

CustomBrightness Readme

New in v0.2b

- Brightness is increased or decreased smoothly (no more blinking!)
- Added a screen which shows your current settings and lets you delete unwanted ones. You need to press *Done* after making any changes
- The readme is now bundled with the app and can be accessed by pressing the ? button
- Fixed an issue which sometimes caused the app to not adjust the brightness. If you still experience this, press *Done* once from the app and it should be fixed.

What is CustomBrightness?

CustomBrightness is a replacement for the default auto brightness feature of iOS. It allows you to specify the display backlight level of the iDevice for the current ambient light. The app always runs in the background and adjusts the display brightness as the ambient light changes.

Installation

The easiest way to install is using iFile – just open CustomBrightness.deb using the installer.

If you don't have iFile, you can install it using SSH/MobileTerminal (you need root privileges for this):

```
xyz's iPhone: root$ dpkg -i /path/to/CustomBrightness.deb
```

How to use it?

After installation, CustomBrightness should show up in Springboard. If it doesn't, run uicache once.

1. Start in a very dark place
2. Disable AutoBrightness and manually set the brightness to minimum
3. Open CustomBrightness and press the *Disable* button
4. It should show the current ambient light in lux and a slider for display backlight adjustment (its updated every second)
5. Slowly move to a brighter area
6. When you think the display is too dark for the current ambient light, use the brightness slider to increase the display brightness
7. When it feels okay, press the *Save* button. This saves your preference for the current ambient light.
8. Repeat steps 6 and 7, moving to a brighter area
9. Finally, choose an extremely bright spot (direct sunlight/lamp) and again use the brightness slider to specify the display brightness and save it. This will be max brightness that will ever be set.
10. When you are happy with your settings, press the *Done* button. This will enable the auto adjustment feature. You can quit the app at this point.
11. If you think you made a mistake, press the *Restart* button. This will stop the auto adjustment feature and delete all settings so far.

Editing your settings

Pressing the *Edit* button takes you to a new screen which lists your current saved settings. You can individually delete them using the standard swipe-to-delete gesture.

Make sure you go back to the main screen and press *Done* after to save your changes.

Tips

- The ambient light sensor is located near the front facing camera of your iDevice. The iPod touch 5th generation *does not have it*. So the app will not

work on it.

- On an iPhone 5, the reported minimum and maximum values for the ambient light (in lux) are 0 and 5000, respectively.
- For step 9, you can use the LED flash/torch of another phone to get the highest possible lux value from the sensor.
- You typically don't ever need to open the app again if you are satisfied with your settings. But you can add a new setting at any time using the app.
- You can disable the app using the *Disable* button. You can re-enable by pressing the *Done* button.
- Its generally best to keep a gap of at least 50 lux between the settings, to avoid constant changes in the backlight level

How does it work?

The app uses a continuously running background process (or a daemon) to adjust the brightness automatically. The daemon polls the ambient light sensor every 5 seconds and reads the current ambient light. It then compares it with your settings and determines the brightness value to set.

For example, consider your settings are as follows:

Ambient Light (Lux)	Display Brightness (min 0, max 1.0)
100	0.0
200	0.1
500	0.3
600	0.35
1000	0.4
2000	0.5
3000	0.7
4000	0.8

When the ambient light is less than 100 lux, the backlight will be set to 0.0. If the ambient light is more than 100, the brightness will be set to 0.1, and so on. If the ambient light is more than 4000, the brightness will be set to the max possible value (hence, to avoid this, step 9 is important).

Notes

You can also manually edit the settings if you have difficulties using the app. All settings for the app are written in */var/mobile/Library/Preferences/com.laughing-buddha-software.CustomBrightnessSettings.plist*. The structure of the plist is as follows:

```
Root (dictionary)
    enabled (boolean)
    brightnessPreferences (array)
        NSDictionary
            lux (integer)
            screenBrightness (float)
        NSDictionary
            lux (integer)
            screenBrightness (float)
        ...
```

You can directly modify this plist using your favourite plist editor. But before modifying, kill CustomBrightness.app and after you are done editing, launch CustomBrightness and press *Done* to apply the new settings. Also, make sure you don't delete a key or change its type; it may cause random crashes :)

Uninstallation

You can use Cydia to completely remove the app and its files. The preferences file, however, is still left on the device. You can safely delete it if you want. Its full path is:

/var/mobile/Library/Preferences/com.laughing-buddha-software.CustomBrightnessSettings.plist