

Changing the default fonts on the PRS-505

Fun and Fonts for the Whole Family

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Contents

| | |
|--------------------------------------|----|
| Contents..... | 2 |
| Introduction | 3 |
| The Fonts..... | 5 |
| Step One: Modifying our font..... | 6 |
| Step Two: PRSCustomizer..... | 8 |
| Step Three: The Flashing..... | 10 |
| Step Four: Reloading books | 12 |
| Appendix A: Different Fonts | 13 |
| Appendix B: No card reader | 14 |
| Appendix C: Unbricking..... | 15 |
| Appendix D: Old firmware..... | 16 |
| Appendix E: eBook Library fonts..... | 17 |

Introduction

So why are we here? We're here because the default fonts on the Reader, well, *suck*. The default body font for the Reader is *Dutch Roman*, and it's far from being the most readable font for such a display. Take a look at the same book in both the default font (Figure 1.1) and the *Vera Serif* font (Figure 1.2). Which one do you prefer? Which one do you think is more readable? Thought so.

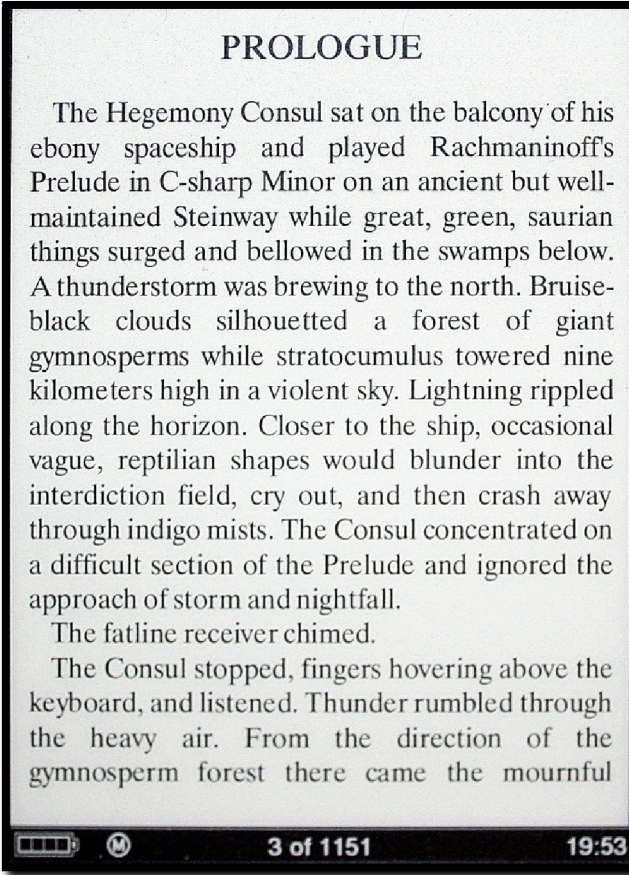


Figure 1.1: Dutch Roman

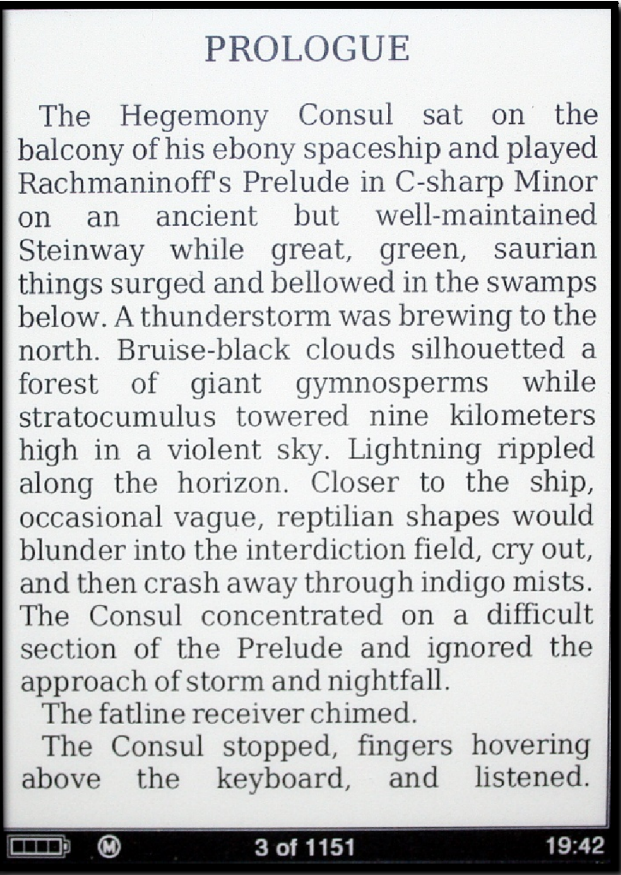


Figure 1.2: Vera Serif

So why go to all the trouble of flashing the Reader when one can just embed the fonts they want directly in the LRF file? Well, there are multiple reasons. First off, page turning with the default fonts takes 0.5 seconds. With embedded fonts, it's more like 3.0 seconds, which to me is unacceptable. Secondly, you would have to *manually* change each and every one of your books with a program like [Book Designer](#) to use the font file you want. That too is unacceptable.

On the other hand, if you replace the default font with the one you want, every book (that doesn't have embedded fonts) you load onto the Reader will use that font. All the books from Sony's store and the vast majority of the books you find elsewhere.

This guide is here to help you do just that. It is organized into four very detailed Steps that are easy to follow. It also has several Appendices that deal with topics from unbricking your reader, to changing the fonts in Sony's eBook Library.

Oh, one last thing before we begin... I take no responsibility for any damage you may cause to your Reader if you follow this guide. That being said, the only harmful thing you could do to it is brick it, and there's a sure-fire way to unbrick it (see Appendix C for that).

The Fonts

In this guide we will be using *Bitstream Vera Serif*, because it's a free font anyone can use for any purpose and doesn't have to pay royalties. If you don't have it, you can get a ZIP file with the entire font family [here](#). Unzip the archive and look for a file named *VeraSe.ttf*. That is our font.

If you care to know, my font recommendations for the Reader—in descending order of preference—are:

1. *Caecilia*
2. *Bitstream Vera Serif*
3. *Constantia* (this text is in *Constantia*)
4. *Cambria*
5. *New Century Schoolbook*

I am using *Caecilia* on my PRS-505, but you will have to buy it online to get it, like *New Century Schoolbook*. *Constantia* and *Cambria* are included in Vista and come with Office 2007. If you have neither and would like to get them, they come with the free [PowerPoint Viewer 2007](#). Be wary though, if you include them on the Reader without a direct license from Microsoft, you will be breaking the license terms you agreed upon by downloading the Viewer. Proceed at your own risk. You are of course free to use any other font with this guide.

The fonts that come with the Reader are *Swis721 BT*, *Dutch801 Rm BT* and *Courier10 BT*, with filenames *tt0003m_.ttf*, *tt0011m_.ttf*, *tt0419m_.ttf*, respectively. The font used for body text (that is, the text of the books) is *Dutch801 Rm BT*, and that is the font we will be replacing in this guide. The other two are mostly used around the Reader's interface (and sometimes for book titles), but you are free to change these too, if you prefer.

Step One: Modifying our font

We need to modify our new font so that we "trick" the Reader into thinking it is *Dutch Roman*, the font it has always used. If we don't, the device bricks itself, and no one wants that. If you are trying to change one of the other two fonts on the Reader—or have an OpenType font—read Appendix A (if you don't know what an OT font is I suggest reading Appendix A just in case).

So, if you don't already have it, get a trial version of FontCreator [here](#) and install it (if you're on a Mac or use Linux, get [FontForge](#), but you're on your own with that one). Now, browse to the folder that has that *VeraSe.ttf* file that we talked about earlier. Right-click the file with your mouse, and you should see an option *Open with FontCreator*. Click that, and FC will open with *VeraSe.ttf* loaded. Your screen should look something like Figure 3.1.

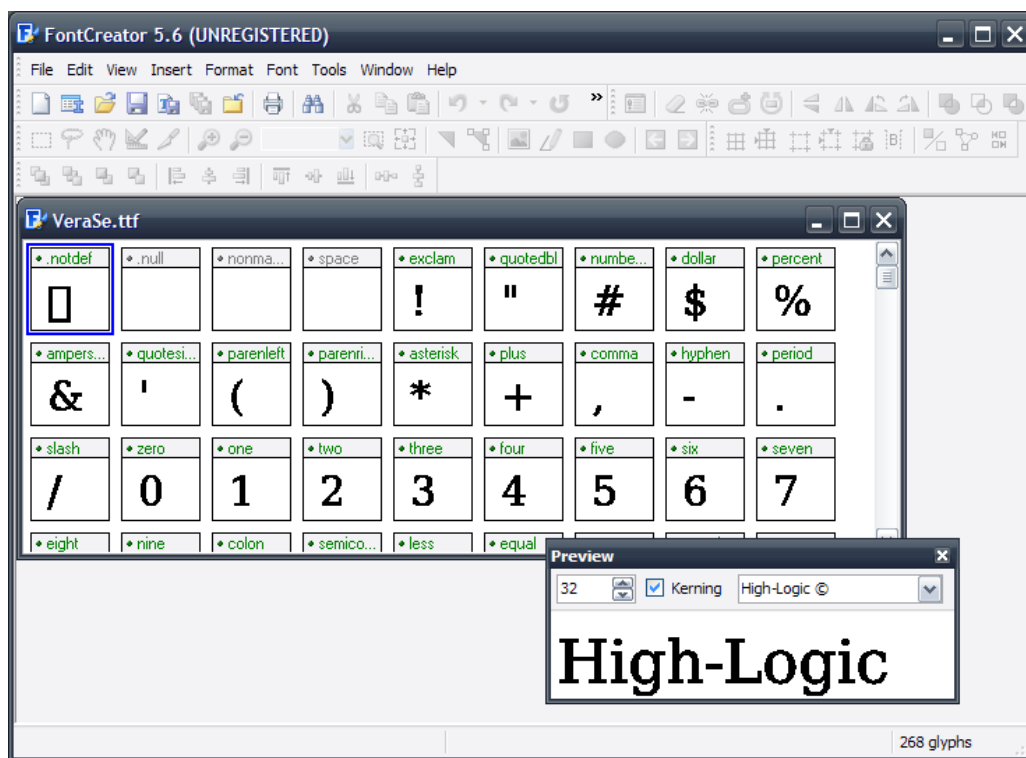


Figure 3.1: FontCreator with VeraSe.ttf loaded

Go to Tools -> AutoNaming. You should see a dialog asking you to enter the Font Family name. Enter "Dutch801 Rm BT" in this field, and be very, very careful you type it in correctly (the name is case-sensitive, and *pay attention to the required spaces*). If you mistype the name, you *will* brick your Reader. It is imperative you do not screw up this step. This is illustrated in Figure 3.2.

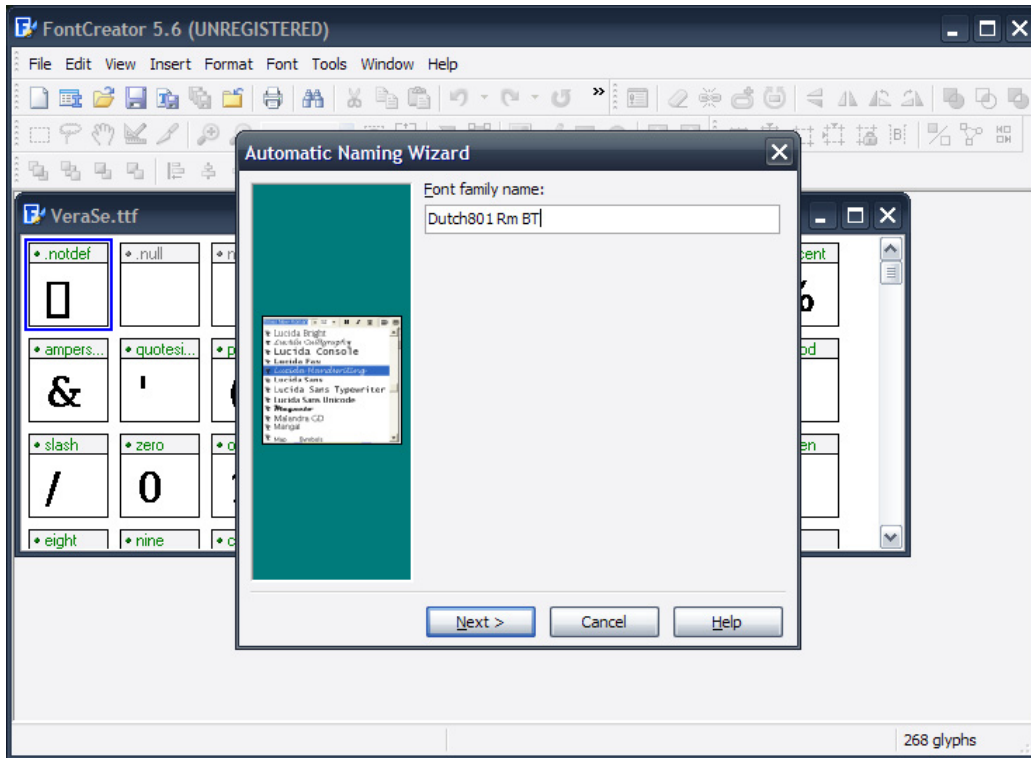


Figure 3.2: Changing Font Family

Now, press `Next` and *don't change anything on the next screen*. Just press `Finish` and you're done. Go to `File-> Save As`, pick a folder of your choice and type in "`tt0011m_.ttf`" as the new filename. Again, be very careful and get this right, otherwise you *will* brick your Reader.

After that is done, you're finished. You can proceed to the next step.

Step Two: PRSCustomizer

You need to get the latest version of [PRSCustomizer](#) (henceforth referred to as PRSC), because it will greatly simplify the flashing process (feel free to drop a "thank you" to Jeff while you're at it). PRSC comes with an assortment of different hacks for the PRS-505, and it's a godsend. This guide assumes you are using PRSC vo.07.

So, now you have the file `prscust-0.07.zip`. Extract it to a folder of your choice (let's call it `MyFolder`). Run `prscustomizer.exe`. A dialog should pop up with several options (Figure 4.1).

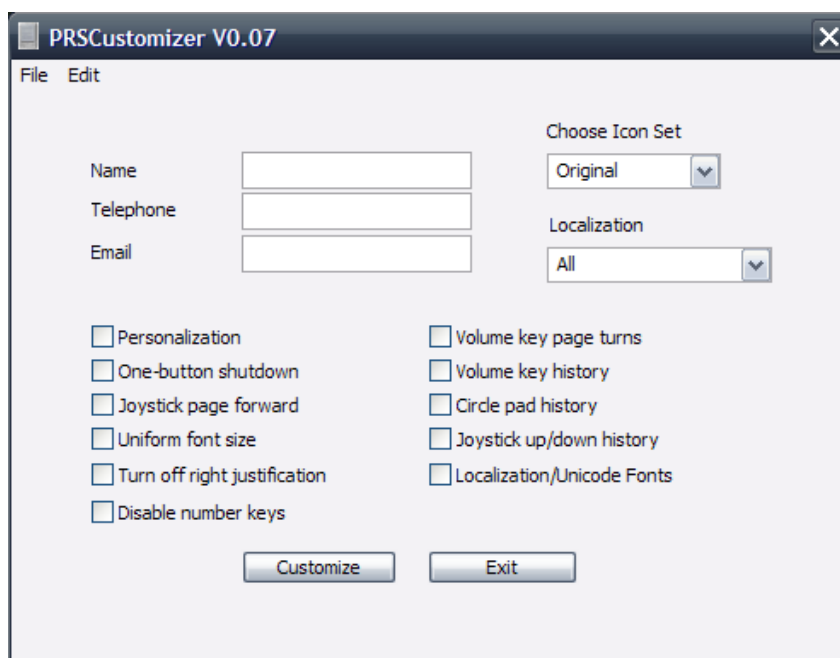


Figure 4.1: PRSCustomizer

Now, tick the boxes next to the hacks you want. You can read more about them in the thread where you downloaded the application, but the hack we're looking for is the one named `Localization/Unicode Fonts`. Tick the box next to that one. All others are optional, although I would suggest getting at least `Personalization` (fill in the name, phone and email details) and `Uniform font size`. You also get a clock (you can see it in some of the pictures of my Reader).

Please note that you will *not* get Unicode font support after we replace the font PRSC made for us (not unless your new font is Unicode compatible).

Now, click `Customize` and PRSC will populate the `sdcard` folder in `MyFolder`. Exit the program.

Next up, find that tt0011m_.ttf font file you made in Step One. Copy it, go to MyFolder\sdcards\files.505.1.1.00.18040\opt\sony\ebook\FONT and paste it there. When asked do you want to overwrite the file already there, select Yes.

Then, go up to the sdcards folder and copy everything in it to the card reader with the memory card you will use for flashing the Reader. Don't have a memory card? Get one; they're really cheap (PRS-505 can use SD cards and Memory Stick PRO Duo cards). Don't have a dedicated card reader? Read Appendix B.

Before you proceed to the next step... Have you previously flashed your Reader with any third-party tool? If the answer is yes, you need to re-flash it back to Sony's latest version. You can use the procedure in Appendix C; then return here.

One more question... Do you have the latest firmware for the PRS-505? If not (or you're unsure), proceed to Appendix D, then come back.

Step Three: The Flashing

Ok. So we're here. Take a deep breath, you're gonna need it. Take that memory card you filled up in the previous step, and insert it in the correct slot in the Reader. A screen like the one on Figure 5.1 should appear.

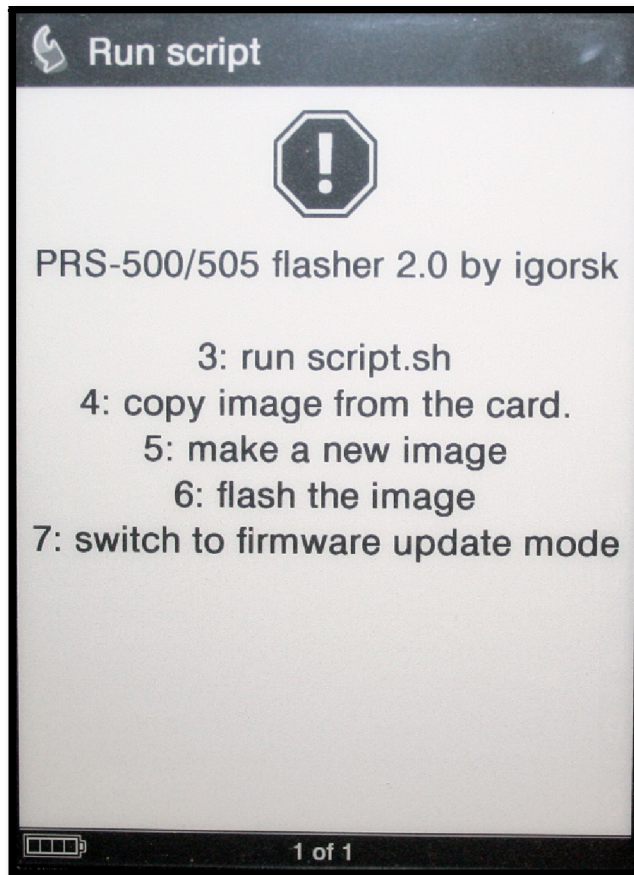


Figure 5.1: Initial flash screen

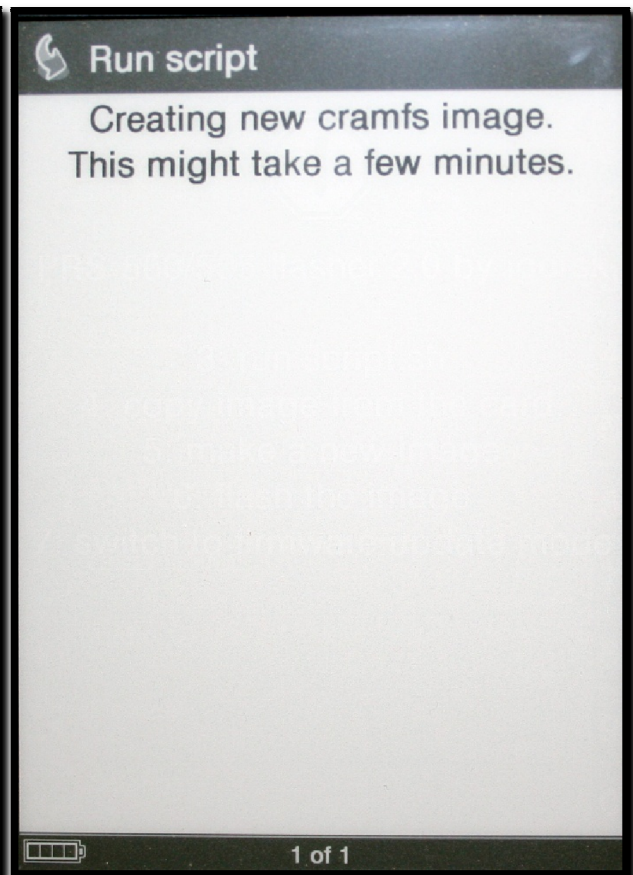


Figure 5.2: Image creation

Press the number 5 (five) on the Reader to create an image from the files on the card. This should take you to a screen like the one in Figure 5.2. This actually *will* take a few minutes.

When that is complete, you should see the screen from Figure 5.3 that says Image created successfully. Now press 6 (six) to start the flashing process. The screen from Figure 5.4 will appear, and yes, it *will* stay like that for a few minutes.

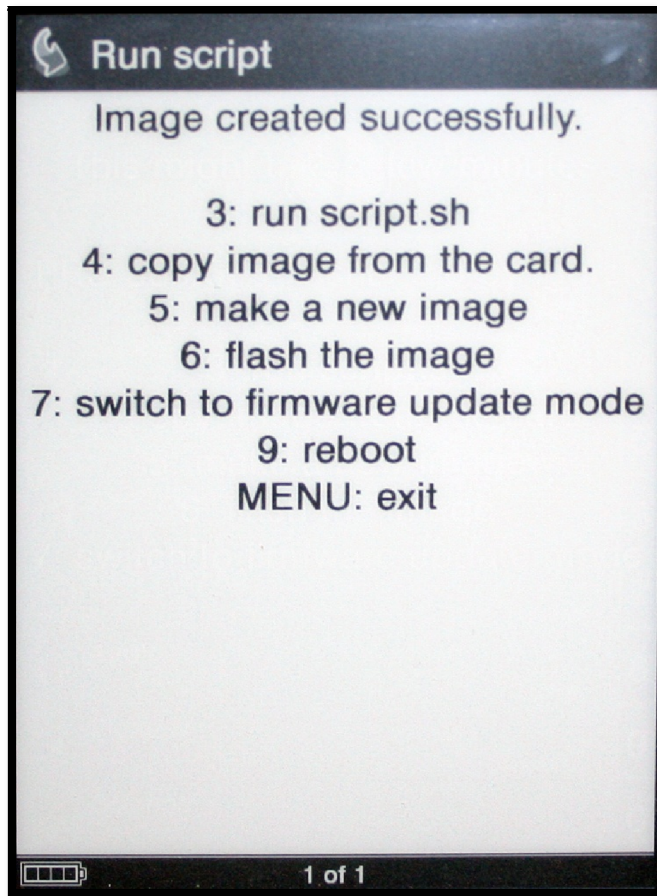


Figure 5.3: Image creation successful

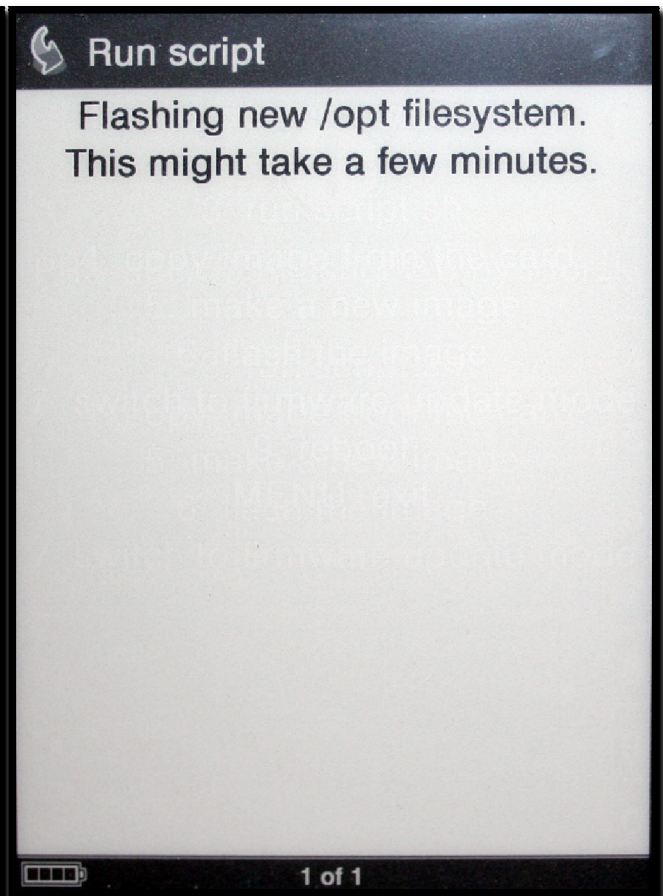


Figure 5.4: Flashing

After that is finished, you will be returned to the flashing menu. Press 9 (nine) to reboot—even if the top of the screen says `Rebooting`—because in my experience, it usually never reboots itself on its own. When you see the familiar `Starting` screen of the Reader booting up, remove the card so the script doesn't start all over again (and even if it does and you see Figure 5.1 again, just remove the card then).

And that is it! Open any book on the Reader and it will show up in the font you installed.

Step Four: Reloading books

If you're using Sony's eBook Library software to transfer books to and from the Reader, you *have* to read Appendix E on changing its fonts too. You need to follow this procedure so that the books you transfer in the future are paginated correctly. With incorrectly paginated books, you may find while reading that some of the lines from the previous page appear on the next one, or that some of the lines are missing (it depends on the size of the characters of the new font compared to the old one).

Now connect the Reader to your computer, and delete all the books you had in its memory. After you've done that, transfer the books you had (or other ones if you prefer) from your library software back to the Reader. You need to do this because the original files were paginated while the previous font was installed, and so were adjusted to it specifically.

If you're using [calibre](#) and *not* Sony's eBook Library, you don't have to change its fonts because it doesn't paginate books in advance, it leaves it up to the Reader. You still have to go through the procedure of deleting the old books and putting them back in though.

Appendix A: Different Fonts

To people who are changing one of the other two fonts on the device: use the Font Family and filename of *that* font in Step One, not the one used in this guide. All the names are in a previous section called The Fonts.

Also, if you're trying to replace the default font with some other font (not *Bitstream Vera Serif* that is used in this guide), pay attention to the *type* of the font. The Reader only accepts TrueType fonts (fonts ending with `.ttf`), and does not accept OpenType fonts (fonts ending with `.otf`). Be sure to convert your OpenType font to a TrueType one before sending it to the Reader.

The easiest way to do this is to use FontCreator. In fact, if you're following this guide to the letter and using FC, everything is honky-dory. After editing your OpenType font in FC to change the Font Family, just save it with the correct `.ttf` extension you would use anyway with the correct filename. FC will convert the OpenType font into an OpenType font with TrueType outlines, and I can guarantee you that those work on the Reader (I'm using just such a font on mine).

Appendix B: No card reader

You don't have a dedicated card reader on your computer? Don't worry; you can work around that (I don't have one either).

When you want to transfer something to the card, just put it in the correct slot on the Reader, and then plug the Reader into the computer. When transferring scripts (like the flashing scripts PRSCustomizer created for us), be extra careful and use this procedure:

1. Plug the Reader into the computer *without* the card
2. Put the card in the slot on the device
3. Transfer all the necessary files
4. Remove the card from the device
5. Unhook the device from your computer
6. Success!

It's that simple. Now just plug the card back in so the script starts up.

Appendix C: Unbricking

So you think you've bricked your Reader? Ok, first off: *take a deep breath*. Now *take another one*. You OK? Great. Don't worry, we'll unbrick it, it's easy.

1. Connect your Reader to the computer
2. Download [this file](#)
3. That exe file is just a big archive. Extract it to a folder (let's call it MyFolder2). If you don't have anything to extract it with, get [WinRAR](#), it's shareware.
4. Go to MyFolder2\eBookUpdater\assets\updaterAssets and find a file called PRSVersion.dat
5. Open it with Notepad
6. There should be a string of numbers, exactly "110018040". Change it to "110018041" (the zero at the end became a one)
7. Go back up to MyFolder2
8. Run PRS-505 Updater.exe
9. Follow the on-screen instructions
10. Success! Reader unbricked!

In case you somehow missed step ten :), and your Reader is still bricked (it totally shouldn't be), go online to [MobileRead](#) and ask for help. Someone will be along to help you, they're really nice people.

Appendix D: Old firmware

Do you have the old firmware on your PRS-505 (or you're unsure if you do)? Easy, just follow these steps:

1. Download [this file](#)
2. *Make sure your Reader is fully charged*
3. Connect the Reader to the computer
4. Run the file PRS-505 Updater 1.1.00.18040.exe (which is the one you downloaded)
5. Follow the on-screen instructions
6. Success!

Appendix E: eBook Library fonts

Do you want Sony's eBook Library to use your shiny new font too? Easy as pie, just follow these steps:

1. Locate the `tt0011m_.ttf` file you created in Step One
2. Copy it.
3. Go to this folder (though it depends on where you installed the Library):
`C:\Program Files\Sony\Reader\Data\fonts`
4. Paste your file in that folder (overwriting the old one)
5. Success!