Displaylight modification

For Uniden UBC220XLT

Follow these steps to do this modification

1. Dismantling

As usual. Remove battery cover and disconnect and remove battery. Remove antenna and chager if connected.

Remove the 4 philips skrews which hold the back cover.

Lift out the RF-PCB by lifting in both end, so the multiconnector comes straight off.

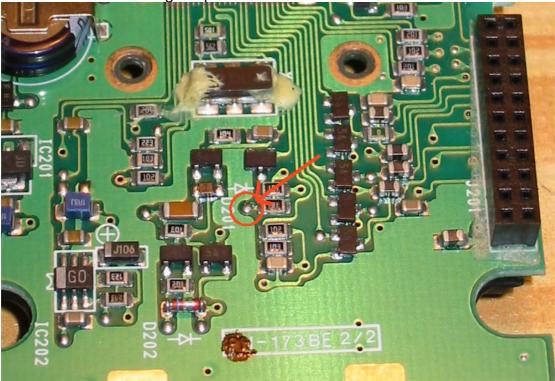
Disconnect the small loudspeaker connector.

Remove the 7 small blank philips skrews.

Lift out the controller-PCB. Take care not to harm the display and keyboard. Remove the shield by clicking the 2 fingers off in each side of it.

2. Locate testpoint

Now locate the following testpoint on the controllerboard:



3. Solder a wire to the testpoint

Now solder a wire (5 – 10 cm) to the testpoint. Be carefull !



4. Start assembly

Put back on the shiled and let the wire come out as on the below picture. Put the controller PCB back in the frontcase, making sure that the keyboard is located right and no dirt is on the display.

Also gentle skrew in the 7 small philips skrews. Now you should have something like this:



5. First Testing

Now put back the RF-PCB and the battery. Turn on the radio and hold the wireend to GND as shown. When connecting the wire to GND the light in the display should come on.



If testing was succesfull continue, otherwise go back and locate whats wrong.

6. Transistor mounting

Remove the RF-PCB again and the battery.

A transistor BC547C or similar has now to be soldered to the controller board and the wire is connected to the C of the transistor as shown. Start by scratching some solderresist (green) of the board, so the E of the transistor can be soldered onto that.

NOTE: Be VERY VERY carefull not to damage the plastics !! If you find it too difficult take out the controller board again.

You should now has something like this:



Just leave the B of the transistor floating for now.

7. Connect a wire to the basis

Solder a wire to the B of the transistor (10 cm).



8. Connect the resistor to the RF PCB

Now put back the RF PCB in the radio.

Locate the black diode just left from the DC-connector.

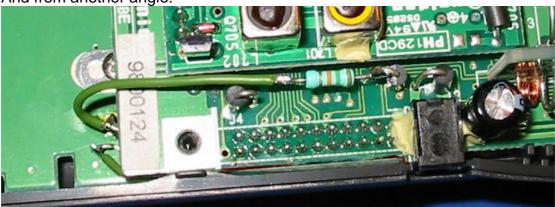
Solder a resistor on that (15kohm).

Cut the wire from the B to correct length and solder it to the resistors other end.

Now you should have this:



(Soldered in the red circles) And from another angle:



9. Assembly and final testing.

Put back on the rear cover and skrew in the 4 philips skrews. Connect the battery and put the cover on.

Now turn on the radio without anything in the dc connector. The light function should function as normal standard.

Connect the charger and the light should come on automaticaly and should remain on. Turn the radio off and check the light goes out.

If all above was ok, the modif. Was succesfull.

Enjoy easy reading of the display when the scanner is operating as a home scanner or in the car at night.

/S. Jørgensen

