

## 5. Modifications

1. Backlight switch
2. 6 voice out cable
3. Individual outputs

### 1. Backlight switch

Due to constant lighting and just common wear and tear the readability deteriorates over the years. The backlight is responsible for this.

Once the switch is installed the annoying buzz also disappears when the backlight is switched off.

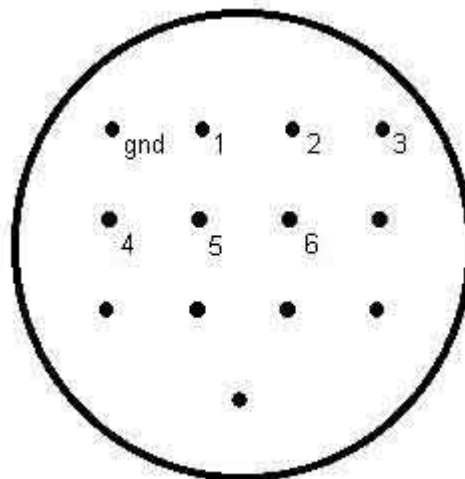
- Open the VX-600: remove the screws underneath the sides of the machine (4 in total) and lift off the top panel; it stays open by itself.
- Locate the spool that has to be interrupted by the switch. It's on the main bottom pcb in the right top corner, close to the connector for the backlight (the wires with the plastic coating). It's coloured green and it's called 'L2', it looks like a resistor, just a bit bigger. Use the **scheme** if you can't find it.
- Now cut the left connection of the spool right in the middle, so it's easy to solder the wires on them, bend the two connections apart a little.
- Solder two wires on the cutting points very gently, don't heat them too much.
- Drill a hole in the little metal plate labeled 'INTERFACE', it's not used anyway.
- Make a little switch in it and solder the wires to the switch.
- Close the panel, rescrew the screws and you're done.

### 2. 6 voice out cable

When the VX600 was introduced Akai sold the VW-X6 cable. This was a DIN/PHONO converter cable. Unfortunately this cable is no longer available. So if you want to use the VX600 with 6 individual outputs you might want to solder your own cable or you can try **this**.

The VX600 uses a 13-pin DIN connector. These are not easy to find. I know they were used by Atari as a connector for their ST-monitors (SM124) .

This is the pin layout for the connector as viewed when you look at it at the back of the instrument.



### 3. Individual outputs

Based on the pin description for the 6 voice cable, you can build your own individual outputs for the VX600 as I did. But you will need the patience and the courage to disassemble your synth. First of all you must **open** the VX600's topcover by removing 4 screws located on the bottomsides of the instrument. Then you must disconnect most of the internal cables so you can unscrew the main PCB and lift it. You will need to solder 7 cables at the back of the PCB (6 for each voice and 1 mass). This must be done where the 13-din connector is installed.

At the bottom of the PCB you will find the 13 soldering points from the PCB connector. When you know the above pin layout it should be easy to solder the cables to internal Jack connectors. There's just enough room at the back of the panel to install 6 jack connectors. The whole operation took me about 4 hours to complete. Just make sure that when you reassemble your VX600 all internal connectors are well in place.

You can find a picture **here** to see how it looks on the inside.



As always I will not be held responsible for any damage suffered to your instrument during the procedures of these modifications :-)

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