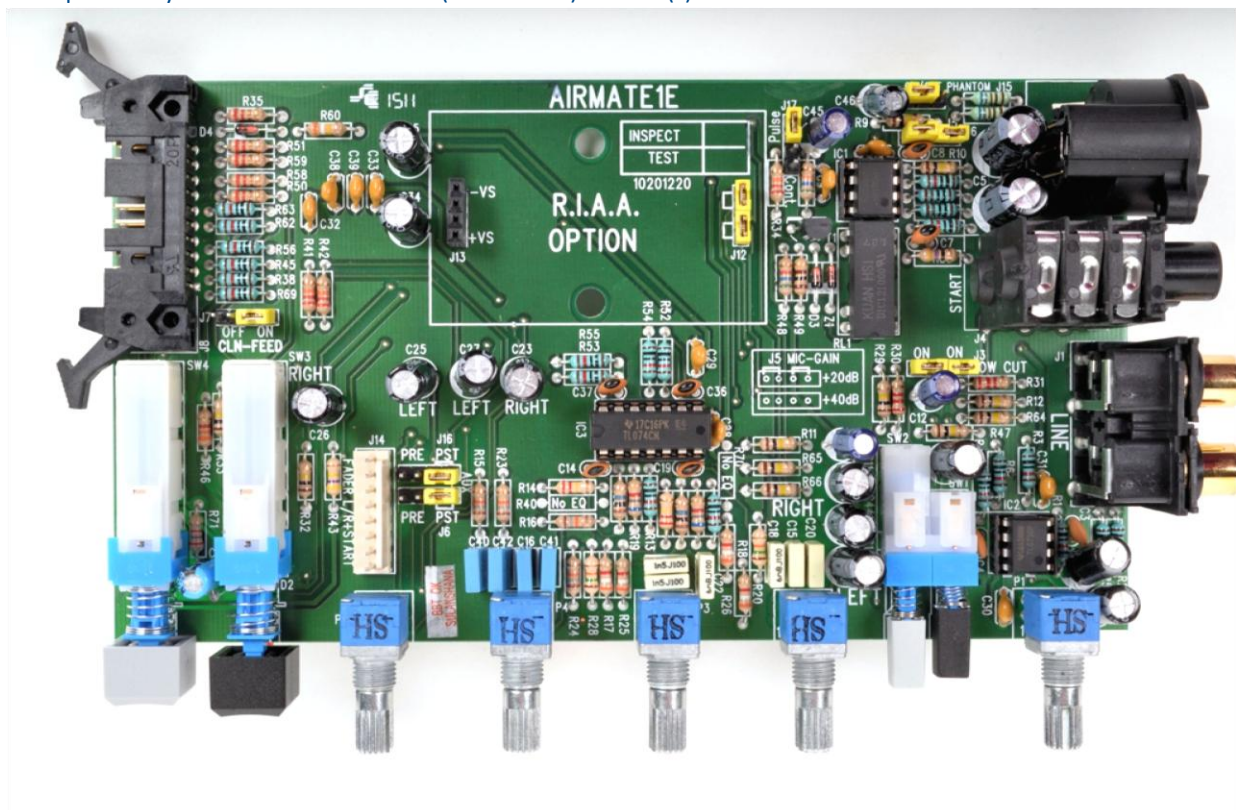


# HOW TO REPAIR A NON WORKING AIRMATE-(USB)

I am sorry to hear that one of our products failed totally.

First you need to put the console on a soft surface on its knobs and remove the bottom plate/frame. This can be done by using a screw driver and unscrew 3 bolts on the top of the front panel below the faders and all the screws that are fixing the frame to the connector back panel. Three on the bottom, one left and one right. Now carefully remove the bottom panel. Now you see all the pcb's.

Step 1 is to find out if the power supply voltages are still present on the power supply board. Remove the main flatcable from that board and measure its voltages to be + and - 15 volt and +48 volts for the phantom powering of microphone. If it is not the case this board has to be repaired or replaced. This is something an experienced technician can do. If the power supply board is functioning then look carefully on every PCB if you see anywhere a burnt resistor. These burnt resistors are always placed very close to the flatcable connector. Below you see a picture of a pcb and in the top left corner are the 5x "fuse" resistors R35, R51, R59, R58 and R 50 All have a value of 2E2. If one of these resistors on one of the PCB's look burnt, de-solder it carefully from the pcb and replace it by one or more 100kOhm (or 47kOhm) resistor(s).



Now remove all the chips from that faulty PCB and put power again on the pcb by turning on the power supply of the Airmate. Now measure the power supply before and after this 100kOhm resistor. If the power supply is present before and after this resistor then there is no short anymore on the pcb.

If it is still dropping to zero, switch off the power supply and remove the small decoupling capacitors of 0,1uf/50volt close to the Chips. After you have removed one decoupling capacitor (C28/C29/C30/C31/C32/C33 on the above PCB) You

Put power back on and measure if the power has returned again after the test resistors of 100k

You can do that easily by connecting a voltmeter permanently to this 100k resistor on the circuitry side (not on the side that goes to the flatcable connector and to the Power supply board. You have to measure a positive and negative voltage of 15 volt (or +48volt) coming from the power supply board.

If the power supply is back on that pcb you can put back the decoupling capacitors (measure first which one has a short and replace that one by a new one) insert the chips again one by one, and measure after every insertion.

If the voltage drops to zero on one side of the 100k resistor(s), you know that the last inserted chip is broken and need to be replaced. If both or all fuse resistors were blown/burnt replace them all by 100k resistors, leave the long leads on the resistors to make measurements easier.

This procedure has to be done on every board were a fuse resistor is burnt.

Good luck