

Energy Dimmer 2

for PalmOS 5.x

© Daniel Seifert, 2001-2002
© 79bmedia GmbH, 2003-2006

dimmer@79bmedia.com

Contents

Introduction.....	1
Usage Scenarios.....	2
System Requirements.....	2
Important Notice.....	3
Installation.....	3
The configuration panel.....	3
Main Dialog.....	3
Managing profiles.....	4
Calibrating the Palm Tungsten T.....	5
Known Problems.....	5
Registration.....	6
Contact.....	6

Introduction

The brightness of the screen is a tricky setting. Depending on the situation you may want it to be very bright or very dim. You may also want to keep the screen on for a long time without wasting too much valuable battery power by having it set to the highest brightness.

By default, PalmOS devices only allow you to set a fixed brightness and you will have to re-adjust the brightness whenever you feel it is required. But by using Energy Dimmer, you can switch between brightnesses much more easily – plus you will have additional features like a screen dimming (hence the name) and adjustable auto-off values.

Using Energy Dimmer will give you the flexibility to manage the brightness quick and efficient by using profiles. A profile ...

- ... allows to set a brightness
- ... allows to define if and after how many seconds of inactivity the screen should dim
- ... allows to define to what level the screen should dim
- ... allows to define individual auto-off times in the range of seconds

The brighter the screen, the more power is consumed. Switching to a profile with the perfect match for your current situation will allow you to only consume the power that you really need, allowing for a potentially larger runtime on one charge.

Usage Scenarios

Here are a few special usage scenarios that we use with Energy Dimmer or that have been reported to us by users:

- **Office Meeting**
If you are using your device in a meeting for making or reading notes, you usually need a medium to high brightness (depending on the light in the room). You often also want your device to stay on for a longer time, i.e. it should not turn off all the time which can be very annoying. Using a profile with a high auto-off value and dimming after one or two minutes of inactivity will allow you to keep your device running for the whole meeting – and should you not use the device the screen will dim to save power. Just tapping on an empty part of the screen will restore the brightness (much faster than if you had to turn the powered-off Palm back on).
- **Astronomy**
When using your PalmOS device to aid you in watching the stars, you do not want it to have a very bright screen. As you will be in the dark, looking at a Palm with full brightness will not be helpful to watch the stars afterwards. A profile set to the lowest possible brightness will improve this situation.
- **Multimedia Remote Control**
Using your PalmOS device as a remote control for e.g. DVD playing may require that the device stays on the whole time (e.g. when using Salling Clicker via bluetooth). If you watch your DVD in a dark room, you do not want your Palm to illuminate the area around you – but you can't turn it off and you still may want to see the controls on the screen when necessary. In this case a profile with a very low brightness and a dimming to the lowest possible brightness after just a few seconds of inactivity will be very helpful.

Energy Dimmer allows you to define as many profiles as you need, so you can cover as many situations as you expect to experience – be it a setting for bedtime reading of ebooks, settings for using the device outside in the sun or settings for dark rooms.

System Requirements

Energy Dimmer requires:

- PalmOS 5¹
- a colour PalmOS device (more specifically it currently supports the Tungsten C, T², T2, T3³, T5, TX, E, E2, the LifeDrive, the Treo 600 and 650, the Zire 71 and 72 as well as Sony Clie NX, NZ, TG, UX, TJ, VZ and TH series and also the Garmin iQue 3600 as well as the Tapwave Zodiac).

¹ PalmOS 3.5 and 4.x devices are not supported in this release of Energy Dimmer.

² On the Tungsten T, you might want to use Energy Dimmer's calibration mechanism.

³ On the Tungsten T3 and some other newer devices of Palm(One), please be aware that you should not use the system brightness slider that you can access by tapping on the clock in the status bar at the bottom of the screen. Using this slider will not pose a problem but the setting there might be replaced by Energy Dimmer's brightness the next time the screen is dimmed/undimmed.

Important Notice

On some devices Energy Dimmer allows to turn off the backlight altogether or to dim the brightness below what the devices' own brightness sliders offer. This is the case if a device's brightness slider does not make use of the full range of brightness values that the PalmOS-interface allows for. Devices where this happen are most notably the Tungsten T, T2 and E as well as the Zire 71.

On newer devices like the T5, LifeDrive, E2 and Zire 72, you can not achieve this side-effect of dimming lower than originally possible by using Energy Dimmer. Please keep in mind that it is not the task of Energy Dimmer to do that. If you really need this feature, you could try out an application called Brightness Fix that is available at <http://www.palmpowerups.com> and accesses the hardware directly to extend the range of brightness. Energy Dimmer will be able to make use of this new range. Do note, though, that we do **not** endorse this direct access, and you will use this on **your own risk**..

Installation

Install dimmer.prc. You will find an icon for Energy Dimmer in the launcher where you can activate it. If you want to update or delete Energy Dimmer, please make sure to disable the currently installed version, otherwise the update / deletion may not succeed.



General settings can be found in the configuration panel you can open within Energy Dimmer. Selecting and defining profiles can only be done while Energy Dimmer is active.

The configuration panel

The configuration panel offers settings that apply to the general behaviour of all profiles or rather to some special circumstances. Here you can set up a penstroke or button press that will launch Energy Dimmer. This is especially useful on the Tungsten T3 who misses the little sun icon in the Graffiti area that is normally used to open Energy Dimmer.

The other setting available allows you to define whether you want to use the dimming feature while the device is positioned in a (charging) cradle. Saying 'no' might be useful if you are using your device as desktop clock on your desk. On the other hand, having it dimmed in the cradle, too, will charge the batteries faster. In any way, this setting has of course only effect on profiles that have dimming enabled.



Figure 1:
Configuration Panel

Main Dialog

To access the main dialog, Energy Dimmer has to be active. Open the main dialog by tapping on the brightness icon in your graffiti area - just like you would normally do when trying to change the screen's brightness. On the Treo 650 device you may press Opt+P (the buttons have to be

pressed simultaneously) to see the brightness dialog. Or use the penstroke or button press that you configured before (especially when you are on the Tungsten T3). Instead of the brightness adjust dialog as you know it, a new dialog will pop up. You can also open this dialog inside of Energy Dimmer by tapping on the "Brightness" button (will only be displayed when Energy Dimmer is enabled).

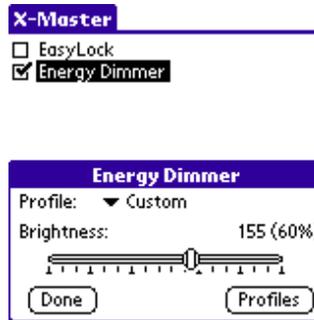


Figure 2: Dimmer's main dialog

In this dialog you can see at the top the list of available profiles. By opening the list you can easily select any of the previously defined profiles (read below for details on how to create and manage profiles). To just adjust the brightness, use the brightness slider in the lower part of the dialog. This will not affect the other settings (dim level, auto-off time, etc) but will just copy all these values plus the new brightness level to the "Custom" profile. By using the button labeled "Profiles" at the right, you open a new dialog that is described in the next section.

Managing profiles

As previously mentioned, you can define an almost unlimited number of profiles. Of course the maximum number depends on the free memory, but as each profile only eats a couple of bytes, you sure won't run out of space.

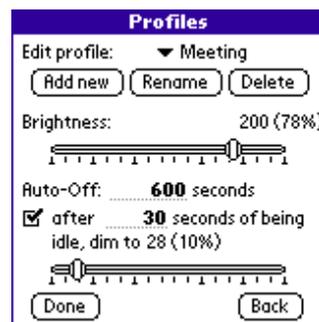


Figure 3: Dimmer's profile dialog

The profile dialog offers you at the top the list of already defined profiles in alphabetical order. Please note that there is always at least one profile called "Custom". This profile will always be displayed at the top of the list and can neither be renamed nor deleted. Its purpose is to allow on-the-fly changes of the brightness level without changing the values of a profile but while keeping the other profile settings. This means that changing the brightness in the main dialog (see above) will copy the complete profile setting to the "Custom" profile and change the brightness level of the custom profile.

Below the profile list you have three buttons to add, rename or delete a profile. The first two will ask for a (new) profile name and will create a new profile with that name and the default settings or will rename the currently selected profile. Deleting a profile will ask for a confirmation and if you confirm the profile will be gone forever.

In the middle part you can define the settings for this profile:

- **Brightness:** Adjust the level of brightness this profile should use for the screen. Setting a brightness of 0 will have the backlight turned off (only if supported by PalmOS on this device). Note that for fine-tuning you can also use the page-up and -down keys.
- **Auto-Off:** Set the auto-off time in seconds. For example, entering 300 means an auto-off time of 5 minutes. You can set any value you like, though values between 1 and 10 seconds will be rounded up to 10 seconds. A special value is the 0 which stands for "never auto-off".
- **Dimmer:** You can define whether the profile should use dimming at all or not. If yes, you also have the possibility to define the time of inactivity after which the screen should be dimmed and the dimming level. For obvious reasons you should choose a timeout that is smaller than the auto-off value.

Setting a value of 0 will turn off the backlight (only if supported by PalmOS on this device).

Calibrating the Palm Tungsten T⁴

Based on having seen several Palm Tungsten T (T|T) devices, each of them has a different range of brightness. For example, on one T|T the left-most part of the slider (about 10 pixels) were not doing anything, e.g. the brightness is off and doesn't change here. On other devices, this 'dead zone' has often other sizes, sometimes there is no such dead area and if you would be able to move the slider further to the left you might get an even dimmer screen.

To correct this and to provide a fully functional brightness slider with exactly the right size, it is recommended to run a calibration on the T|T when using Energy Dimmer. To do so, please launch Energy Dimmer, tap on "Preferences" and on "Calibration" (this button is only available on Tungsten T devices). Move the slider to the exact position where the backlight is off completely and where a press of the up-button causes the light to go on (in bright light this is sometimes hard to see, please use a dimly lit or dark room for this). Again: please move the slider as far to the right as possible without the backlight turning on. On our device this is at level 79, other devices may vary.

You may also use the automatic calibration. In this case Energy Dimmer will change the brightness and will ask you whether the backlight is on or off. Please answer correctly, otherwise the calibration won't be perfect. It is recommended that you do this in a dimly lit or dark room where you can see for sure whether the backlight is on or off.

Known Problems

No incompatibilities to other applications are currently known.

If you discover problems, please contact dimmer@79bmedia.com with a bug report.

⁴ This is only available on Tungsten T (a.k.a. T1), not on T2 or T3 or T5 or any other devices.

Registration

Energy Dimmer is shareware with a trial period of 21 days. During these 21 days, you can use it without any limitation to see whether it does what you expect. After day 21, Energy Dimmer will refuse to work unless you register your copy.

For information on how to register, please refer to the register.html file that accompanies this documentation, or select "Register" from within Energy Dimmer's menu.

Contact

All support questions or inquiries can be directed to dimmer@79bmedia.com in either English or German language.