

# Radioddity GD-77 LCD inversion



**YOU DO IT WITH YOUR OWN RISK!! I GIVE NO RESPONSIBILLITY  
WHEN YOU DAMAGE YOUR RADIO!**

**31.01.2018 DB2OE**



**2018 DB2OE**

## 1. The parts and tools you need:

1. fitting torx and + screwdrivers
2. x-nut key shown in the picture (ebay)
3. self adhesive linear polarizing foil (ebay)
4. a really sharp cutter blade or similar
5. two short strips of tesafilm or similar
6. nitro thinner
7. q-tips and hankies
8. Patience and two right hands :P

## 2. Disassemble the easy parts



Unmount the clip firstly. After you did this, you have to screw out the four torx type screws. Make sure you placed all screws and parts on a safe place, so you can not loose them ;)





Remove the two nuts on the antenna connector and the ON/OFF/VOL-switch.  
The nut-tool you can find on ebay on hamradio stuff, I don't have any link for it, but I think you will search and find it.

### 3. Disassemble the housing



When you pull out the backpart of the housing from the front, it is necessary to make it really really careful. On the picture above and down you can see sensitive cablestrip. It is clipped on the pcb and you only need to open the clip on the pcb-connector and pull out carefully the cablestrip



I recommend to clip it off by your finger nails, because a hard tool could be damage the cablestrip.



Unsolder the speakercable from the pcb, mark it with a pen before makes it easy to solder it back to its correct positions.

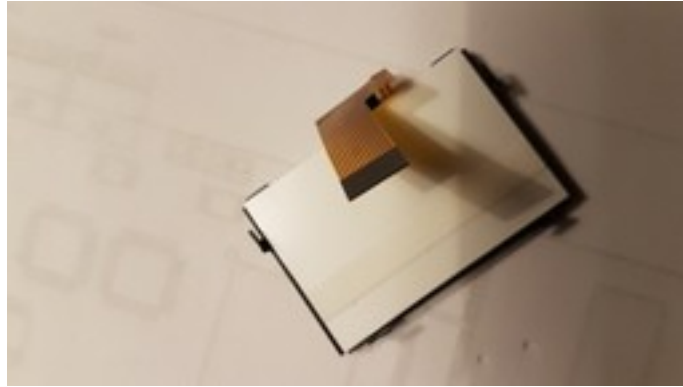
#### 4. Remove the front pcb and the LCD from it



After the second chapter this is what you got.  
Now you need to remove the pcb from the front housing.  
Remove the four + type screws and pull out the pcb really carefully.



To make shure not to damage the cablestrip, remove it.  
And clip off the cablestrip from the LCD above too.  
Then you need to unfasten the frame of the LCD by wristing the framehooks on the pcb.



Remove the black frame carefully from the LCD by pull it to the back, make sure not to damage the cable strip.

### 5. The dangerous part



Take a really sharp blade from a cutter or a blade like above and cut the adhesive under the original mounted foil. This is a really sensitive process and do not press on the cablestrip, do not cut in the cablestrip and do not cut yourself! You need to have much patience, because the adhesive is really resistive.



When you are successful, you put can use the old foil as a pattern for your new foil. Do not throw it away now!

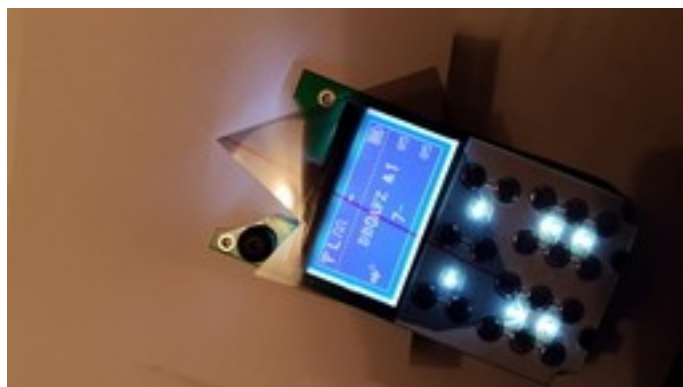


There will be some adhesive leaved on the LCD. You can clean it effective with nitro thinner and q-tips and hankies only.



The LCD needs to be absolute free from any adhesive on it's surface! But you clean it again before you put the new foil on.

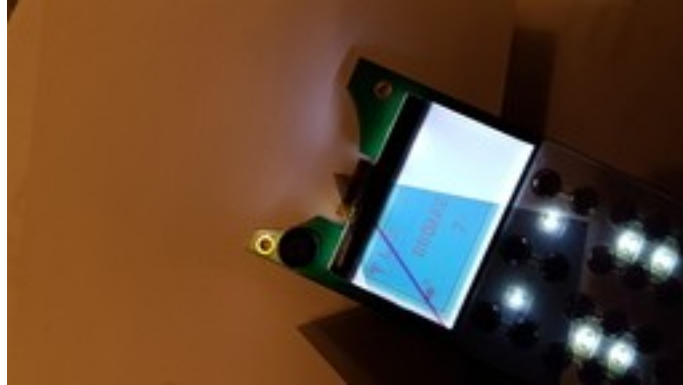
## 6. Choose the right angle of the polarizing foil



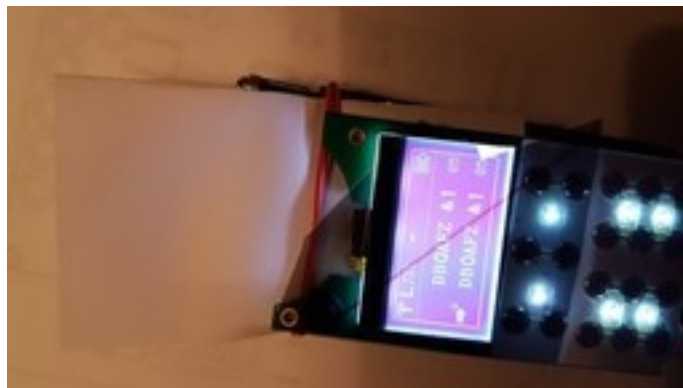
You need to assemble the lcd on the front pcb and connect the front pcb to the back pcb. This is a really sensitive setup, you need a sheet of paper as an insulation between the pcb's. Put the battery on the back and fix it with a wrist. Switch your radio on and put a



sheet of the new foil over the display with the adhesive side down (you need to try out with a little cut off the foil, what side is the down and what side is the upper side).  
Turn the foil in different angles but look at the display with your eyes like you look on the display when your radio may assembled.



Do not be surprised, you only can see the letters WITH the foil. Without foil over the LCD you will see nothing! It is like magic, but it is only an optical physical effect of the light filtered by the polarizing foil.

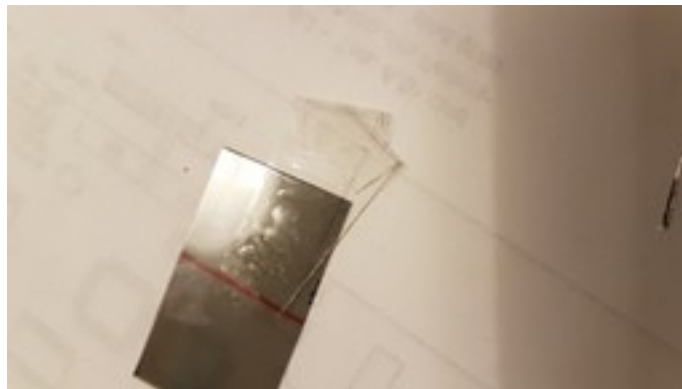


Different angles gives different look and different contrast. Find out what you like mostly and how you can read it as the best for your eyes.  
Mark the foil on all four corners with small points by a pen.  
Disassemble all parts again and put them to your side.

## 7. The new foil on the LCD



Put your old foil covering to the four marked points on your new foil and cut it out. Make it the same size as the old one makes sure to get no bubbles on the edges.



Now you put too tesastripes on the front and the back of the foil like in the picture above.

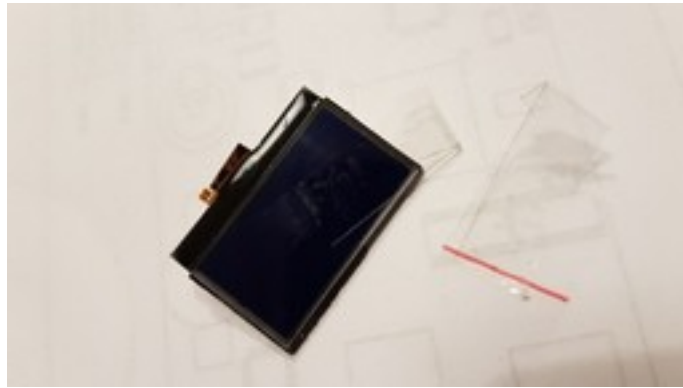
This is an easy trick to remove the coverfoils without damaging the polarizing foil.

Clean your LCD again and make sure to do this absolutely perfect without no dust or anything else.



Press sensitive from the middle to the corners and make sure there are no bubbles. In this picture, you can see I let the coverfoil on it, because I remove it at the last step before I assemble the frame back on the LCD.

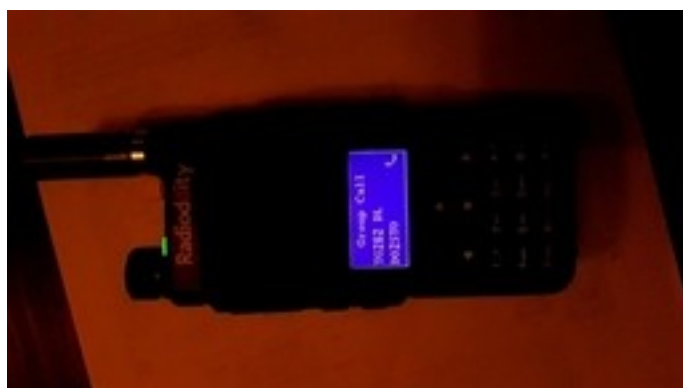




Assemble your display back on the pcb and if needed, clean it again before you put it back in the front housing. You can blow any dust with pressured air from the glasses, but do not touch it with your fingers or a towel, both is scratchy.  
Assemble your radio against the steps you disassemble it.

## 8. The time of truth!

Turn it ON!



The result is depending your patience and accuracy.  
Hope you will be successful and get a good job.

**I will not give any responsibility by damaging your radio.  
All you do is on your own risk!**

Vy73 Dennis DB2OE