

USB Light for Openmoko

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1 USB-Light

One thing that i like on my older phone, a Sony Ericsson W800i, is the light (camera light, but you can use it without the camera). So i thought about a solution for my Freerunner and the result is the following article. At least \Rightarrow At own's risk ;)

1.1 Idea

- Two leds
- Two resitors
- a miniusb B male connector
- a bit solder
- and a bit hot glue

and you have a light for your Freerunner :D

1.2 Instructions

1.2.1 Components

- 2 x white LED ultra bright \Rightarrow LED 3-2000 WS on Reichelt (german distributor for electrical components)
- 2 x 75 Ohm resistors 1/4 W \Rightarrow 1/4W 75 Ohm resistor on Reichelt
- 1 x USB mini B cable \Rightarrow AK 673-A USB mini B to normal usb connector on Reichelt

1.2.2 Schematic

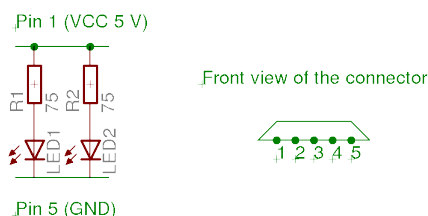


Abbildung 1.1:

German Wikipedia-article about the universal serial bus \Rightarrow <http://de.wikipedia.org/wiki/Universal\textunderscoreSerial>

1.2.3 Preparation

Cut the usb cable and separate the rubber of the usbmini connector and remove the pins 2,3,4 (a lower risk of a short circuit). Now solder the components according to the schematic. **WARNING** ⇒ risk of a short circuit on the metal parts of the connector. Check the circuit without the metal part, if it works.

without the metal part of the connector

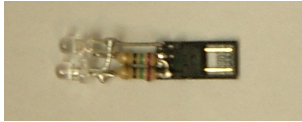


Abbildung 1.2:

with the metal part of the connector

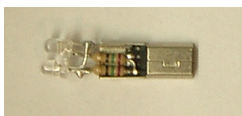


Abbildung 1.3:

with hot glue (i know its not very beautiful, but it works, it's robust and i have no short circuit ;)



Abbildung 1.4:

1.2.4 Software

When i searched for a good solution to activate the host-mode of the freerunner i found this blog entry

- <http://blogs.thehumanjourney.net/finds/entry/usb\textunderscorehost\textunderscoremode\textunderscorethe\text>

Joseph Reeves modified his usbmode-button package after a few suggestions by me and here is his new blog-article with Version 0.2

- <http://blogs.thehumanjourney.net/finds/entry/usb\textunderscoremode\textunderscorebutton\textunderscore0\text>

Thanks Joseph Reeves :D

You can toggle the host-mode on and off with a click on the icon.

1.3 It works!

1.3.1 Images

1.3.2 Videos

- Freerunner in broad daylight ⇒ <http://www.youtube.com/watch?v=iK5w-OHSm9g>
- Freerunner at night ⇒ <http://www.youtube.com/watch?v=f2H4QZq2xxE>



Abbildung 1.5:

1.3.3 Improvements? Ideas!

It works but it's not very beautiful, perhaps you have any ideas. Mail me :D



Abbildung 1.6: