



dreambox

dm 8000 hd pyr  
dm 800 hd pyr  
dm 800 hd se  
dm 500 hd  
dm 702+

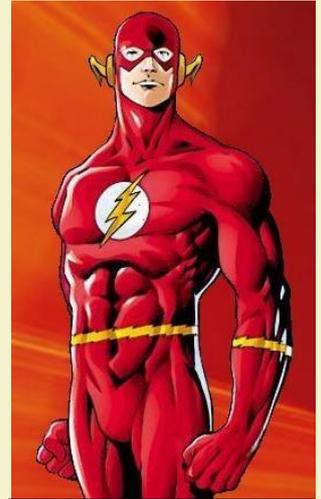
## Forward:

The following files are to be regarded as examples and of course, the version numbers will change over time. Always use the current version, meaning the latest files.

Where? [here:](#)

**!! This manual is written for v6.0.6. . Images for this and subsequent versions must be newer than October 2011 (V3.2.1). All images that you want to have in Flash must include the **loop driver**. ([here](#) is an \*. ipk from OoZooN, in the image the loop driver is already included in the kernel)!!**

*This guide is an attempt to explain the main points of the program. Some of the menu items however, are so specialized that I can not explain it fully. You may find answers to this question in the following [Thread](#). Barry Allen is certainly not just a boot manager. In the BA options you'll find an extensive collection of useful to very specific features for the Enigma2 boxes.*



BARRY ALLEN  
the second FLASH

I've written this guide from the perspective of a newbie. Of course, not everything is written down perfectly. Also, I'm sure there could be many improvements. Therefore, everyone is invited to send me **suggestions**, **improvements** and **bug fixes**. For one alone may not know all the intricacies of Barry Allen (of course, exceptions prove the rule) and thus: If there is something to correct or supplement .... Please bring it on

### **PS:**

Everything is done with this guide is at your own risk. I have tried to do everything down to the best of my knowledge, but for the damage done by the use of these instructions, I assume no liability.

Now enjoy browsing through this guide

romeo-golf

PS. Thanks for this great translation to „oldfart101“ who offered help and as translated not only the text but also the pictures

# Introduction

Part 1 - [Basics](#)

Part 2 - [Media preparation](#)

Part 3 - [Barry Allen Kit on the Dreambox - copy to the /tmp directory](#)

Part 4 - [Barry Allen Telnet installation](#) (CVS- or Original DMM Image in Flash)

Part 5 - [The Barry Allen Plug-In Menu](#)

Part 6 - [Insert New Image in Barry Allen](#)

Part 7 - [Barry Allen web interface](#)

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## Conventions:

- Commands to be entered are highlighted in **bold**.
- Controls to press are bold in square brackets: **[Enter]**
- Normal written text is the explanation

## Important!!:

Linux is different from Windows - the file names are case-sensitive, just as the line breaks in text files. Whenever it is necessary to edit a text or a file, use a

[Unix-compatible editor](#) (e.g. UltraEdit )

# Part 1 - Basics

What is the meaning of, or what's different:

**Barry Allen - Wally West**

Barry Allen is a multi-boot tool which is installed on a CF card, a USB flash drive or hard drive, giving you the opportunity to choose between different images to boot. You should know that an image from the (Linux) kernel, various drivers and the GUI (Enigma2) exists. Barry Allen increases both the kernel and the necessary drivers for the boot manager from the flash image and installs "only" Enigma2 and the rest of the image contained in Linux from the selected boot image.

Which explains that the flash image may not be too old and it also must be one which, for example includes the necessary USB drivers so that the USB device is [mounted](#) to allow you to select the images thereon.

If you turn off the boot manager, several drivers will already have been used from the respective image by the continued use of the kernel in flash, this is not a perfect solution.

Therefore we would like the [Kernel](#) and the drivers of the selected image using the boot (as if it was in the boot Flash) Wally West has to offer its services in addition. Note: Wally West install first, reboot if necessary, partition and only then install Barry Allen is before any other (s) application feature ([Swap file](#), Picons etc.) are put onto the media.

Barry Allen in the boot menu - you can turn on or off with the subsequent effects

	Barry Allen with Boot menu:	Barry Allen without Boot menu:
Kernel	Flash	Flash
Driver	Flash <i>(which are needed for the boot manager that's the way the CPU driver, LCD and Keyboard/Remote control + as the dependencies need to start)</i>	Image <i>(up to the kernel are)</i>
Enigma2	Image	Image

	Barry Allen + Wally West with Boot menu:	Barry Allen + Wally West without Boot menu:
Kernel	Flash	Image
Driver	Flash <i>(up to the kernel are)</i>	Image
Enigma2	Image	Image

this is all highly simplified. because not all, but only the drivers needed for the boot manager will be loaded, but for a basic understanding, it should be sufficient

On what medium is Barry Allen now installed?

It's simple: the installation kit of Barry Allen is looking for a storage medium which will always be found. If you want to have BA on USB stick, then a stick it is. On a 7025, a CF card is recommended, for all other boxes a USB is preferred.

If you want to prevent that Barry Allen is accidentally installed on the hard disk, via FTP, you put a directory with the name "Noba" on / media / hdd.

For DM7025 Users:

Although if you use a CF card, but still want to install Barry Allen on USB stick, you will need during the installation of Barry Allen to temporarily remove the CF card. (Very important: CF cards are treated as hard drives **never** insert or remove the CF card whilst in operation.)

Only for 7025, a CF card is really a must as there are always problems with one or the other type of USB stick. If you want to try it anyway, and you get problems, test it again with an intervening USB hub (completely passive ranges).

## Small collection of responses from the Barry Allen threads

- BA+WW or LowFat work on the DM8000 only with the USB stick and on the 7025 only with the CF card !
- BA+WW + 3 partition layout with up to 8 image partitions (more on USB stick does not work) works in much the same as thow's old multi-boot, which is no longer supported or developed further!
- If BA finds a WW configuration with a FAT partition on the device, turned off only by installing the boot manager - you can turn it on again later. But then the FAT for the kernel is no longer used and it is practically the same as when you would not use WW. And you can also turn off the normal BA boot manager to the driver's image and take only the kernel from Flash.
- If you only have BA classic on a DM8000 it doesn't matter whether CF card or USB stick, CF card is not really hotplug-able anyway, so I do my BA on whatsoever.
- Operate BA plug-in by the recommended reboot after the installation of BA, if then the USB drive is not detected soon enough. Try another USB or try to stick a USB HUB between.
- BA 5 also says the information is no longer where it is installed as / media / ba is a separate mount and no link
- The "Noba" does NOT apply only if BA is found on the device when BA is already on the hard disk, it will only act after an uninstall of BA and prevent a new installation of BA, the hard disk is used!
- Barry Allen should only be installed / updated when you are booted from Flash
- The document is the one for installing BA set up / or / tmp is because when one is installing yourself on the mount point of the USB-Stick or the CF card (cd / media / usb or cd / media / cf), BA can not then unmount the device to format it.

## Notes from gutemine how best to recognise your problems and how you can help

- Even if the Barry Allen plugin is easily copied to tmp with an FTP program on the Dreambox and then the Blue panel to install the Gemini image. Or directly from the OoZooN with the Software Manager, it is advisable to complete the manual way to install. See menu item 4.
- Advantage? The output of the telnet window can be posted to gutemine in the Barry Allen thread to get appropriate advice.

## Part 2 - Media preparation

### Prepare CF-card for Barry Allen.

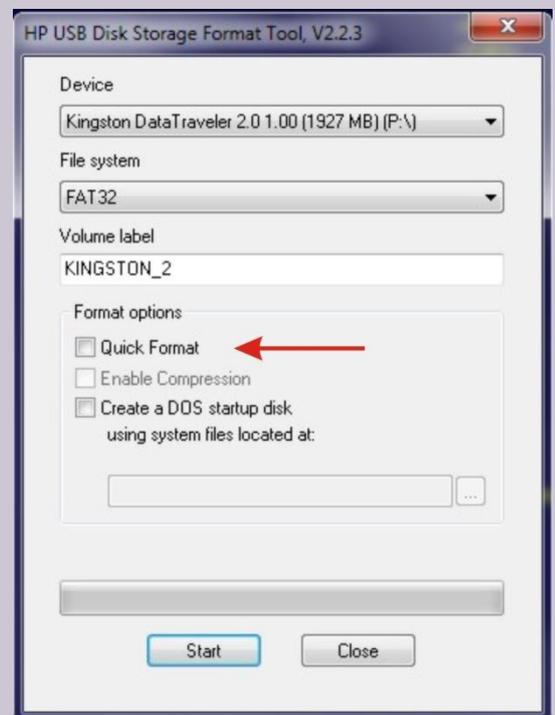
- A CF card, we are preparing from the PC. Those who have no internal card reader, please get an external one.
- They cost no more than about 10,-Euro



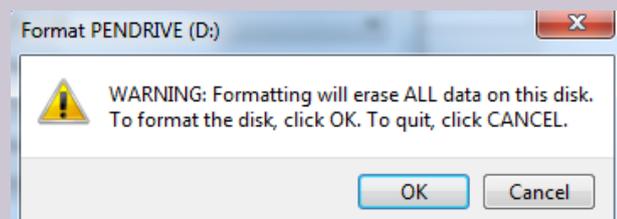
### Prepare USB stick for Barry Allen.

- We format the USB-Stick on a PC with the „HP USB Disk Storage Format Tool“  
*(Freeware, do a google search)*

Do a **complete** format  
(even though it takes a little longer)  
*(clear the tick from the „Quick Format“ box)*



- Naturally – we want to format



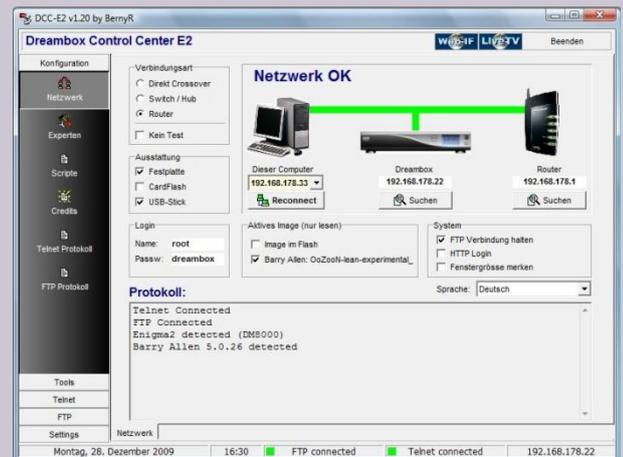
## Part 3 – Copy Barry Allen Kit to the Dreambox

1. First what do we need to install Barry Allen? In any case, a CF-card/USB-Stick of recommended 512MB. With the low prices you will now have problems to get less than 2GB media. However, a few hundred MB to do more good for other things, such as a swap file, or the popular Picon's.

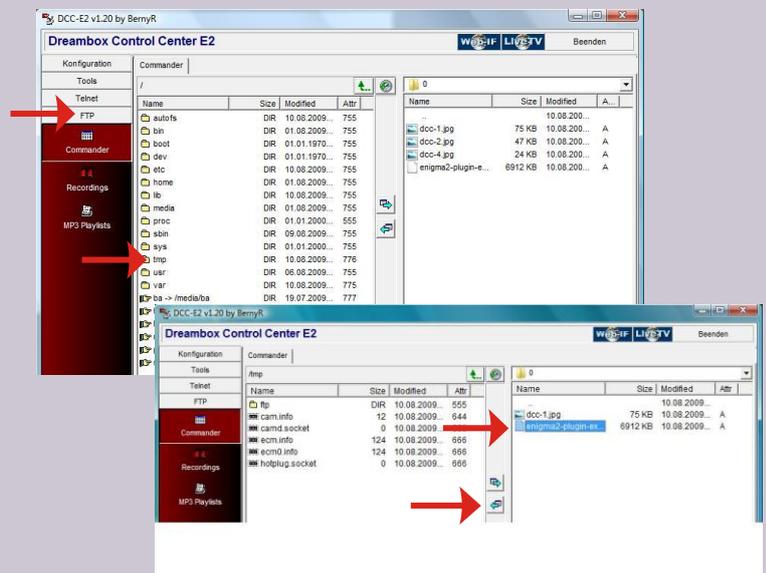
And naturally the Plug-In itself:

**enigma2-plugin-extensions-barryallen\_6.0.6\_mipsel.ipk**

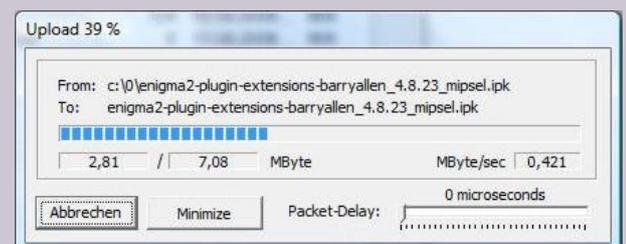
2. Second in order to copy the plug-in onto the Dreambox use Telnet, we use the best program - [DCC E2](#). How to set up DCC, you can go to „[bernyr.de](#)“ and read.



3. After you've set up DCC, you click on the button "FTP" and open (double-click) the /tmp directory. Seen in the right window the Barry Allen Plugin "Copy" and click on the switch.



4. 4th Now you watch how the plug-in is copied to /tmp on the Dreambox. Note: the directory /tmp is cleared on every reboot. Hence the name "temporary".



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## Part 4 - Install the Plug-In with Telnet

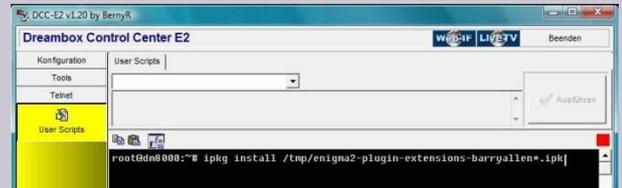
1. First whoever has an original or CVS Image in Flash memory, you must go via the small but fast detour of [Telnet](#). Furthermore, telnet to the [Blue-Panel](#) of a Gemini Images has the advantage that you always check to get a log to view. As bugs are immediately recognisable, and the question of whether Barry Allen has been installed on the right medium will also be answered.

2. To install select Telnet from the DCC menu, and type the following commands:

```
cd /  
opkg install /tmp/enigma2-plugin-extensions-barryallen*.ipk
```

( !! observe the spaces !! )

[ENTER]  
[ENTER]

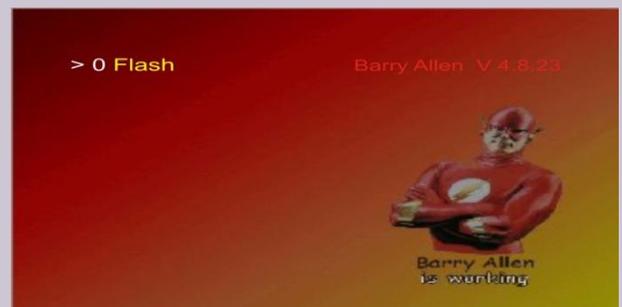


3. The Telnet log tells us all sorts of interesting things.
  - How to solve problems with the remote.
  - Is that Barry Allen is, as desired, installed on the USB we should ignore any stick.
  - That "bapostinst" is not active. (See details in the "Options for Barry Allen")
  - Barry Allen restarts the graphical user interface, so it is included in the plug-in menu.
  - That we should reboot the box again.
  - Any error messages.

```
*****  
* OoZooN-Image *  
* Enigma2 experimental *  
* 20111224 *  
* OpenDreambox 1.6.0 dm800se *  
* http://www.OoZooN.tv *  
*****  
  
dm800se login: root  
root@dm800se:~# opkg install /tmp/enigma2-plugin-extensions-barryallen*  
Installing enigma2-plugin-extensions-barryallen (6.0.4) to root...  
-----  
dm800se  
-----  
Barry Allen stoppt automount, rebooten Sie um es zurueck zu bekommen  
Barry Allen stoppt udev, rebooten Sie um es zurueck zu bekommen  
Barry Allen Device wird /dev/sdb1 !  
Erasing Barry Allen device ...  
Making empty ext3 Filesystem ...  
Configuring enigma2-plugin-extensions-barryallen  
Integrating Barry Allen into Flash Image  
Looks like your Dreambox doesn't have a local harddisk mounted !  
/MB Images will be created on /media/ba/MB_Images  
Integrating Barry Allen into WebIF  
Flash Kernel Version: 2.6.18-7.4-dm800se  
Barry Allen feels home at /dev/sdb1  
disabled keep squashfs  
bapostinst is disabled - enable with the Barry Allen Plugin if wanted  
-----  
If your Flash image has no loop device driver built into the  
kernel don't forget to install kernel-module-loop !!!!  
-----  
Installation or Upgrade of Barry Allen is now finished !  
If this is a new installation, then please reboot NOW  
to check if Barry Allen Plugin shows up in the Plugin List !  
-----  
PS: You can ignore any file_move or Can't open status file  
errors after this, they don't hurt  
-----  
root@dm800se:~#  
root@dm800se:~# reboot  
  
Broadcast message from root (pts/0) (Fri Jan 6 17:44:29 2012):  
  
The system is going down for reboot NOW!  
  
Barry Allen by gutemine Version 6.0.4  
  
root@dm800se:~# █
```

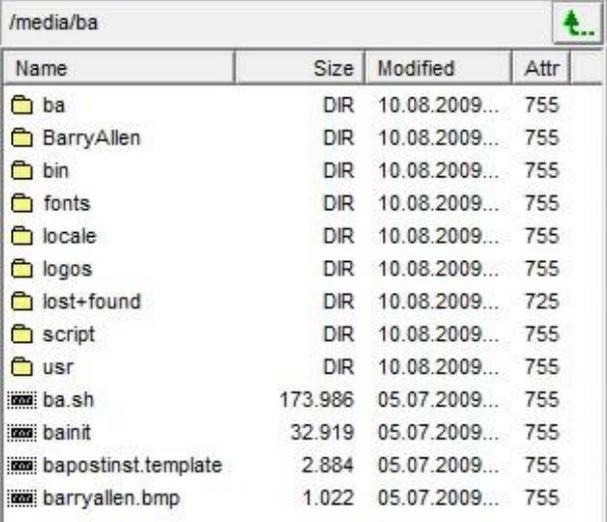
4. Now once we boot the Dreambox with a new Barry Allen, it reports with the boot menu. The first time we have, logically, only one image to choose from and that is that from the flash memory.

Either we now press the **[OK]** button or wait about 12sec. our flash image is booted up, or 30sec. if a PIN has been assigned.



5. We check again via FTP, if Barry Allen has actually installed correctly to /media/ba start DCC, FTP, and click again to open /media and then /ba

6. This creates directories Barry Allen and the program itself and then the script "ba.sh". Later, we learn, how you can run commands directly from telnet. As I said, Telnet always gives good reports, if there are mistakes and, if so, what.



The image shows a file manager window titled "/media/ba" with a tree icon in the top right corner. A red arrow points to the window title bar. The window displays a directory listing with columns for Name, Size, Modified, and Attr.

Name	Size	Modified	Attr
ba	DIR	10.08.2009...	755
BarryAllen	DIR	10.08.2009...	755
bin	DIR	10.08.2009...	755
fonts	DIR	10.08.2009...	755
locale	DIR	10.08.2009...	755
logos	DIR	10.08.2009...	755
lost+found	DIR	10.08.2009...	725
script	DIR	10.08.2009...	755
usr	DIR	10.08.2009...	755
ba.sh	173.986	05.07.2009...	755
bainit	32.919	05.07.2009...	755
bapostinst.template	2.884	05.07.2009...	755
barryallen.bmp	1.022	05.07.2009...	755

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## Part 5 - Barry Allen Plug-In Menu

We press **[Menu]**, and then **[OK]** to activate, **Plugins** and press **[OK]** again

We end up at the plugin browser with a new entry, namely

„**BarryAllen, the second Flash**”

Which is activated by another **[OK]** press... and

This window opens with a menu of options.

[Wizard for installed Images](#)

[Wizard for images at /MB\\_Images](#)

[Wizard for Debian](#)

[Wizard for Tools](#)

[Wizard for Setup](#)

**Barry Allen Lite Menu Mode**

**Barry Allen readme.txt**

**About Barry Allen Version 6.0.4**

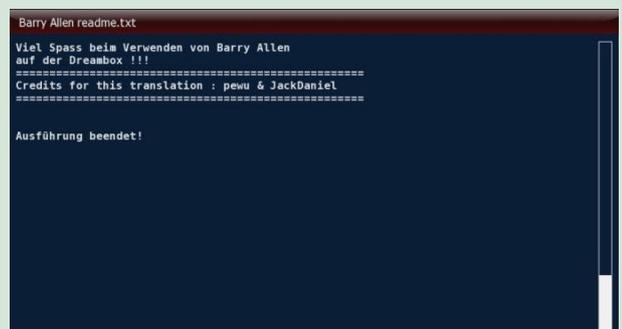


**Barry Allen Lite Menu Mode:**

The menu is limited to essentials:-

**Barry Allen readme.txt:**

Gutemine's readme text file is displayed – in English only.



## Menu

### Wizard for installed Images:

#### 1 – Full info on the installed Images:

show me what images are installed, how much space they occupy and how much space is still available on the storage medium.

**Important!** You can clearly see that the flash image to open embedded version number is 1.5 and all OE installed Images also. If this were different, problems can not be excluded. Therefore ensures that the OE numbers are identical!

#### 2 – Short info on the installed Images:

goes faster than the full version, it does not look into each image, how much disk space they take up

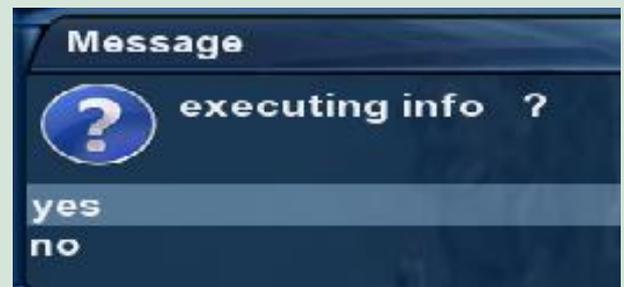
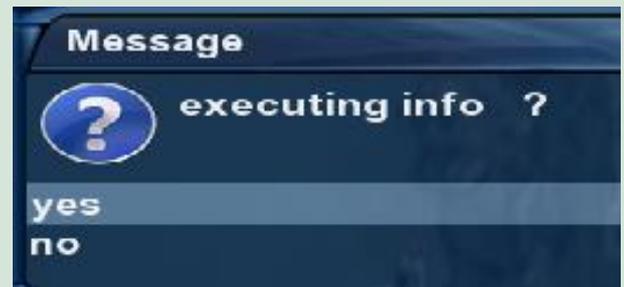
#### 3 – select installed image for booting:

Select which image I want to boot.

*(One can therefore choose how to multiboot (more on that later), even from the image out of the boot image.)*

#### 4 – delete an installed Image:

Probably self-explanatory



### 5 – rename an installed Image:

Also self-explanatory

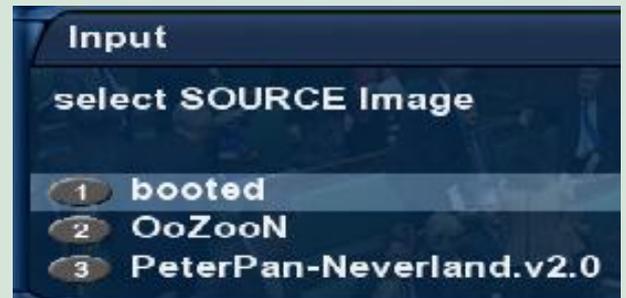


### 6 – copy an installed Image:

copies the selected image to /MB\_Images

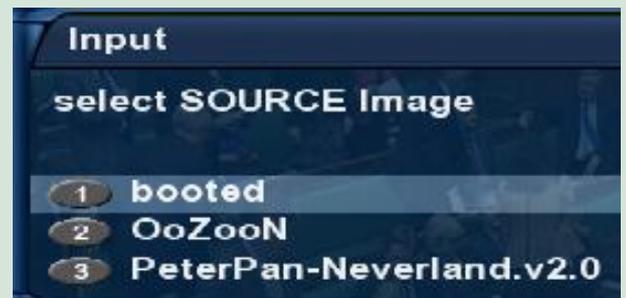


### 7 - backup Image (Type nfi) to /MB\_Images:



### 8 - backup Image to tar Image at /MB\_Images:

on special request: create an installable backup of the selected images. Including all add-ons, plug-ins and files.



### 9 – Switch image lock:

You can now protect the images on a CF card with a PIN, so that the protection is 100%, takes up the flash boot switch (otherwise the last booted image from CF is still booted - this is on purpose so that recordings from deep standby function are maintained, without having to enter a PIN)



## Menu

### Wizard for images at /MB\_Images:

#### 1 – list nfi images at /MB\_Images:

show the corresponding files in /MB\_Images

*\*.nfi backup's can again be flashed with the new WebIf \*.tar.bz2  
Backup's can be re-installed with multi-boot, can be unpacked, and  
any portion thereof may be used*

#### 2 - extract nfi image from /MB\_Images:

shows only existing \*. nfi files in /MB\_Images.  
and after OK the image is on the stick...

#### 3 – delete and extract .nfi Images:

4 - rename Image (Typ .nfi):

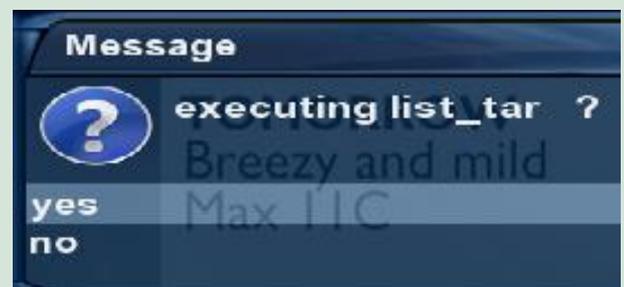
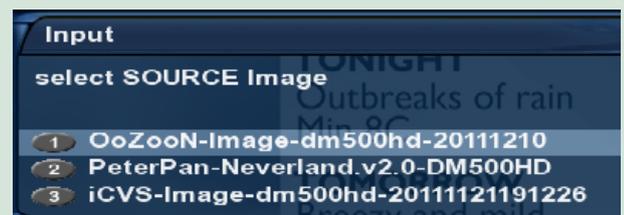
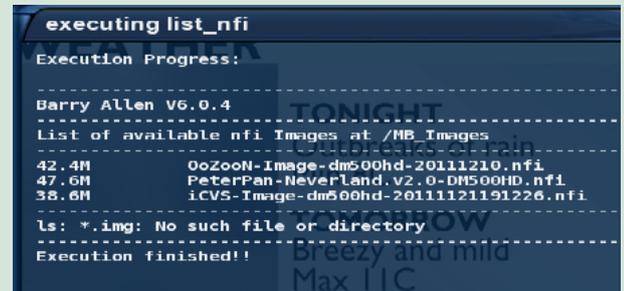
5 - remove Image (Typ .nfi):

6 - list Images (Typ tar.bz2):

7 - extract Image (Typ tar.bz2):

8 - rename Image (Typ tar.bz2):

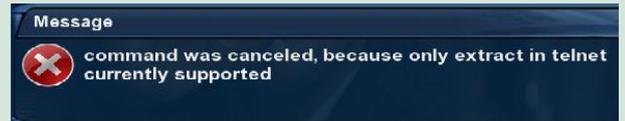
9 - remove Image (Typ tar.bz2):



## Menu

### Wizard for Debian:

Command only via Telnet: `ba.sh extract_debian <imagename>`



[back to BA Plug-In Menu...](#)

## Menu

### Wizard for Tools:

#### 1 - restart options:

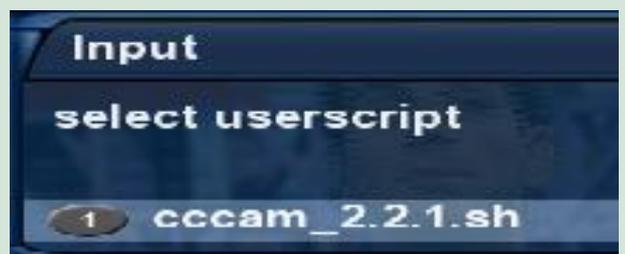
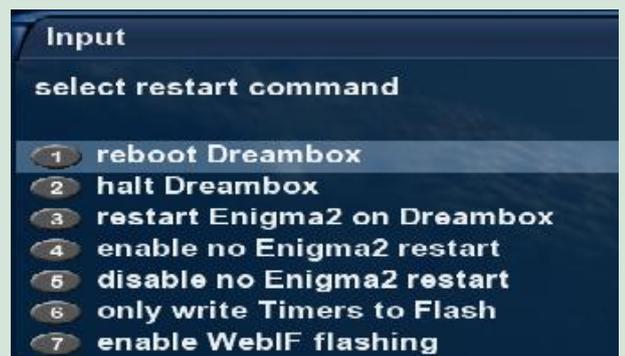
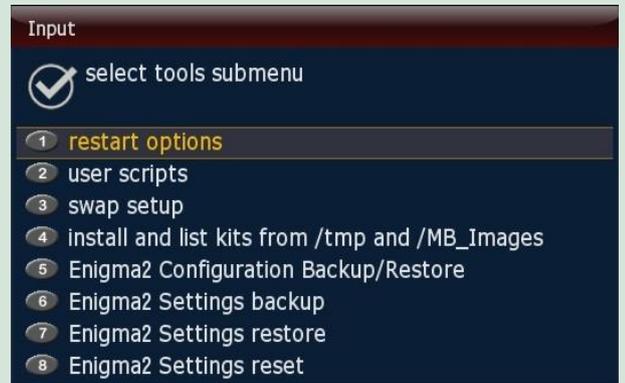
- 1- **reboot Dreambox**
- 2- **halt Dreambox**  
Restart, and halt the Dreambox are features which are also available in standard images
- 3- **restart Enigma2**  
The enigma2 restart was included in plug-ins because it is in CVS and is missing from the DMM standard image, or found only in expert mode of the "Customise" menu.
- 4- **enable no Enigma2 restart**
- 5- **disable no Enigma2 restart**
- 6- **only write timers to flash**
- 7- **enable WebIF flashing**  
the kernel will be deleted on next reboot in order to bring WebIF to the flash status without the need to press stop button.

#### 2 - user scripts in active Image / /media/ba/script:

You can write a script that is useful for each image, put in /media/ba/ script and run it.

#### 3 - Swap setup:

- 1 - **show memory:**  
Shows the free memory on the Box
- 2 - **enable Swapfile 32MB**  
a 32 MB Swap file will be created in /media/ba
- 3 - **enable Swapfile 64MB**  
a 64 MB Swap file will be created in /media/ba
- 4 - **enable Swapfile 128MB**  
a 128 MB Swap file will be created in /media/ba
- 5 - **disable Swapfile**  
Swap file will be removed. See the difference when "show memory" is called.



[back to BA Plug-In Menu...](#)

#### 4 – Install and list kits from /tmp & MB\_Images

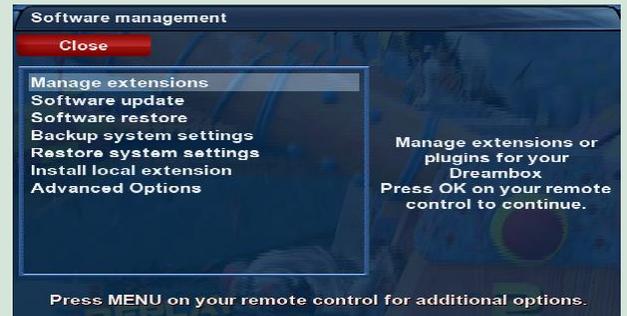
All files found with the appropriate suffix in /MB\_Images and /tmp are displayed and using "install" are also available to install. If 'File' is both in /tmp and in /MB\_Images only the one in /tmp will be shown, and if choosen, installed from there.

Kits in /MB\_Images are copied before installing to /tmp. So if the kit as the prerequisite calls, do not worry! It should still work, even if you put it in /MB\_Images (because /tmp is empty again after every reboot)



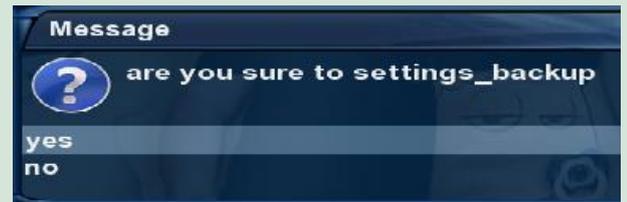
#### 5 - Enigma2 configuration backup/restore:

calls the Software Manager (if installed: Menu - Settings - Software Manager). This can be backup and restore settings, firmware update and as plug-in or de-install.



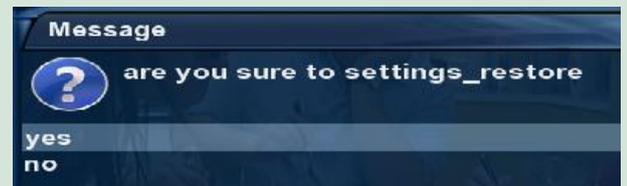
#### 6 - Enigma2 Settings backup

save your Settings



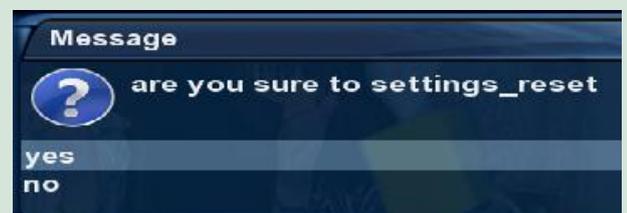
#### 7 - Enigma2 Settings restore

Load your previously saved settings



#### 8 - Enigma2 Settings reset

Load standard settings



## Menu Wizard for setup (of Barry Allen Plug-In):

- 1 – [Boot Options](#)
- 2 – [driver load](#)
- 3 – [sharing and copy options](#)
- 4 – [/MB\\_Images link setup](#)
- 5 – [Patch Enigma2](#)
- 6 – [add webinterface if missing](#)

### 1 - Boot Options:

#### 1 RC level

RC Mask is the mask to the bitmap you can write to the control it might not respond at all levels, if you have several boxes in the room.

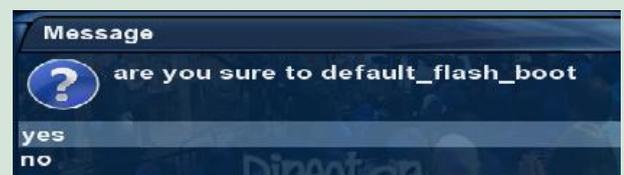
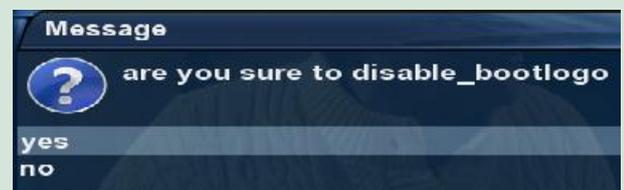
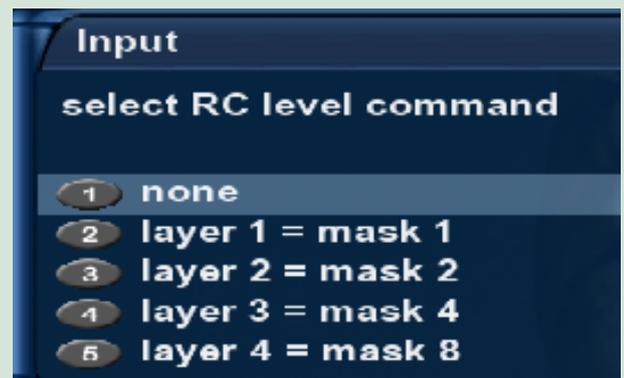
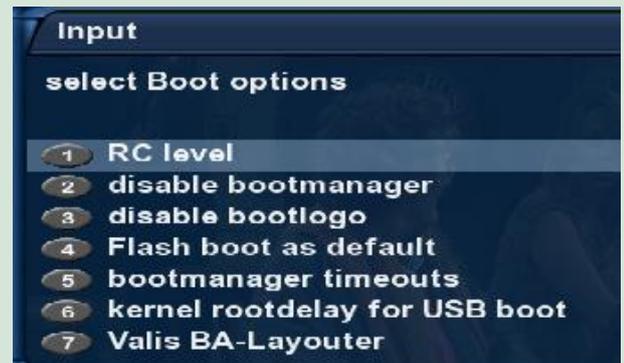
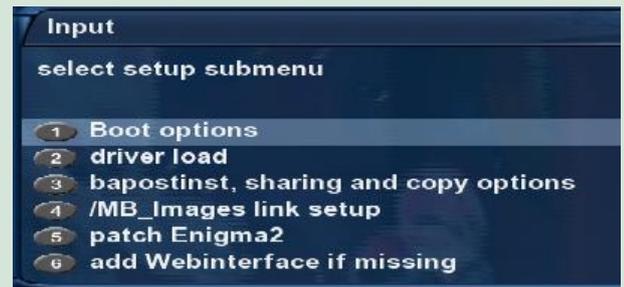
*Tip: number 2 is correct for the DM8000*

#### 2 Disable bootmanager

If you want a boot manager. Another advantage is that no drivers are then used by Flash, but only the flash kernel. And it saves 12 seconds during boot

#### 3 Disable bootlogo

#### 4 Flash boot as default



## 5 Bootmanager timeouts



## 6 Kernel rootdelay for USB boot



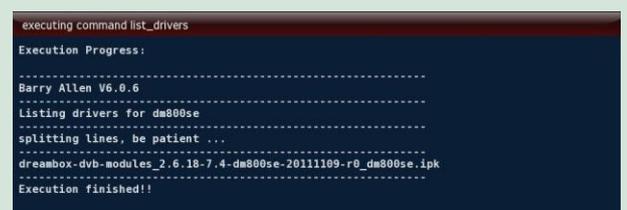
## 7 Valis BA-Layer



## 2 - Driver load:



## 1 Check latest image driver



## 2 Installing latest Image Driver

```
executing command get_latest_driver
Execution Progress:
-----
Barry Allen V6.0.6
-----
splitting lines, be patient ...
-----
Downloading Drivers dreambox-dvb-modules_2.6.18-7.4-dm800se-20111109-r0_dm800se.ipk
-----
Installing Drivers dreambox-dvb-modules_2.6.18-7.4-dm800se-20111109-r0_dm800se.ipk
-----
Installing dreambox-dvb-modules (2.6.18-7.4-dm800se-20111109-r0) to root...
Configuring dreambox-dvb-modules
-----
Reboot dm800se to activate dreambox-dvb-modules_2.6.18-7.4-dm800se-20111109-
```

## 3 Checking latest secondstage Secondstage Loader

```
executing command check_latest_loader
Execution Progress:
-----
Barry Allen V6.0.6
-----
splitting lines, be patient ...
-----
Downloading Secondstage Loader dreambox-secondstage_84-r0_dm800se.ipk ...
-----
Installing Secondstage Loader dreambox-secondstage_84-r0_dm800se.ipk ...
-----
Installing dreambox-secondstage (84-r0) to root...
-----
Execution finished!!
```

## 4 Install latest Secondstage Loader

```
executing command get_latest_loader
Execution Progress:
-----
Barry Allen V6.0.6
-----
splitting lines, be patient ...
-----
Downloading Secondstage Loader dreambox-secondstage_84-r0_dm800se.ipk ...
-----
Installing Secondstage Loader dreambox-secondstage_84-r0_dm800se.ipk ...
-----
Installing dreambox-secondstage (84-r0) to root...
Configuring dreambox-secondstage
-----
Reboot dm800se to activate dreambox-secondstage_84-r0_dm800se.ipk ...
-----
Execution finished!!
```

## 5 List available image drivers

```
executing command list_drivers
Execution Progress:
-----
Barry Allen V6.0.6
-----
Listing drivers for dm800se
-----
splitting lines, be patient ...
-----
dreambox-dvb-modules_2.6.18-7.4-dm800se-20111109-r0_dm800se.ipk
-----
Execution finished!!
```

## 6 Compare all image driver dates

```
executing command check_drivers
Execution Progress:
-----
Barry Allen V6.0.6
-----
checking Image Driver Date
-----
2.6.18 7.4 dm800se 20111109 r0 - Flash - booted
-----
2.6.18 7.4 dm800se 20111109 r0 - experimental-dm800se_20120110
2.6.18 7.4 dm800se 20111109 r0 - iCVS-Image-dm800se-20111211
-----
Execution finished!!
```

## 7 ifconfig

Network commands to look at what Sockets / Connections exist

```
executing command ifconfig
Execution Progress:
-----
Barry Allen V6.0.6
-----
eth0      Link encap:Ethernet  HWaddr 00:09:34:2C:96:DE
          inet addr:192.168.178.39  Bcast:0.0.0.0  Mask:255.255.255.0
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:8668 errors:0 dropped:0 overruns:0 frame:0
          TX packets:8592 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:5678108 (5.4 MiB)  TX bytes:6175781 (5.8 MiB)
          Interrupt:16

lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          UP LOOPBACK RUNNING  MTU:16436  Metric:1
          RX packets:0 errors:0 dropped:0 overruns:0 frame:0
          TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:0 (0.0 B)  TX bytes:0 (0.0 B)
-----
```

## 8 ifup

## 9 ifdown

```
executing command ifup
Execution Progress:
-----
Barry Allen V6.0.6
-----
run-parts /etc/network/if-pre-up.d
ip addr add 127.0.0.1/8 dev lo
ip: RTNETLINK answers: File exists
ip link set lo up

run-parts /etc/network/if-pre-up.d
ip addr add 192.168.178.39/24 dev eth0 label eth0
ip: RTNETLINK answers: File exists
ip link set eth0 up
ip route add default via 192.168.178.1 dev eth0
ip: RTNETLINK answers: File exists
-----
Execution finished!!
```

## 10 netstat

```
executing command netstat
unix 3      [ ]      STREAM  CONNECTED  4341
unix 3      [ ]      STREAM  CONNECTED  4163 /tmp/camd.socket
unix 3      [ ]      STREAM  CONNECTED  4162
unix 3      [ ]      STREAM  CONNECTED  3589 /var/run/tpmd_socket
unix 3      [ ]      STREAM  CONNECTED  3588
unix 3      [ ]      STREAM  CONNECTED  3513 /var/run/tpmd_socket
unix 3      [ ]      STREAM  CONNECTED  3512
unix 3      [ ]      STREAM  CONNECTED  3509 /var/run/tpmd_socket
unix 3      [ ]      STREAM  CONNECTED  3508
unix 2      [ ]      DGRAM   3477
unix 3      [ ]      STREAM  CONNECTED  3466 /var/run/dbus/system_bus_socket
unix 3      [ ]      STREAM  CONNECTED  3465
unix 3      [ ]      STREAM  CONNECTED  3460
unix 3      [ ]      STREAM  CONNECTED  3459
unix 2      [ ]      DGRAM   3014
unix 3      [ ]      STREAM  CONNECTED  2956
unix 3      [ ]      STREAM  CONNECTED  2955
-----
Execution finished!!
```

[back to Wizard for Setup...](#)

### 3 Share and copy Options

#### 1 – activate bapostinst.template

from 4.6.71 BA there is an active bapostinst template, which can be enabled with the tools. It is enabled from /media/ba the one created with the Configuration Backup Plugin setting when extracting an image

#### 2 - copy automount.conf from active Image to /media/ba

#### 3 - copy automount.conf from /media/ba to Image

timers.xml epg.dat will be copied to /media/ba. If you are then in another BA Image, you have a common linked timer.xml and epg.dat

#### 4 - copy timers.xml from active Image - /media/ba

#### 5 - copy timers.xml from /media/ba to Image

In both cases, rather than a shared file (which is linked to /media/ba) they are simply copied to /media/ba into the image file. So that one has his "auto mount" mount points and recurring timer, if they have been copied in Flash using the same menu points to /media/ba.

#### 6 - enable timers xml in /media/ba

#### 7 - deactivate timers xml in /media/ba

#### 8 – backup all shared Files

#### 9 – restore all shared Files

*Note: Share increases with use, there is danger that an image corrupts the file. Then all the other images have a problem. Generally, then, it is safer to "copy" timers.xml than "share" because there remains the files in the images separately and copied with a detour via /media/cf between the images..*



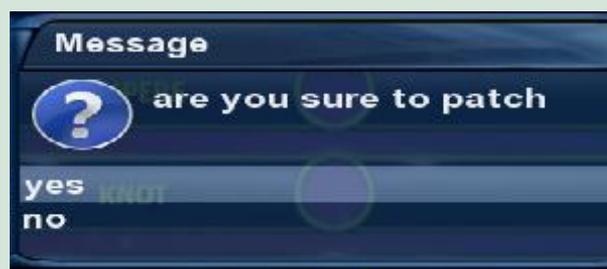
### 4 /MB\_Images link setup

on which medium do we want the directory /MB\_Images linked to?



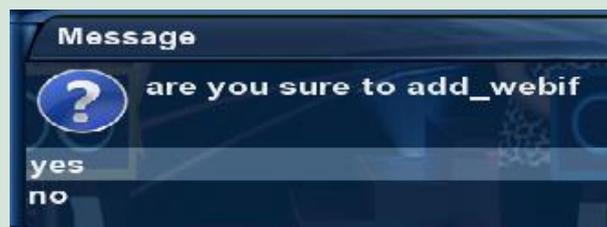
### 5 Patch Enigma2

for example if you WebIF the updates, you lose the pure patched BA WebIF. If you then execute this menu item, it is again purely patched. In addition, the Configuration Backup Plugin is patched so that CF is offered as a backup device, even when booting from that. You can also enable them to make modifications E2 in old images that you had unpacked before it came into BA, so that happens automatically when you unpack the image.



### 6 Add Webinterface if missing

Self explanatory



[back to Wizard for Setup...](#)

[back to BA Plug-In Menu...](#)

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## Part 6 – Insert New Image in Barry Allen

Barry Allen expects the \*.nfi Image files in the directory MB\_Images on the hard disk, CF card or USB flash drive of your Dreambox. Therefore we copy the files with DCC onto the Dreambox. As can be seen in the picture below it is quite reasonable to rename the files. On TV you can see about 40 characters, that means that you should limit the image name (to about 15 characters).

For user convenience: the "instant extract feature": copies the image (\*.nfi) File to /media/cf and then just reboots, the rest is done automatically by Barry Allen. Next: the image is installed and booted in the same sequence.

Very long file names seem confusing and do not fit completely on the screen. Note that the image name will be included in the menu as they are.

Note - Filenames in MB\_images should NOT contain the characters () {} [ ], nor should they exceed 20 characters (preferably)



We open "Wizard for images on /MB\_Images"

And select 2. install Image (Typ .nfi) from /MB\_Images



I have copied an image to /MB, now select an image to install. to activate this selection press [OK]



now accept or edit the name and a last chance to prevent the install. otherwise [OK]



After about 3 minutes. This image appears and we click [OK] Booting the box and when the program runs again, we check the menu item **installed image**, if the image info is listed. Then when you restart you can select the image



## Part 7 - The Webinterface

Type in the address bar  
of your web browser:

**192.168.x.x/barryallen**

(IP-ADDRESS of the Dreambox/barryallen)

and confirm with **[ENTER]**



In principle, all three wizards are just like the plug-ins, just for the sake of clarity all are on the same screen - enter or select command, select source, target, and possibly enter a PIN. These are the corresponding fields of the Wizards in WebIF.

The WebIF works in the background so the plugin does the work (done by a shell script) and reports in the output display of the WebIF scripts results. Since the webif is running in the background, enigma2 carries on running. You may see early results on screen, but they will lag behind enigma2. Only when you see the command finished at the bottom of the screen is processing complete - yes there should be a refresh button, but there isn't. Use the browser's refresh facility to get true result output..

Image names are preserved as they are - if no name is specified the target image name will be empty.

*If you mute whilst in the boot manager (speaker) the kernel will be deleted (rm -r/boot), but since this is already running (it has been extracted in memory) the system boots by a subsequent restart and brings the box into the flash mode for the press to flash with the WebIF without the stop button (DHCP should, however, be enabled) - a feature that was originally developed for the 600 where it has no LCD buttons, but now goes for all other Dreamboxes.*

## Teil 8 - Debian

In principle, gutemine developed in the Barry Allen plugin for the Dreambox a feature that one can extract a complete basic installation of Debian with Barry Allen CF/HDD/USB and boot from it, or even with chroot while Enigma is running!

The only requirement is approximately 250MB of free space on your boot device Barry Allen (CF/HDD/USB) and the box must be online to be able to download the mipsel/powerpc Debian Kit (approx. 50MB) from a Debian server via the Internet. Simply go to Barry Allen> 4.3 r0 upgrade as usual.



In order to install Debian Linux opens a Telnet session. For this you log in with telnet to your Dreambox and type:

```
cd /media/ba [ENTER]  
ba.sh extract_debian Imagename [ENTER] (Image name as the default is "debian")
```

Now you can watch as dozens of packages are loaded, checked and installed. Time - approximately 1 hour (varies depending on the speed of DSL), this method does nothing, only one is constantly up to date what's going on.

And then you have an image with a Debian base install of about 180MB in the Barry Allen device, which will normally be selected when booting with the boot manager! Also installed are telnet, ftp and ssh in the Debian and with a user "debian" created for you, because Debian is already secure in the default installation and one can login over the network as root.

## ATTENTION:

The root and the default standard debain users have no password

**So after you have your Debian with Barry Allen, the unpacked image and once you have logged into the Enigma image, chroot into the image from there set passwords!!!!**

**ba.sh** Has been extended, so (almost) everything will be mounted as if Debian booted, although enigma2 still running - so you can also start things from the Debian distribution in addition to Enigma2 if you want:

```
cd /media [ENTER]
ba.sh chroot imagenamendesdebinaimages [ENTER]
```

One is then the root user in Debian and can:

```
passwd [ENTER]
2 x a Password for root user can be entered
```

```
passwd debian [ENTER]
2 x enter a password for Debian users
with exit to get back out of the chroot environment.
```

## EG:

```
cd /media [ENTER]
ba.sh chroot debian [ENTER]
passwd [ENTER]
myrootpassword [ENTER]
myrootpassword [ENTER]
passwd debian [ENTER]
mydebianpassword [ENTER]
mydebianpassword [ENTER]
```

You can now select to boot from the Debian image as usual in the plugin or in the boot manager. Of course, coming from the Debian booting a corresponding boot logo, but because so (yet?) No graphical interface in your minimal Debian installation is available; to get there then only with telnet, ssh and ftp to the box - there is no output on the TV itself apart from the boot logo (yet).

And as I said through the security setting one must first login as debian, so after you have entered into the Telnet IP address you are:

```
debian [ENTER] or just the name of whom you have given the image
```

Password:

```
Mydebianpassword [ENTER] or the password assigned by you
```

to enter commands as admin

```
su - [ENTER]
```

password root:

```
myrootpassword [ENTER] or the password assigned by you
```

## Part 9 – Things to know - news



If you have problems with format conversion, audio or video, please update the flash image and / or its driver!!

If you want to install an updated version of Barry Allen, you must ensure that BA checks whether the secondstage Loader of the flash image fits the image on BA. Or simply put:

old Image - old Barry Allen Version.  
new Image - new Barry Allen Version.

As of version 4.8.x is the "bapostinst" again as default "disabled". In previous versions, after you extract images from the same run a file/shell script "bapostinst". This will copy the flash image and all the essential settings (if available) with bouquets into the new image. This saves you the hassle of setting up a New Image.

On what medium is Barry Allen being installed? It's simple: on the one which you offer Barry Allen. I mean, if Barry Allen is on a CF card, it is installed on that. Barry Allen finds no CF card, but a USB stick, install it and when Barry Allen Barry Allen or a CF card, still finds a USB flash drive, it installs itself as a last option on the hard disk.

The installation kit of Barry Allen first looks for a CF card, next to a USB stick and finally to a hard drive. Although if you use a CF card, but still want to install Barry Allen on USB stick, you'll need during the installation of Barry Allen to temporarily remove the CF card. (Remember: **Never** remove the CF card whilst the box is switched on - CF cards are treated as hard drives)

If you want to test Barry Allen, and don't have a CF card or a USB stick should bear in mind that Barry Allen would then be installed so that the images are on the hard disk and that the hard drive would run constantly. With prices of less than 10 Euro for CF cards or USB sticks, the hard drive is no real alternative.

If you have problems with installing using the blue panel, try again but this time via Telnet (Part 3): telnet always reports back, if it worked and if not, where it got stuck. With this error message, ask the board and the help will come.

## Part A – some hints – after many painful years:

Always respect the spaces (eg between cd and /) in the [Telnet](#) commands. In their absence, Barry Allen is installed into the [Flash memory](#) and will abort naturally, if there is not enough room. Is there a solution? No, except NEW-FLASHING. Therefore, pay attention to the spaces!

A CF card or USB flash drive when you install Barry Allen must be empty. The media may well have a [FAT32](#) partition. Once Barry Allen is installed, you can change the media prior to booting and then delete the media using Barry Allen.

And of course even an attached hard drive must be initialised (formatted). And even without storage media (CF card, USB stick or HDD) it works well, of course.

And while there are no recommendations for CF cards; USB sticks can sometimes be problematic with the Dreambox and may need a hub to operate them.

Note - Filenames in MB\_images should NOT contain the characters () {} [ ], nor should they exceed 20 characters (preferably)

-----

[back to introduction...](#)

## Part B - FAQ:

(Here are some frequently asked questions)

### 1. Can Barry Allen be easily updated?

Yes! Simply install the BA [ipkg](#), while observing that you have booted from Flash. Images will remain existing  
**Note:** if you're on the Barry Allen media in /media/ba deletes the ba.sh, but the media is refurbished (formatted)

### 2. How do I get when an image already installed Barry Allen in Flash?

No, you can now when flashing with the WebIF the media can be asleep. Taking it out does not harm. And instead of a new "ipkg install" use theBA Kit, simply run the script, eg, if BA is installed on a CF card:

**cd /media/cf** (In GP-images use the UDEV mounts cd /media/hdc1 e.g. /media/sda1 would be the USB stick)

**ba.sh patch**

**ba.sh info**

**ONLY** if you want to remove the plugin with "ipkg remove", it is dangerous for the images. The CF card is erased then cleaned, which is also the meaning of a Remove

[back to introduction...](#)

### 3. Is it possible to Multiboot and use Barry Allen?

Yes, but obviously not at the same CF card/USB stick/hard disk. Barry Allen is very different than Multiboot and uses a much simpler partition layout on the device. So if you have another CF card to use. Then you can - depending on whether the CF card with Multiboot and Barry Allen in the affected Dreambox - alternately use both.

### 4. Can I use my multi-boot media for Barry Allen again?

Yes, but these must first be disabled with multiboot, or formatted on a PC. Then with the empty CF card, boot and simply install Barry Allen again. Barry Allen then sets this card for its images.

### 5. Can I use my multi-boot images in Barry Allen also?

Yes, but they must be exported in Multiboot to copy N /MB\_Images and then Barry Allen will be imported. (copy X uses tar.bz2, copy N are from nfi) caution that this is not too old!

### 6. Are the /MB\_Images Multiboot and Barry Allen the same?

Yes, if they are placed on the same device

### 7. How many images can fit on a CF card or USB stick?

All the images in Barry Allen share the same file system, they tend to be somewhat larger than the multi-boot. But each image you should still expect 60-70MB, it makes sense to use as much as you can.

### 8. Will a CF card or USB flash drive be formatted when you install Barry Allen?

Yes. For safety, formatted, unless Barry Allen (with images) is already on it. Then, just updated. Barry Allen checks for the presence of ba.sh

### 9. Do I always boot from flash memory when I try to install new images?

In principle you can do almost anything with Barry Allen (extract info boot selection). Only in the Tools, there are things like autofs, go into the flash (but then it tells you to) And of course things work, how to delete the booted image or extract override (hopefully) not.

### 10. Must the image be created in flash memory completely (bouquets, Skins, EMU, etc.)?

No, not right and that is intentional. The flash image is booted by Barry Allen only using the [Kernel](#) because, the Flash image is not even configured (except network), so only the kernel is used

### 11. I want to do a file check and get an error message (unmount)?

This can happen if you put a [Swap](#) file on the media, or where you bring up Telnet.

### 12. What happens if I forget a PIN?

If you've assigned a PIN, you will be in the image selection at boot time only if you enter this PIN. Otherwise you're limited without a PIN to boot from flash. And then without a PIN the wizards menus like "boot, copy, rename" are not available regarding the images on CF card, and also you can really only make "info" and "flash" in the boot menu.

So do not forget PIN; but if you have forgotten it, telnet in  
rm media / ba / .balocked  
you can make and delete the PIN file (or look with cat/media/ba/.balocked. The PIN is there in plain text - so beware the children do not read this notice :-)

### 13 What's all about this "hidden" feature?

If you go to /media/ba a shell script "bapostinst" is created, chmod 755 /media/ba/bapostinst makes it executable, then after this, each copy with the path to the new Image (/media/ba/ba/<newimagename>) is called with the first and only argument. And in this shell script you can copy additional files to the image, link, etc. Only you have to write a script yourself and you get pretty BA addons :-)

### 14 Can you run Barry Allen on a USB flash drive and USB hdd simultaneously?

If the USB stick is plugged in alone, it is always /dev/scsi/host0 - no matter where it is. But if it is mis-diagnosed and is put wrong and you stick to an additional USB hard disk, then this is detected first, and then the wrong media is at dev/scsi/host0 - BA of course no longer works, because where it looked, no BA is installed.

So reposition the stick to see if BA recognises the change if not, possibly edit /dev/scsi/host0. Install BA anew then see if BA works then, if a USB HDD has been added.

### 15 What does this mean „USB stick available but not mountable after formating, sorry?

Stating that the stick was not formatted properly, because no part1 could be created. On the 7000 you have probably a stick with a disc, rather than formatted with part1, so BA went there. But that is just what Barry Allen (intentionally) did. Format the drive again with the HP Freeware Tool for USB boot stick and then see.

### 16 Could you make a target selection when installing?

It is Barry Allen actually patronising, but it implements a foolproof method of installation. The hard drive is only used as a last resort. You want to change the installation - not really. The implementation then becomes two-stage and on reboot loses the location of the installation. Also it avoids user error .. where is my installation??

Feel free to read the old Multiboot thread, how much trouble it was at the time - if you want to have again :-) I can not help it, that the USB support under enigma2 is so shaky and the people do not specify conditions. If I could only make the checks more stringent, but then people say again afterwards, BA does not work ....

A good example is the story with a disc instead of the USB mount as part1. This is totally unnecessary if the stick was previously formatted properly. And if it is not accepted yet, you should better not use it and not call for it, because in the Flashwizzard 'super' works like that. Instead, people seek out others that sometimes use the old threads, they then become lazy: "once again had the stick for Flashwizzard format on the PC, because it has" suddenly "stopped working", etc.

### 17 Move Barry Allen from one device to another?

Suppose we have installed Barry Allen on USB stick, unpacked and multiple images fully installed. Now we would like to move with the whole Barry Allen onto a CF card. Log in using Telnet, and enter the following commands:

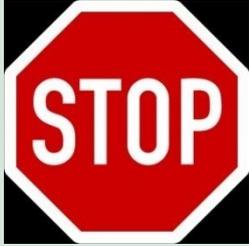
```
ba.sh backup_hdd
```

This is the complete /media/ba/ba directory on the hard disk along with all images. then turn Off the box, remove the USB stick and plug the CF card. Box boot and install Barry Allen. Then again access via telnet to the box and

```
ba.sh restore_hdd
```

enter Thus, all backed up images are then written back. Ready ☺

## Part E - The main Telnet commands



Note:  
Correct spelling .. including the blanks!

cd /media/ba

[ENTER]

---

ba.sh extract nameofimagewithoutnfi (nameinbootmenu) - install image to boot, if there is no name in the boot menu, the image name is used

---

ba.sh boot nameinbootmenu

- Selection of an image to boot,  
Note upper/lower case (because Flash is the name if you want to boot from)

ba.sh info

- indicates what has been booted, info about the installed image.

cat /tmp/.baimages

- Image name of the booted image  
There is no such file to boot from flash

ba.sh list

- lists the Images in /MB\_Images

---

ba.sh delete nameofimage

- deletes an installed image

---

ba.sh disablebootmanager

- disables Bootmanager

ba.sh enablebootmanager

- enables Bootmanager

---

ba.sh backup nameinbootmenu (nameofimagewithoutnfi) - creates a backup nfi, if no name is given the bootmenu name is used

ba.sh backup booted mybackupname

- as before, but the booted image is booted

---

ba.sh bootlogo barryallen\_dark

- dark Bootlogo

ba.sh bootlogo barryallen\_standard

- Standard Bootlogo

---

grep ")" ba.sh

- shows all available options from ba.sh

---

Note: The **bainit** commands only make sense if you are booted from Flash, because otherwise the device is usually cast as a boot device..

bainit 91		- Filesystemcheck - CFcard
bainit 92	(not available on a DM600)	- Filesystemcheck - USB stick
bainit 93		- Filesystemcheck - Harddisk
bainit 81	<b>(!!Attention!!)</b>	- <b>erase CF-Card</b>
bainit 82	<b>(!!Attention!!)</b>	- <b>erase USB-Card</b>

---

init 4		- stop enigma
init 3		- start enigma2
init 2		- start enigma1
ps		list running processes

---

ba.sh list		- list tar.bz2 kits and nfi images images on /MB_Images
ba.sh list tar.bz2		- list kits at /tmp and /MB_Images
ba.sh list tar.gz		- list kits at /tmp and /MB_Images
ba.sh list rar		- list kits at /tmp and /MB_Images

---

ba.sh install ipk kitnamewithoutfileextesnions		- install ipkg kit
ba.sh install tar.bz2 kitnamewithoutfileextension		- install tar.bz2 kit
ba.sh install tar.gz kitnamewithoutfileextension		- install tar.gz kit
ba.sh install rar kitnamewithoutfileextension		- install rar kit

---

ba.sh free		- shows memory useage
ba.sh swapon /media/cf 32000		- installs on /media/cf 32MB size Swapfile. /media/ba and 64MB is Default is only included if swapon
ba.sh swapoff		- disables swapfile
ba.sh link /media/cf		- moves /MB_Images Link to /media/cf/MB_Images

---

## Part D -Troubleshooting

1. I have Barry Allen on a 2GB USB-Stick in a DM8000.

Gemini 4.7 in Flash memory, which is going well;

As No. 1, Gemini 4.6, which is also good.

As N°2 OoZooN Image 11.12.2011. - It is impossible to bring that image up and running

*There are two typical problems with Barry Allen, when an image will not boot:*

*To old image in the flash (because secondstage loader, kernel and drivers like squashfs - OE 1.6)*

-> **Solution:** Flash newer image!

- *File system of the CF\_card is corrupt*

-> **Solution:** boot from Flash - Filesystemcheck the CF card with the Barry Allen Tools!

2. Can I use an image on the USB stick, CF card and delete "by hand"? (I have an image that is on the menu (Wizard for installed Images) can not be deleted.)

- *Boot once more from flash, and do a file system check before removing the image*

- *And yes, you can also manually delete using telnet: (but the plugin does not do anything else)*

- **[rm -r /media/ba/ba/<name-of-image]**

- *PS: And a swap file should be there regardless. That bothers you only for file system check, because then you can not unmount the CF card.*

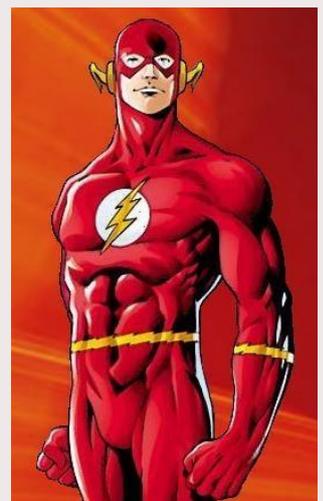
2. have OoZooN image in flash and want to install Gemini on a USB stick. Barry Allen is installed, but after a restart no longer appear under Plugins. (?)

*It may be that the USB stick only works with a USB hub, etc. Each USB flash drive is there one new chance for trouble. Check if the LED blinks the USB stick after selecting boot!*

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And finally a thank you to gutemine for the good plugin Barry Allen and that he has asked me to write this guide. And of course ... gutemine this guide has to correct.

For suggestions, improvements and bug fixes I'm always open



BARRY ALLEN  
the second FLASH

Have fun with

**romeo-golf**

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