

CHANGING THE FUSES ON A RAMSA DA7

Notes and pictures taken by A. Bhinder - June 2004

*Special thanks to Dave Wraight who I met via www.da7.com
for getting me started and supplying initial information*

SYMPTOM

Everything works fine but there is no analogue audio coming out of the mixer.

FAULT

The chances are that either one or both of the fuses which protect the supply lines responsible for feeding the analogue circuitry (+/-14.5V) have blown.

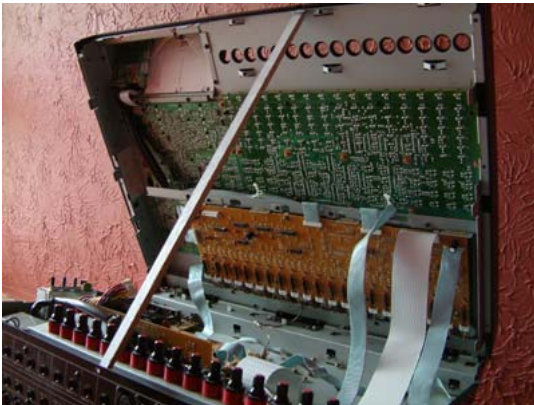
FIX

Unfortunately these fuses are not accessible from outside of the unit and even worse, once you get to them, you will notice that they are special PCB mounting devices and not your conventional glass tube type. The fuses need to be replaced. I personally believe that they are under-rated and I tend to up-rate them to a slightly higher value of 7A. The RS Components supplied equivalents are time-delay fuses which means they don't blow as soon as the rating is exceeded. Hence small fluctuations in the supply won't blow them. If you wish to use original parts, then the Technics part number for these fuses is YWSSFR6R3AF3.

PROCEDURE

Before starting, you will need the following tools and parts:

- 1 A cross-head screw driver
- 2 A piece of wood, approximately 2cm wide and 50cm long
- 3 A note-pad and pen
- 4 Wire cutters
- 5 Pointed pliers
- 6 Soldering iron
- 7 Three PCB (solder) mounting 6.3A fuses (or 7A, time-delay fuses if you want to up-rate)



The top of the DA7 is hinged to the base. The hinges are at the front. Remove all small screws along sides, rear top and front top. Then pull MONITOR A LEVEL, MONITOR B LEVEL and TB LEVEL knobs. The top can now be easily lifted from the rear. Use that 50cm long piece of wood to hold the top open as shown opposite.

There are eleven brass coloured screws which secure the POWER SUPPLY B board to the bottom of the case. Nine of them are easily accessed from the top of the board. The other two require the MONITOR module to be removed. The MONITOR module is held down with three black screws, two on the top of the unit and one lower down going into the bottom of the case (see picture below). Remove these

screws and gently lift the MONITOR module out of the way so that it hangs over the side of the main casing. Now you can access the last two screws which hold down the POWER SUPPLY B board.

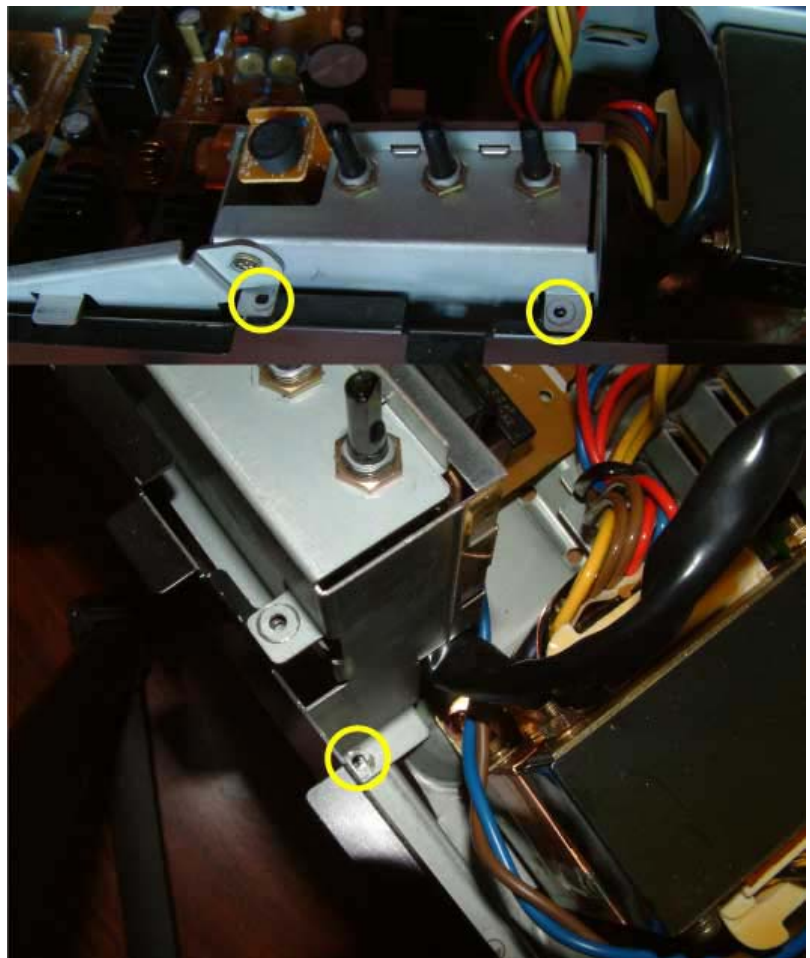
Before attempting to remove the board, you will need to detach the cabling between it and some of the other boards.

Initially there are five cable bundles which can be disconnected from the POWER SUPPLY B board and at the POWER SUPPLY B board end. However, three (blue) ribbon cables can only be detached at the non-POWER SUPPLY B (i.e. the destination) end. These cables are secured in special PCB mounted terminals. On the side of these grips are tabs which need to be lifted. Once lifted, the respective cable can be eased out of the terminal.

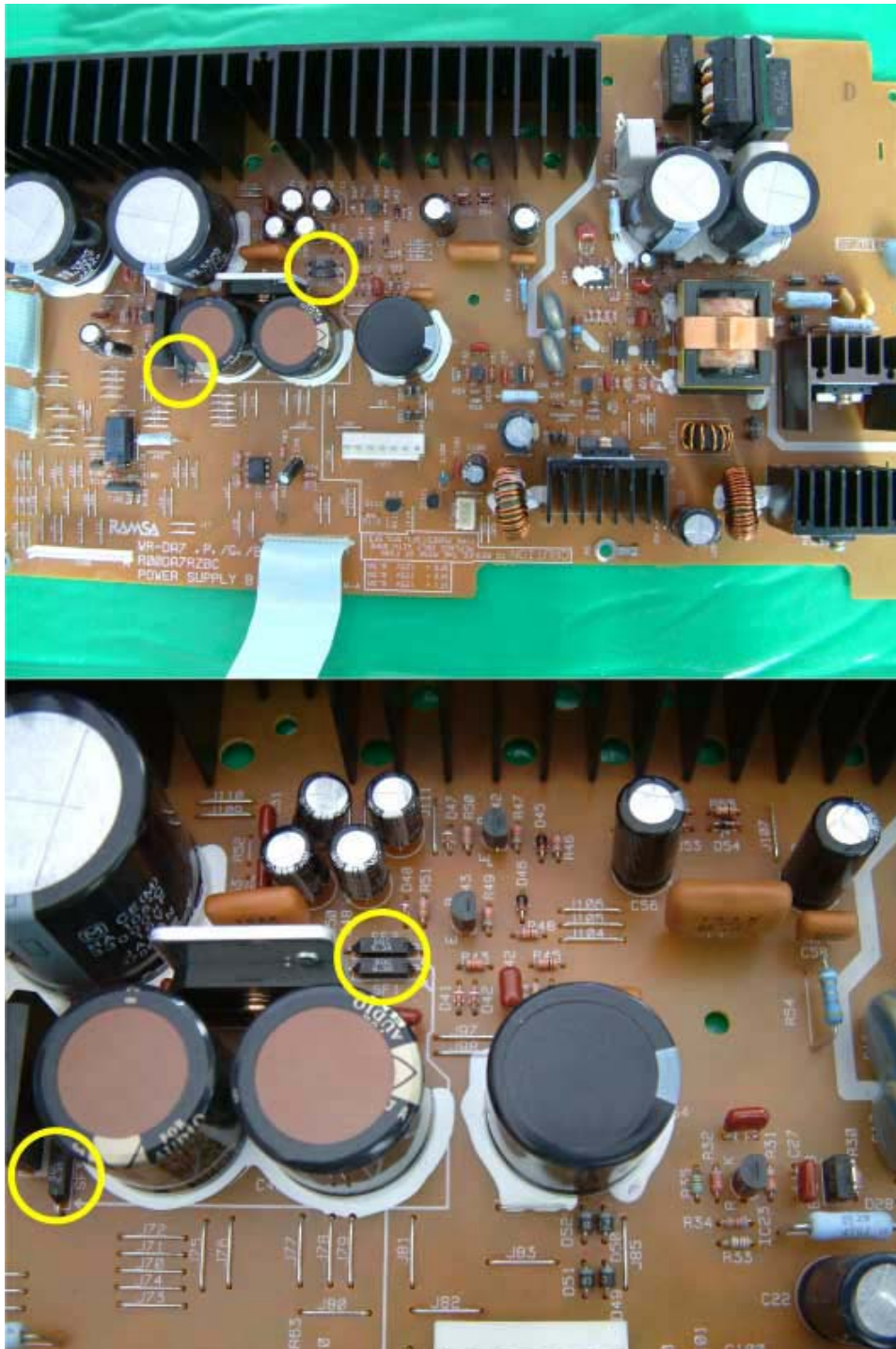
NOTE: You will notice that there is a red line on one side of each ribbon cable. Make a note of which side of the terminal the red line was. When re-assembling the mixer, the polarity of these cables is crucially important and they *MUST* be put back correctly.

Two of the cables for example, come back to the main board. If looking from the rear of the mixer, the red line faces the left (towards the MONITOR module).

Once all the cables have been removed, gently lift the board away from the mixer.



The pictures below show the POWER SUPPLY B board and a close-up of the fuses which need to be replaced/up-rated.



My personal suggestion is to up-rate the fuses circled in yellow from 6.3A to 7A.

Original Technics part number (6.3A): YWSSFR6R3AF3
RS Components part number (7A, time-delay): 419-375

Fuses 1 and 2 are responsible for +/- 14.5 volt supply for the analogue section of the board. Fuse 3 is for 5V for Logic. The 48V phantom supply is not fused. The main fuse on POWER SUPPLY A board is a conventional 20mm type which is rated at 5A.

Disclaimer: I take no responsibility for you screwing up your DA7!