

## Running LK 8000 on a Falk PNA

This is a „no frills“ version to run LK8000 on a Falk PNA. It utilizes the small and smart programs „nfRunner“ and „nfSpeedMenu“ from Navifriends ( [www.navifriends.com](http://www.navifriends.com) ) to switch between programs. With probably small changes this procedure might also work on many other PNAs.

I choose a Falk PNA because they have quite bright displays and my model F6 runs LK8000 with continuous 100% backlight for more than 2 hours and with a quite small AA NiMH battery pack for more than 6 hours.

What you get on startup is the following screen:



Bottom 1: Sets the desired backlight settings (in my case 100%, no delayed switching off at any time)

Bottom 2: Runs LK8000

Bottom 3: Runs the Falk Car Navigator

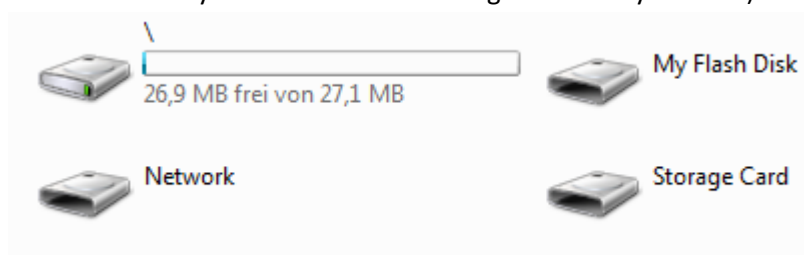
Bottom 4: Switches off the device

The hardware switch for switching off the device remains disabled to prevent an undesired switching off during the flight, hence you need bottom #4. Switching on works with the hardware switch!

It works only when you switch off the “Theft protection” of the Falk Car Navigator program.

### **(1) Installation**

- Install LK8000 on the storage card (SD or microSD) to be inserted into the PNA. This means on the card should be the folder “LK8000” with the program “LK8000-PNA.exe” in it.
- Connect the PNA to a PC in order to have access to the file system on the PNA (You should have the folders “My Flash Disk” and “Storage Card” on your PNA):



- c) Download the programs „nfRunner.exe“ and „nfSpeedMenue.exe“ from <http://www.navifriends.com> (to be exact: <http://www.navifriends.com/phpbbForum/viewforum.php?f=173>). These are very nice and useful programs. Many thanks to *stroetmann* and friends for providing this and the helpful Newsgroup!!
- d) In the Folder “My Flash Disk” rename the file “AutoRunCE.exe” to “AutoRunCE\_fx.exe”
- e) Copy “nfSpeedMenue.exe” into the Folder “My Flash Disk” and rename it to “AutoRunCE.exe”
- f) Copy the file “AutoRunCE.nfSM” from the attached zip file into the Folder “My Flash Disk”
- g) Copy the Folder “nfrun” from the attached zip file into the Folder “My Flash Disk”
- h) Copy “nfRunner.exe” into the subfolder “My Flash Disk/nfrun/” and rename it to “fxbacklight.exe”

Now you can use the hard reset switch of the PNA to restart the device and you should be able to use LK8000.

For LK8000 to use the Falk gps you need the following settings (system settings #8):

Port: COM2

Baudrate: 9600, 8bit

Serial mode: polling (in German “abfragen”)

NMEA Checksum: Enabled

My Car Navigator program has no means to exit, so you need to reset the device to return to the main selection screen after having used the car navigator.

## (2) Extra information for the experts

What happens is that you run instead of the car navigator the program “nfSpeedMenue.exe” which can be configured in the file “nfSpeedMenue.nfSM”. This is a text file with the content given below. See the programs manual to understand what it means. You can select the number of bottoms, the shown bitmaps and start any program you like. E.g. if you like to switch to the WindowsCE shell you can use: “EXEC=\Windows\Programs\Windows Explorer.lnk”

----- AutoRunCE.nfSM -----

```
[ INIT]
HIDETASKBAR=0
ONTOP=0
CLOSE=0
Xoffset=0
Yoffset=0
TYP=3
BUTTONTYP=1
TITEL=GSCColibri Navigatorsetup
SHOWTITLE=1

#Backlight
[1]
TEXT=Backlight
BITMAP=\My Flash Disk\nfrun\Backlight1.bmp
EXEC=\My Flash Disk\nfrun\fxbacklight.exe

#Falk Navigator
[2]
```

```

TEXT=
BITMAP=\My Flash Disk\nfrun\FalkLogo1.bmp
EXEC=.\AutoRunCE_fx.exe

#LK8000
[3]
TEXT=
BITMAP=\My Flash Disk\nfrun\LK8000Logo1.bmp
EXEC=\Storage Card\LK8000\LK8000-PNA.exe

#PowerOff
[4]
TEXT=
BITMAP=\My Flash Disk\nfrun\PowerOff1.bmp
EXEC=\Storage Card\LK8000\_System\_CEUtilities\Off.exe

```

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For changing the backlight I use the “nfRunner.exe”. This is a WinCE command line interpreter which you can arbitrarily rename and which executes the commands in the file having the same name with the extension “.nfRUN”

In our case it opens the system setting panel for the backlight and changes settings as you would do it “by hand”. The numbers in the first lines represent the settings of the corresponding panel. You should know that using the nfRunner you can basically set or change everything on your PNA. For help on specific problems see the Navifriends Newsgroup (in German). I also just found all this in the Newsgroup.

```

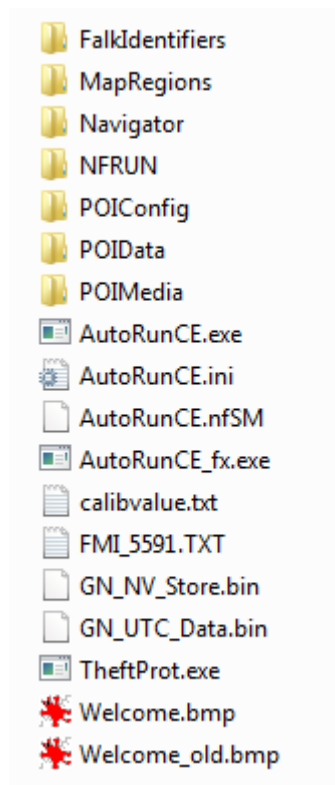
----- fxb backlight.nfRUN -----
#Screenpower
SETDWKEY "HKCU\ControlPanel\Backlight\UseBattery" "0"
SETDWKEY "HKCU\ControlPanel\Backlight\UseExt" "0"
SETDWKEY "HKCU\ControlPanel\Backlight\BatteryTimeout" "15"
SETDWKEY "HKCU\ControlPanel\Backlight\ACTimeout" "15"
SETDWKEY "HKCU\ControlPanel\Backlight\BackLightLevel" "100"

DEBUG
RUN "\Windows\ctlpnl.exe" "cplmain.cpl,7,2"
WFW "Display Properties" "5000"
SLEEP "500"
KEYPRESS "0x09"
SLEEP "100"
KEYPRESS "0x09"
SLEEP "100"
KEYPRESS "0x0D"
WFW "Advanced Backlight Options" "5000"
KEYPRESS "0x0D"
SLEEP "500"
KEYPRESS "0x09"
SLEEP "100"
KEYPRESS "0x0D"

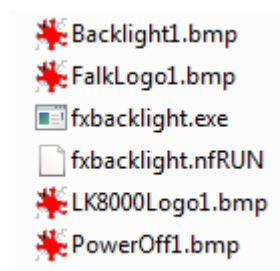
```

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In the end on my PNA the folder “My Flash Disk” has the following content:



This is in the subfolder "nfrun":



If you have problems connection to the internal gps, you can find the settings of the car navigator program in the text file: „\My Flash Disk\Navigator\Device.cfg“.

In principle you don't need a storage card. There is enough space on the Flash Disk (not recommended in the LK8000 manual!). When putting the LK8000 on the internal Flash Disk works as well when changing the corresponding path in the configuration file.

Finally, this is how it works on my device and I don't take over any responsibilities for anything (e.g. for errors, warrenties or things that might happen to your device when using this).

Have fun and successful flights with LK8000!!!