How to change LEDs on Nokia's 51xx

Things you will need:

- · Soldering iron with very fine tip (no more than 15W)
- · Solder, thin, non-fluxed type preferably or job may be messy
- · A drawing pin, map pin
- · Torx No.6 Screwdriver
- · Tweezers
- \cdot 12 x 0603 or 0805 sized SMT LEDs

First, have a clean working area. Dropped LEDs are practically impossible to find!

STEP ONE:

Page1



Remove the X-Press On cover

STEP TWO:



Using a Torx No.6 screwdriver, remove the four Torx screws marked in red in the

photograph to the left.

STEP THREE:





Lift away the white inner front cover





taking care to recover the power button and speaker from the cradle inside, as they may drop out and

be lost.

STEP FOUR:



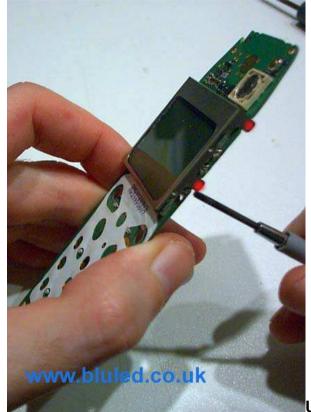
Undo the two silver Torx screws at the top of the upper board, marked here in red.



and lift away the top board.

STEP FIVE:





Using a small flat bladed screwdriver, unclip the LCD retaining clips, marked here in

red. There are two on either side of the display,



then lift away the LCD display.

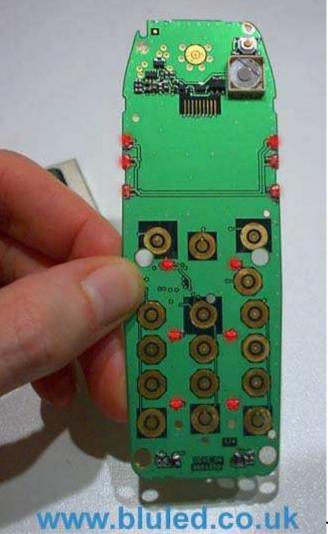
STEP SIX:



Carefully peel away the keypad contacts, and store them sticky side up on a

clean, safe surface, as you need to re-install this pad later. Make sure it's perfectly aligned upon refitting, so that all contacts are covering the key pads on the board.

STEP SEVEN:



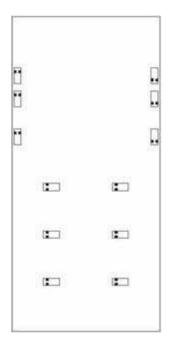
The LEDs are marked here in red. It is now time to remove them. To unsolder

them, you will need to melt the solder on each side of each LED whilst carefully prying the LED upwards from the board with a needle, or pin. Be VERY careful, as undue pressure whilst the solder is not hot enough will result in the copper solder pad being ripped off the board with the LED.

Page11

The new LEDs should now be soldered in place. They are very small, so a small piece of Blu Tak can be used to hold them in place whilst soldering them.

LED polarity is as shown below.



STEP EIGHT:





Upon soldering the new LEDs in place, you may press the top board into place in the phone, and if you have the battery attached, power up the phone by pressing the power button to see if the LEDs are soldered correctly. This 5110 has TG Hyper Blues in the screen section, and Kingbright Blues in the keypad section. Notice the vast difference in brightness.

STEP NINE:



If fitting Blue, White or True green LEDs you will need to bridge the current limiting resistors on the top board. There are two resistors, one on each side. The resistor layout on the opposite corner is a mirror image of this.

STEP TEN:

Re-assemble the phone by reversing the above instructions.

If all has gone well, you will now have a 51xx series Nokia that looks like this



GOOD LUCK

Page15

Page16

Return to main fitting page