

Yamaha TG77 EL-panel replacement

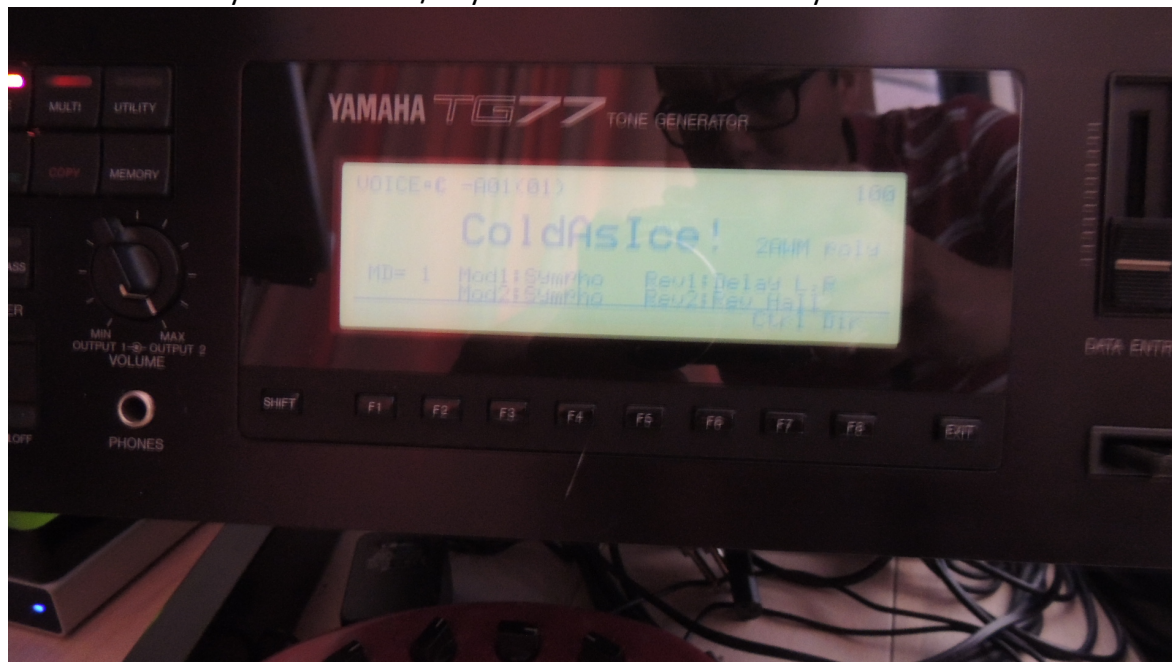
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DISCLAIMER

This document was written to help anyone that is not a complete idiot to perform this task. If you are a complete idiot and you ruin your TG77, your heart or anything else I can not take any responsibility for it. You will perform this operation at your own risk!

Why do you want to do this?

Your LCD is hardly readable and/or you don't like the color of your LCD:



What do you need?

- a Philips screwdriver (preferably a long one)
- a soldering iron + tin
- a pair of needle-nose pliers
- a pair of cutters and a sharp knife

Precautions

- Remove all cats from the room (dangerous, dangerous creatures I tell you!)
- Take a sip of wine or beer for some extra courage

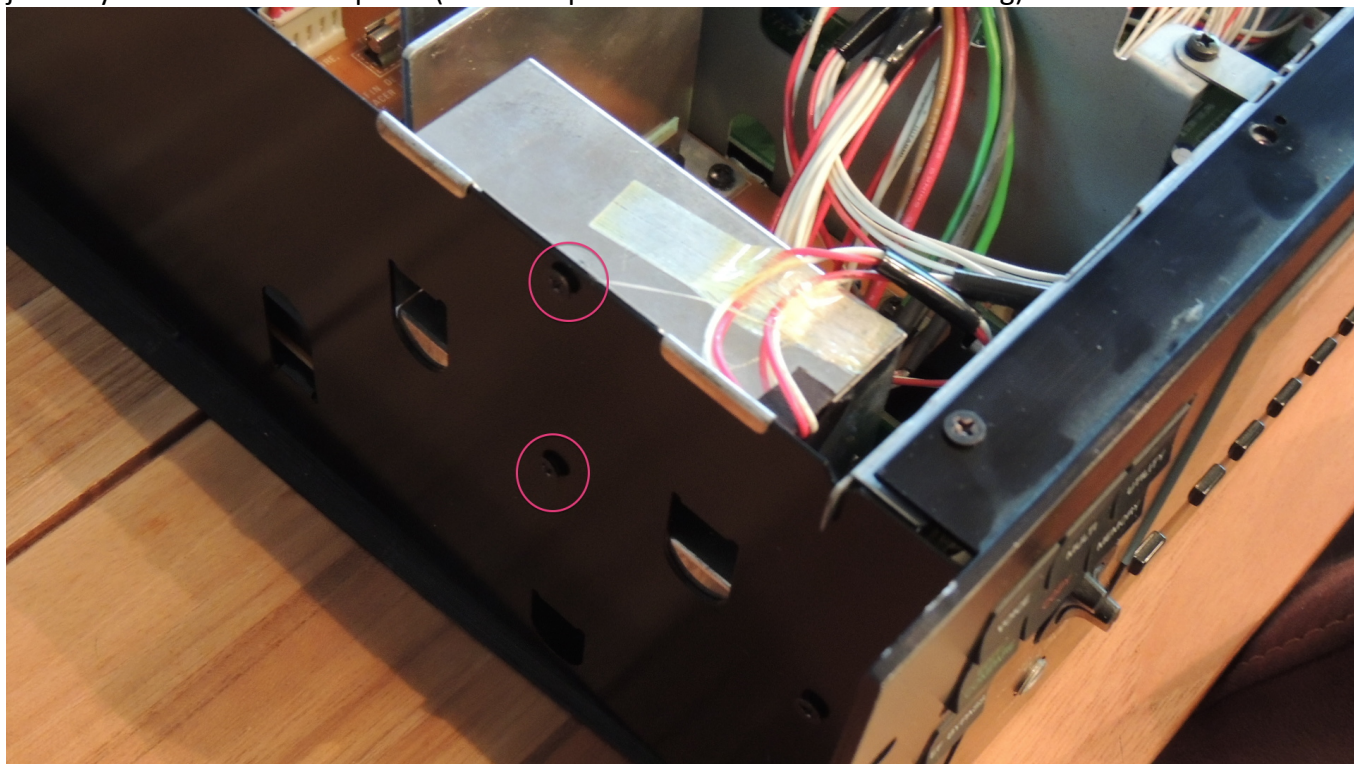
Step 1) : Take of the cover

Should be easy enough, two screws on top, two on each side and three at the back:



Step 2) : Take of the metal panel on the left side

Pretty easy just take out these two screws. Mine had some tape holding some wires, just pull off the tape just so you can take of the panel (and later put it back on when re-assembling).

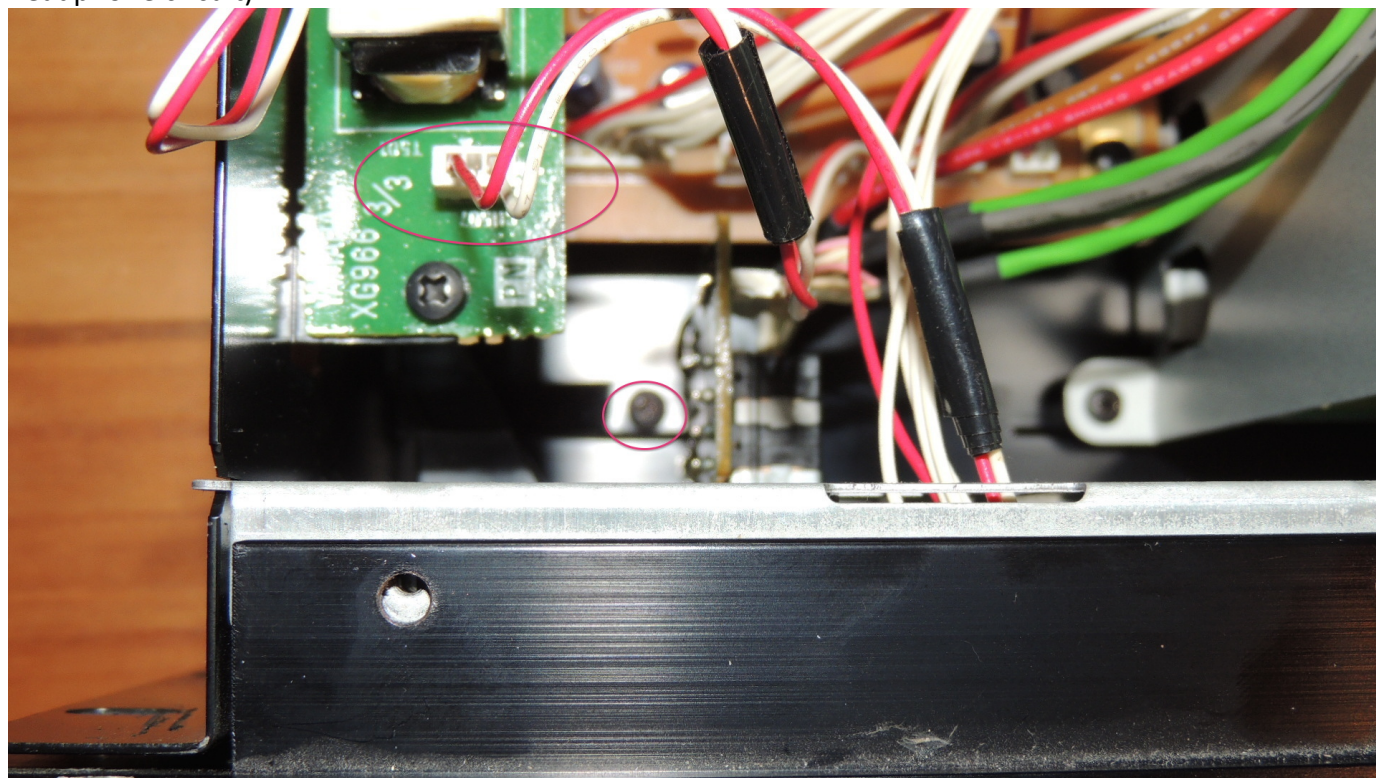


Step 3) : Take of the front panel

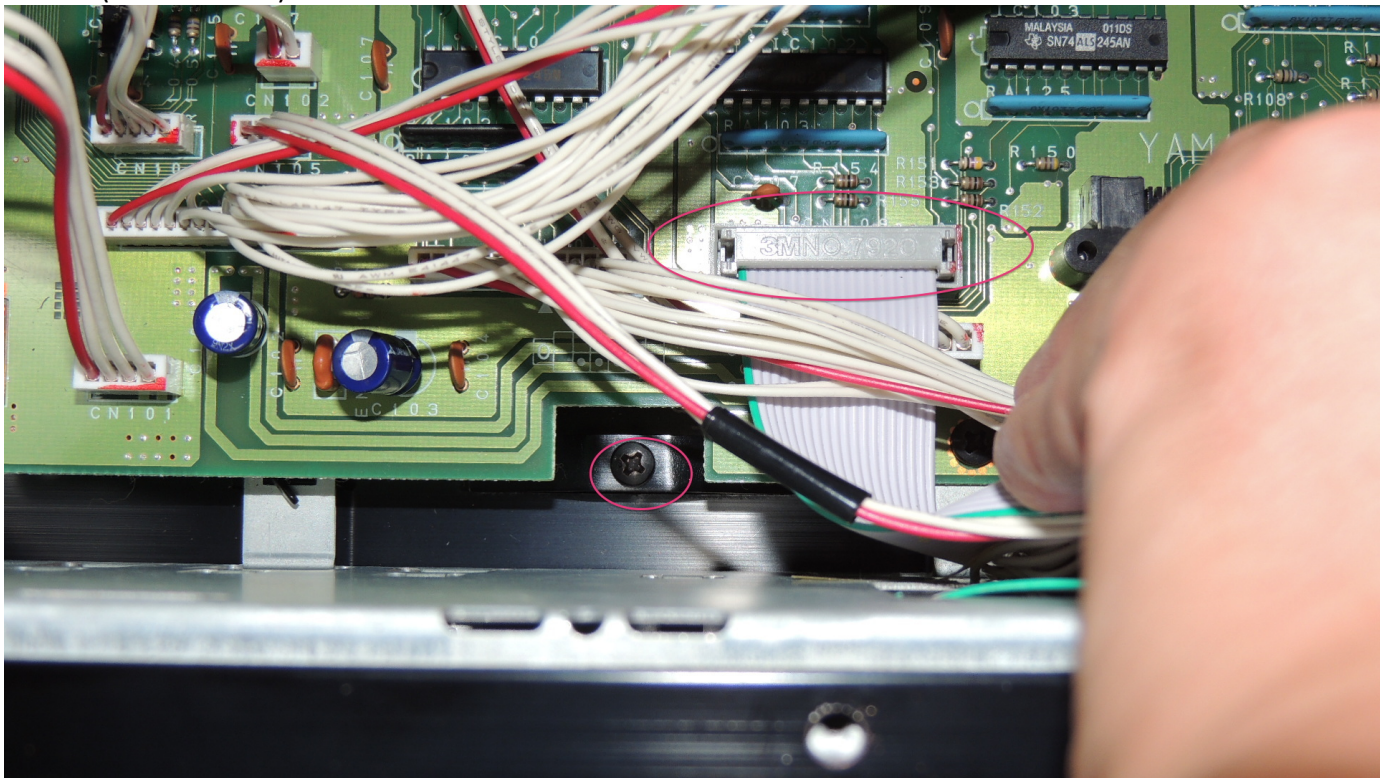
No biggie, three screws on top, two on each side (on my TG77 just one? Bastards!) and three on the inside which are a bit harder to reach...



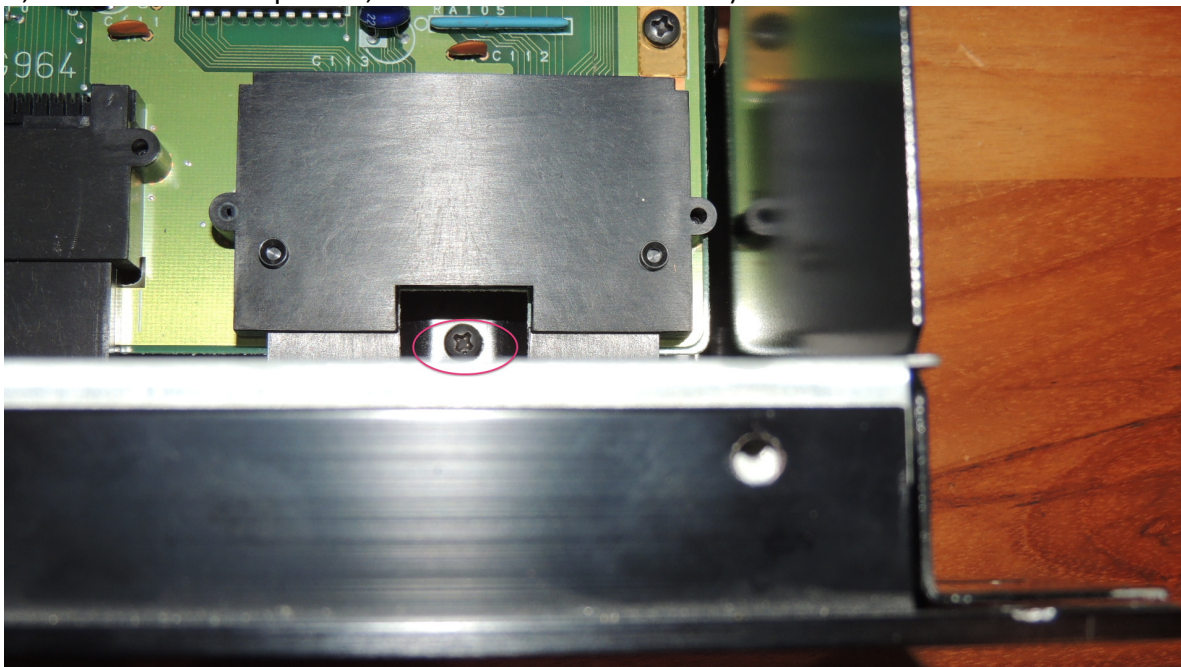
Disconnect this little connector (C507, LCD power) and here's the first of the inside screws (just left of the headphone circuit)



Then disconnect this connector (CN108, LCD data) and in the middle there's the second of the inside screws (in the cutout).



And on the right here's the final screw holding the front panel, make sure you get the rear one (in front of it, not visible on this picture, there's an unrelated screw).



Now gently pull the data slider and the volume knob. If you pull them towards you they should just come off. I had to use some pliers to pull the outer ring of the volume button. You should now be able to take off the front panel by gently pulling the top towards you while allowing it to tilt.

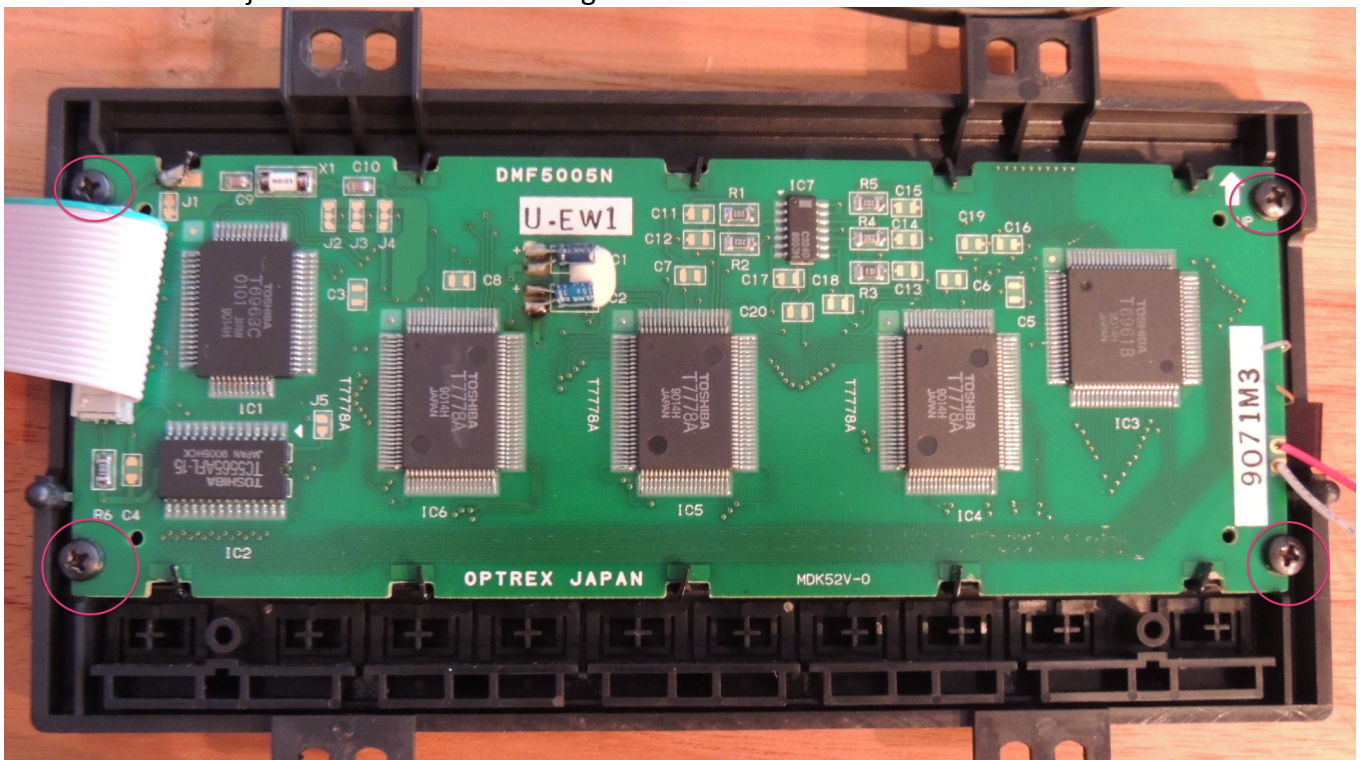
Step 5) : Remove the display unit

Easy peasy: four screws... that's it... If you feel a little resistance on the right bottom, don't worry: the guys at Yamaha put some double sided tape there. Just pull gently.



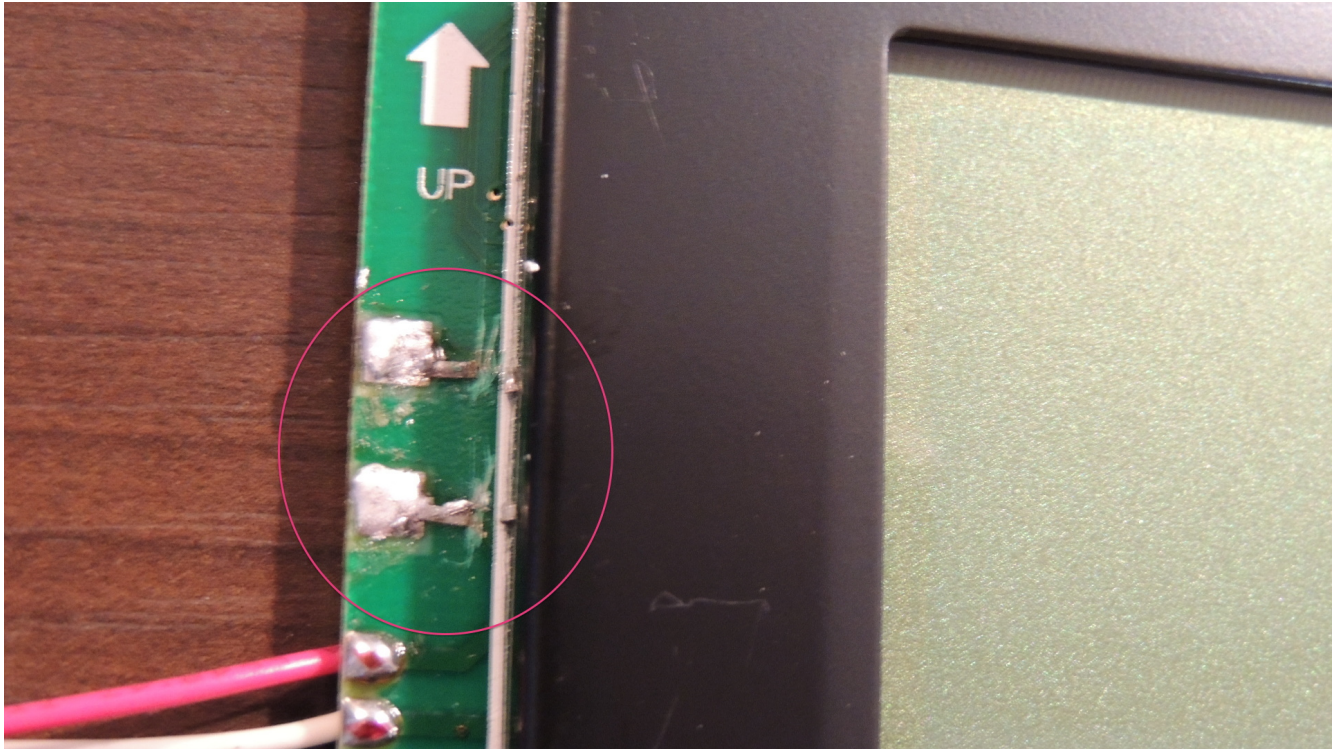
Step 6) : Remove the LCD panel

A kid could do the job. But child labour is illegal. Also four screws...



Step 7) : Cut out the old connections to the existing EL panel

Now flip the LCD panel over and you should see the connections to the old EL panel. Just make sure that no power goes to the old panel, I used a simple cutter and then a sharp knife...



Step 8) : Determine the luminous side of your new EL panel

This is the side providing the light, so obviously this needs to be up when placing it. It is always the 'off' color:

Light-on color: blue / light-off color: grey → make sure the grey side is up!

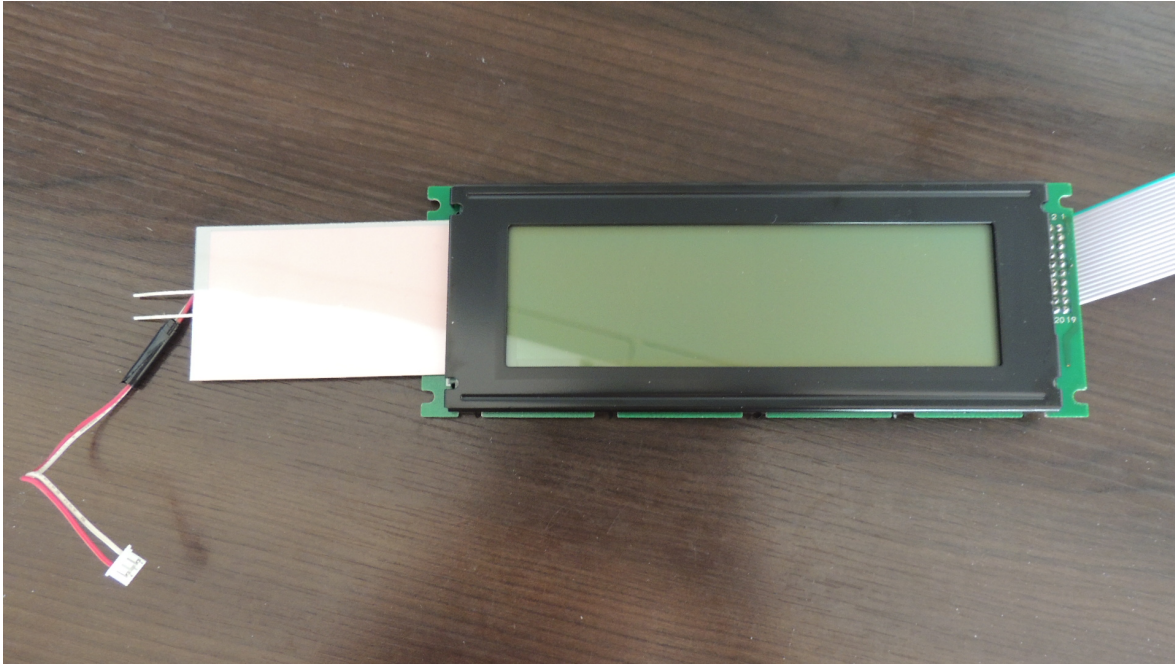
Light-on color: white / light-off color: pink → make sure the pink side is up!

Light-on color: green-blue / light-off color: grey → make sure the grey side is up!

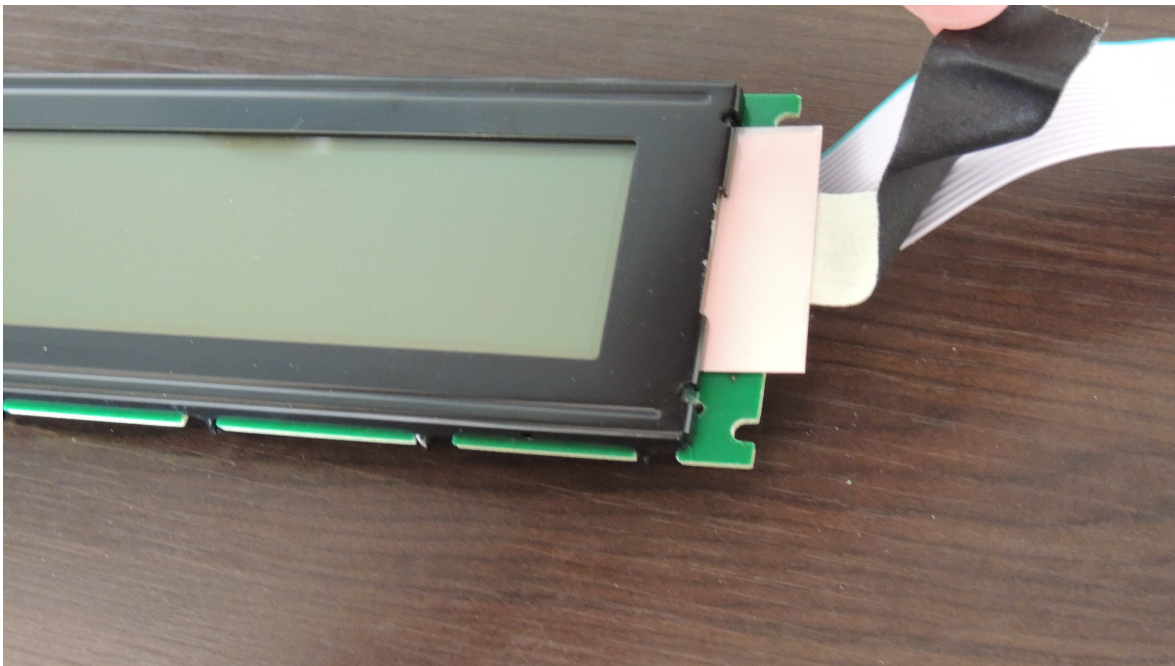
If you want to be really sure about the correct side, connect the C507-LCD power connector and carefully power up your TG77 while holding the LCD panel in your hand. Now carefully connect the two metal pins of your new EL panel to the two contacts (see picture above) on the LCD board and you can see which side is luminous 😊

Step 9) : Put in the new EL panel

You should just place the new EL panel on top of the old panel. Insert it from the side where the connecting pins for the power should be soldered onto the PCB.

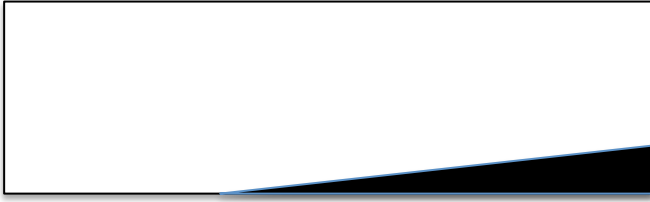


Now put it all the way through so that it comes out on the other side. On the bottom, attach a small bit of black tape and push it back.



Now solder the contacts in such a way that the panel on the left side sits neatly inside the white lines on the PCB.

If the EL-panel is not entirely straight behind the glass you can use the tape on the right side to align it properly. Test it (connect the C507-LCD power connector and carefully power up your TG77 while holding the LCD panel in your hand). Check if the entire display lights up, and that there are no black parts like this:



× Incorrect, EL panel does not cover entire LCD



✓ Correct, EL panel does cover entire LCD

If the position is correct, stick the tape and cut what you don't need anymore.

Step 10) : Re-assemble your TG77

Surely you can go backward step by step can't you? ;) If not... WHY THE HELL DID YOU TRY THIS?!?!

Et voila!

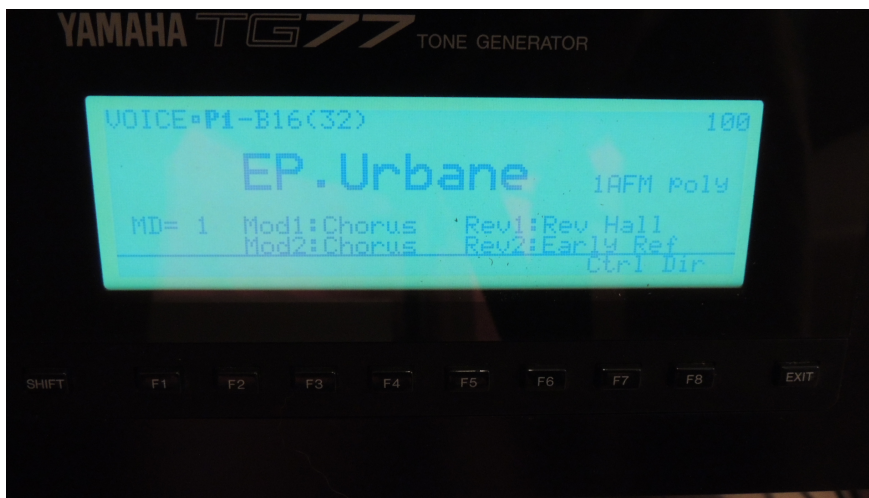
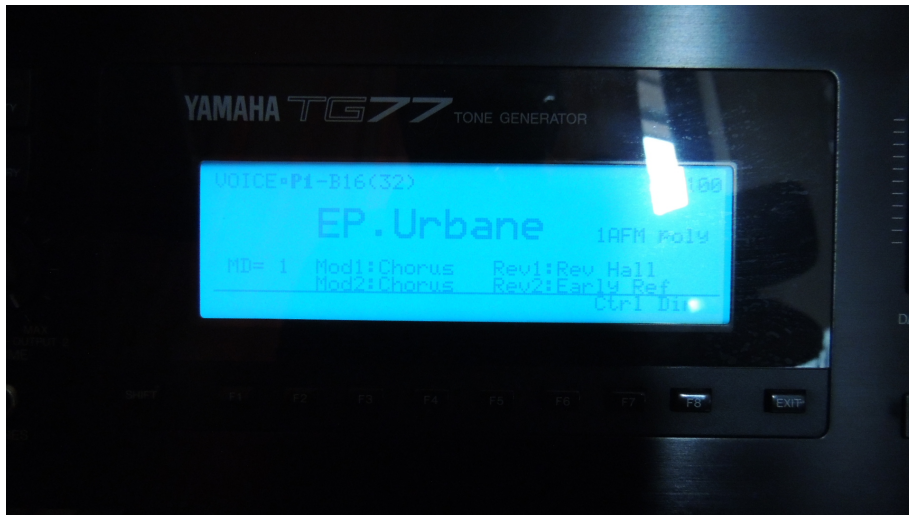
Please see the next page for the results. Blue lacks contrast, it looks pretty cool but it's hardly readable especially if your TG77 is mounted in an angled rack. White and Soft-yellow give a much better result!

Is your dim LCD of your TG77 annoying you? Don't hesitate and put in a new EL Panel. If you are not a complete idiot or even a partial idiot like me, you should be able to do it!

Good luck!

Mike Andrews

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* soft-yellow picture by Synthforum.nl user DJB