

DBOX2

FOR DUMMIES

Companion Web site
has links to free
resources

**A Reference
for the
Rest of Us!**

FREE eTips at Modshack



A Modshack Publication

This Guide has been written to help you understand the technicalities of the Dbox2 system. It has been written for educational purposes only. Modshack and I do **NOT** encourage or condone the illegal viewing of cable TV.

This guide is provided FREE OF CHARGE and no charge should ever be made to read or download it.

I would advise you to read **ALL** the guide, just not the bits you feel you are unsure about.

HARDWARE:

Dbox, Dbox2, Dreambox, what's the difference??

-The dbox (also called dbox1) is an older version of the current dbox2, it is not as advanced as the dbox2 and requires a specific firmware to be installed (DVB2000), this software is not in open source, and thus cannot be easily changed/amended. It has a SCSI interface at the back, NO LCD in the front of the box. Loads of work is needed to play with these dbox1. These are the old generation, best avoided.

-The Dbox2 is an evolution model of the above receiver; it has a LCD in the front, a serial and Network ports at the back and runs Linux. Many Linux Images and Tools are available for this box.

Both Dbox1 & Dbox2 were initially used by Premiere (Pay-TV in Germany), and Dbox were handed over for free (or small rental fee) for Cable TV or Sat TV subscribers a bit like Sky Receivers or NTL Pace receivers are handed over in the UK.

Out of the box, the Dbox2 runs the Beta Nova Software that can only decrypt Betacrypt encrypted channels (Premiere channels in Germany) provided the correct official card is present in the card reader. The goal is to replace this software by Linux so 'much more can be done'.

-The Dreambox, is made by Dreambox Multimedia, and is the newer model of the three (but this is NOT a dbox, this is a commercial version that is sold for a profit, nothing to do with Premiere), it can accommodate a Hard Drive for recording, USB connector, LCD Screen, Compact Flash memory reader, and it's more expensive. (But runs similar OS as the dbox2 and loads of things explained here are valid for Dreambox too).

Different Models:

Dbox2 are available from 3 Manufacturers: Nokia, Philips and Sagem
 Nokia is the most commonly found and thought to be the most stable one (and the better at pulling signals from SAT and Cable feeds)
 Philips Dbox2 are the rarest.
 All 3 have the exact same functionalities, and images will work on all three.

Dbox2 exists with Cable Tuner or SAT Tuner, depending on what you want to use them for.

SAT Dbox2:



- 1x 230 V Input (European Plug)
- 1x Stereo RCA (Cinch) Output
- 2x SCART (1x TV, 1x VCR)
- 1x VCR Transmitter (via optional Infrared Contact between the Dbox2 and your VCR)
- 1x Digital Optical Audio
- 1x RS 232 Serial Connector
- 1x RJ11 phone connector
- 1x Ethernet (RJ45 - 10MBit/Halb-Duplex)
- 1x LNB (400 mA) input (digital)
- 1x Analog Receiver Output

Cable Dbox2:



- 1x 230 V Input (European Plug)
- 1x Stereo RCA (Cinch) Output
- 2x SCART (1x TV, 1x VCR)
- 1x VCR Transmitter (via optional Infrared Contact between the Dbox2 and your VCR)
- 1x Digital Optical Audio
- 1x RS 232 Serial Connector
- 1x RJ11 phone connector
- 1x Ethernet (RJ45 - 10MBit/Halb-Duplex)
- 1x Coaxial Feed Input
- 1x TV Coaxial Output (RF)

Finding Out which Dbox you have:

Check the front cover, is there a LCD?

If not -> you have a Dbox1, this document is not for you

You have a LCD in Front? Is it this one ?



it says Dream Multimedia on the top left corner ?-> If so then you have a Dreambox, this document is not for you

If one the 3 below you have a Dbox2 -> that's good



Philips Dbox2



Sagem Dbox2



Nokia Dbox2

The picture below is the picture of a Nokia Dbox2; notice that it just says Dbox (and not Dbox2) this is normal !!



Cable or SAT?

As I said earlier on, the Dbox2 is available with SAT Tuner or Cable Tuner; you need to get the one that fit best your needs, if you bought one and don't know which one it is this will tell you.

Check the back, where the aerial connector is



This is a cable version



This is a SAT Version

Note: in order to connect the Cable model onto a UK cable feed, you will need a F to Coax adapter (£1.29 at Maplins code QP42V or £2.50 for double pack at B&Q).

Opening the Dbox2:

Unplug the Dbox from the mains

Using a flat screwdriver, unscrew the 3 screws as pointed out by the red arrow, also remove the 4 screws on the side. Remove Casing.



Different Tuners – This will tell you which tuner is installed in your Dbox2



Cable Tuner



SAT Tuner

INTEL, AMD, How Many??

The Dbox2 comes in two different memory configurations:

- 1xIntel Chip or 1x AMD Chip
- 2xIntel Chips or 2x AMD Chips

In order to find out which config you have, you need to open the Dbox2 and check the motherboard. (Check previous section on how to open the dbox2).



Nokia with 2 INTEL chips



Nokia with 2 AMD Chips



Sagem with 2 INTEL chips

Note: Intel and AMD are not important; they are both referred to as Intel and written as **I**

This is how Dbox2 and Images are commonly referred to as:

Nokia, Sat, 2xI (this could be with two Intel or two AMD chips)
Sagem, Kabel, 1xI (this could be with one Intel or two AMD chip)

And so on.....

Debug Mode?

As I said earlier, we need to replace the original Betanova software by Linux, that way the Dbox2 will be allowed to run 'unsigned' software (ie: check the Graphical User Interfaces later on). In order to do this, we need to put the Dbox2 in Debug Mode. This only needs to be done ONCE.

First let's check if your box is not already in Debug Mode.

For this we need to apply power and to turn the dbox2 ON. (Also connect the SCART cable, no need for the feed yet).



If you can see a picture similar to that one the TV then you still have the original software -> it's very unlikely that your Dbox2 is in Debug Mode.

If you can see the following LCD logos then you are already in Debug Mode.





The BEST website about how to put your Dbox2 into Debug Mode is
<http://www.dietmar-h.net/>

Go there and put your Dbox2 in Debug Mode, there is 3 different ways of doing that:

- Short Circuit method
- broken BR
- new MHC method

For the tutorial on putting your Dbox2 into Debug Mode, you will need to find out which BMON version you have, switch the box on while holding the UP button. A number will come up similar to

01DD10081 161608

Explanation:

01 : mID (here Nokia)

Dd : feID (front-end)

10 : Bmon version (here v1.0; if 12 then you have v1.2)

081 : FPrev. Software revision of the front processor (with Bmon 1,0 as SWRev designates)

16 : Internal RAM (here 16MB)

16 : External RAM (here 16MB)

08 : Flash Memory (here 8MB)

The rest of this document assumes your Dbox2 is in DEBUG MODE

Finding Out which Decoder Chip you have: (if you ever wanted to know)

At boot up check the LCD Chipset Info



ENX-Decoder-Chip (usually Philips und Sagem)



GTX-Decoder-Chip (usually Nokia)

Finding Out how much Memory you have

Check the Bottom right of the LCD screenshot above, it says 32/00/08 in this particular one; this is the memory specification of your Dbox2.

The first number is the Internal RAM (in Mb)

The second number is the External RAM (in Mb)

The third number is the Flash Memory Size (in Mb) –This is the one that determines images size of 8Mb

The following 3 specs are usually seen:

- **16/00/08** (old Nokia Dbox2)
- **16/16/08** (old Nokia Dbox2)
- **32/00/08** (Sagem, Philips and New Nokia Dbox2)

GETTING STARTED

Remove the lid from the box; identify your Intel set-up,
 (This is what I did with mine, a Nokia 2xI virgin box)
 Connect the shorting wire to pin 12, & get the box into reset mode.

1. Wait until reset disappears, as soon as the first block appears short it. (Don't let go yet!)
2. It will then freeze on 3 blocks.
3. Now press the up button on the front and at the same time remove the short.
4. The numbers will appear now on the LCD, as soon as they do let go of the button and apply the short again.
5. You will now see 5 blocks appear through the number, i.e. **01■■■■■81**
6. That's it, your now ready to type in the commands in boot-manager to debug it.
7. Go-to page 5.

Equipment needed.

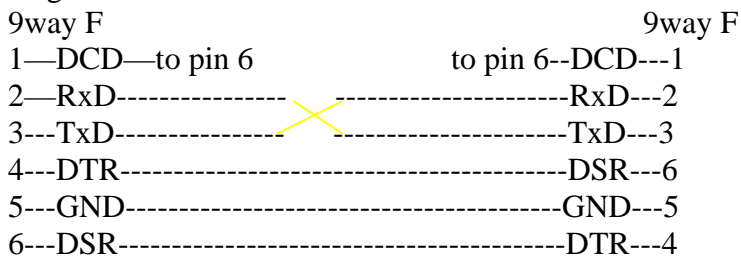
A pc with a network card or a laptop with a network card, you can use XP or Win 98se.

(I used a spare Toshiba p166 laptop running Win98se with a 3com 10base-t pcmcia card.)

A cat5 CROSS OVER network cable for connecting between the dbx and the pc.

A normal cat5 straight network cable if you already have a LAN (i.e. router or hub.)

A NULL MODEM cable for connecting between the dbx & the pc. (3-wire null modem cable will do. 2rx to 3tx, 3tx to 2rx & 5gnd to 5gnd.) If you need to make one you will need two 9 way female connectors, length of cable follow the diagram.



Set your network card to 10 / half duplex (this is the recommended setting & the one I used, but some people have reported that you can use 10 Full duplex or even auto, the choice is yours.)

Set your windows COM port to: Bits per second = 57600

Data bits	= 8
Parity	= none
Stop bits	= 1
Flow control	= none

You will also need some software:

An ftp package, the recommended one is Flashfxp (the one I used) but I am told that ALL ftp software will work. Available on the net.)

Dboxmanager software. Available from the dbox section on Modshack, or available from the net. (Do not use long file names when installing this programme or it wont work)

A file called minflash.zip or .rar, this file is very hard to find, if you have trouble finding it please ask on the Modshack forum.

A file called ppcboot (this file has no extension)

Software for the Dbox.

Profile (no extension)

English.locale (no extension)

autoroll.key (for your provider)

bouquets.xml

cables.xml

services.xml

Folder called clock (this contains the font files required)

A Dbox image for your box. (I used Zgore17072004)

If using Win XP you will need a file called xp.reg. Win XP uses media sensing & will report cable not connected when rebooting your box, this will affect the dbox software, if in any doubt run xp.reg & you should not have any problem. (This applies to NT4, Win2000, and Win XP Home & Win2003.)

If you have more than one network card in your pc, then you will need to disable all but the one you intend using with the dbox, this includes any DVB-C cards you may have. (You don't have to disable all other cards, you could just select the correct one in Dboxmanager, but it is best too, as will eliminate any conflicts.)
Test to see if you can ping other devices on your network (from your pc)?

Setting up your network.

The network card you intend to use, you will need to give it a static IP, I used an IP of 192.168.0.6 (you don't have to use this, but it worked for me.)

Install the Dbox2 Boot-Manager software. (This is German software!)

Unzip or Unrar the file minflash to your root directory C:\

Place the file ppcboot in the root directory C:\

Connect the Null Modem cable to your pc & the other end into the Dbox.

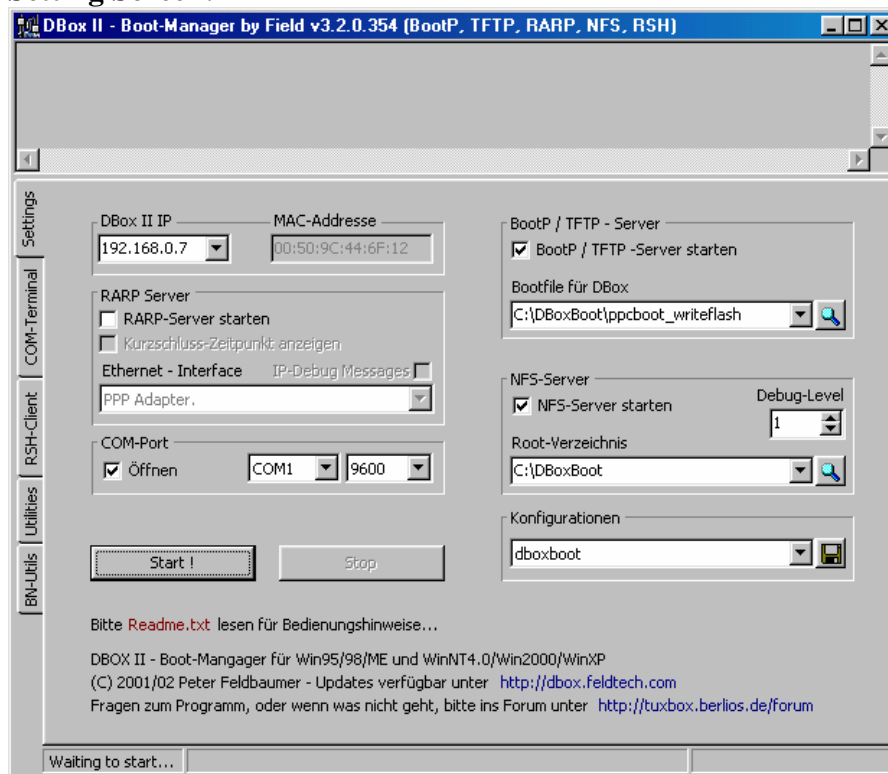
If the IP of the dbox is not known (i.e. The dbox is in debug mode but still has original betanova software installed) any IP can be entered in Dbox2 Boot Manager in the Dbox2 IP field, ARP will be used to get the MAC address of the Dbox2

Connect one end of your crossover network cable into your pc's network card & the other end into the Dbox.

Dbox 2 Boot-Manager.

Assuming that you have already installed the software, start it & on start up you should see a settings screen:

Setting Screen:



Dbox 2 IP: Use a different IP than that you set your pc card to i.e. 192.168.0.7

Bootfile für Dbox:

Providing you placed the file in the root directory C:\ it should read C:\ppcboot, you can use the magnifying glass icon in order to find it. Or just type it in.

Root-Verzeichnis:

If you placed ppcboot in the root c:\ then it should read C:\

Ethernet-interface:

Providing you only have one network card or you have disabled all but one, this should show your card, if yours is not the one shown in the box, then use the drop down arrow & check it is displayed as an option, then select it.

BootP / TFTP-Server Starten:

Should be ticked.

RARP-Server starten:

Should be ticked.

NFS-server:

Should be ticked.

COM-port:

Should be ticked & you should select the port you are using, also the speed should be 9600 baud.

Konfigurationen:

Leave empty.

Once all the above are correct, make sure your box is switched off press the Start! button, the screen should automatically jump to the COM-Terminal window on the boot-manager. If you get an error while starting, please recheck you have applied the XP.reg file for WinXp, or check the settings are correct.

If you are in the COM-Terminal window, switch on the dbox, you should get some data on the screen, but you need to look at the LCD screen on the box, the screen should look like it is about to load & you should be getting about 4-5 filled square boxes along the bottom of the LCD, after this you should get "Reset..." "Reset" continuously forever, if this does not happen power off & then on, sometimes it may take several attempts before it goes into reset.

If you are now in COM-Terminal window, I then did the following:

In the COMM-Terminal window type:

icache [Enter].

Answer should be: icache is on

Type:

chorus 800000 [Enter].

You should see lots of stuff..

Type:

cp 10000000 01000000 1000 [ENTER]

Type:

Nm 01000944 [ENTER]

The address to 0 set:

When you see this:

01000944: ffffffff?

Type:

00000000 [ENTER]

To leave Editing mode, when you see:

01000944: 00000000?

Press:

[ESC] [ENTER]

To turn off the Protection of the Flash Sectors:

prot off 1:0 [ENTER]

Changed RAM into the first sector copy:
cp 01000000 10000000 1000 [ENTER]

Now you can reset the box by typing
go 10000100 [Enter] .

After the RESET the box should present you with the debug screen on the LCD.



If you get this far then you can stop the boot-manager, because we need to set it up for flashing the new software.

There are other ways of doing this, but this was the only way that worked for me. If you switch off the box & plug in a scart lead to your TV, (there is no RF output on the Dbox, so you must use a scart lead)

When you turn the dbox on, you have some German on the TV? Mine said something "welcomen".

Others like this:



You may get displayed on the LCD after a short time...

Das Betriebssystem
Konnte Nicht Korrekt
geladen werden.

Mit "ok" Aktualisieren

Sie jetzt das Betriebssystem.

This means: The operating system could not be loaded correct. With "ok" Update the operating system now.

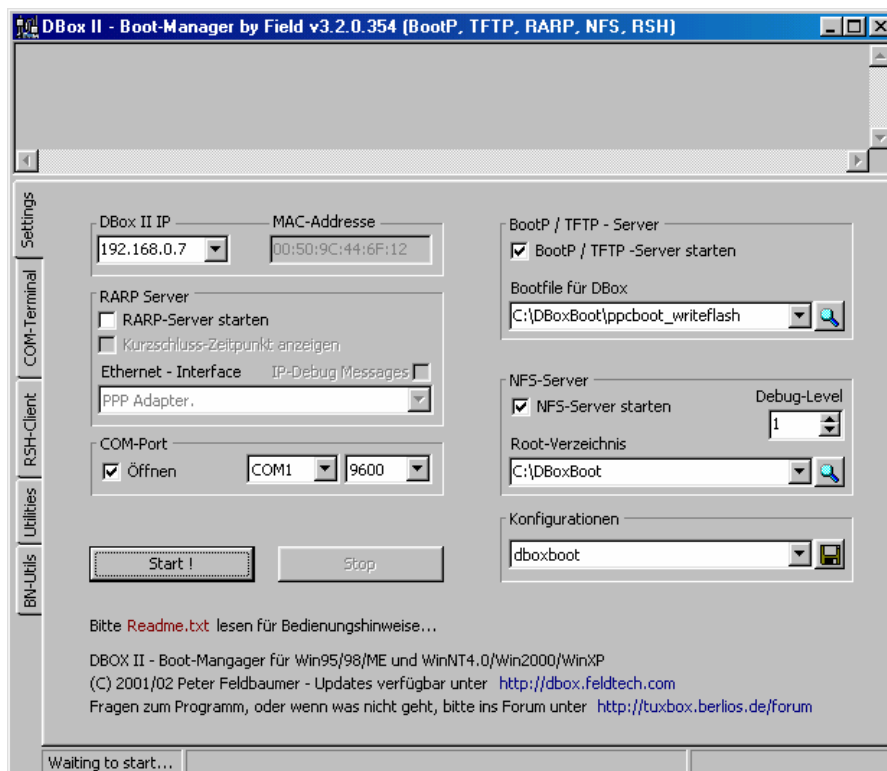
Start dbox manager?

Select correct COM port, also 9600

Do not tick RARP or BootP or NFS

Leave Konfiguration empty

And make sure that the correct NIC is showing in Ethernet Interface (if you have more than one NIC in your laptop) it should be greyed out.



Untick BootP / TFTP-Server Starten.

Use the magnifying glass icon to find the file ppcboot_writeflash.

Untick NFS-Server starten.

In Root-Verzeichnis.

Find the root of where ppcboot_writeflash is.

Konfigurationen:

Leave empty.

Select Utilities.

Image flashen

Select the image you intend to use. i.e. I used Zgore17072004, inside this is an 8meg file called *.img (check to make sure the size is 8meg) I also had to put this file in the root C:\ or I got an error, also if you take too long over this then you may get an error as well, just re-boot the box.

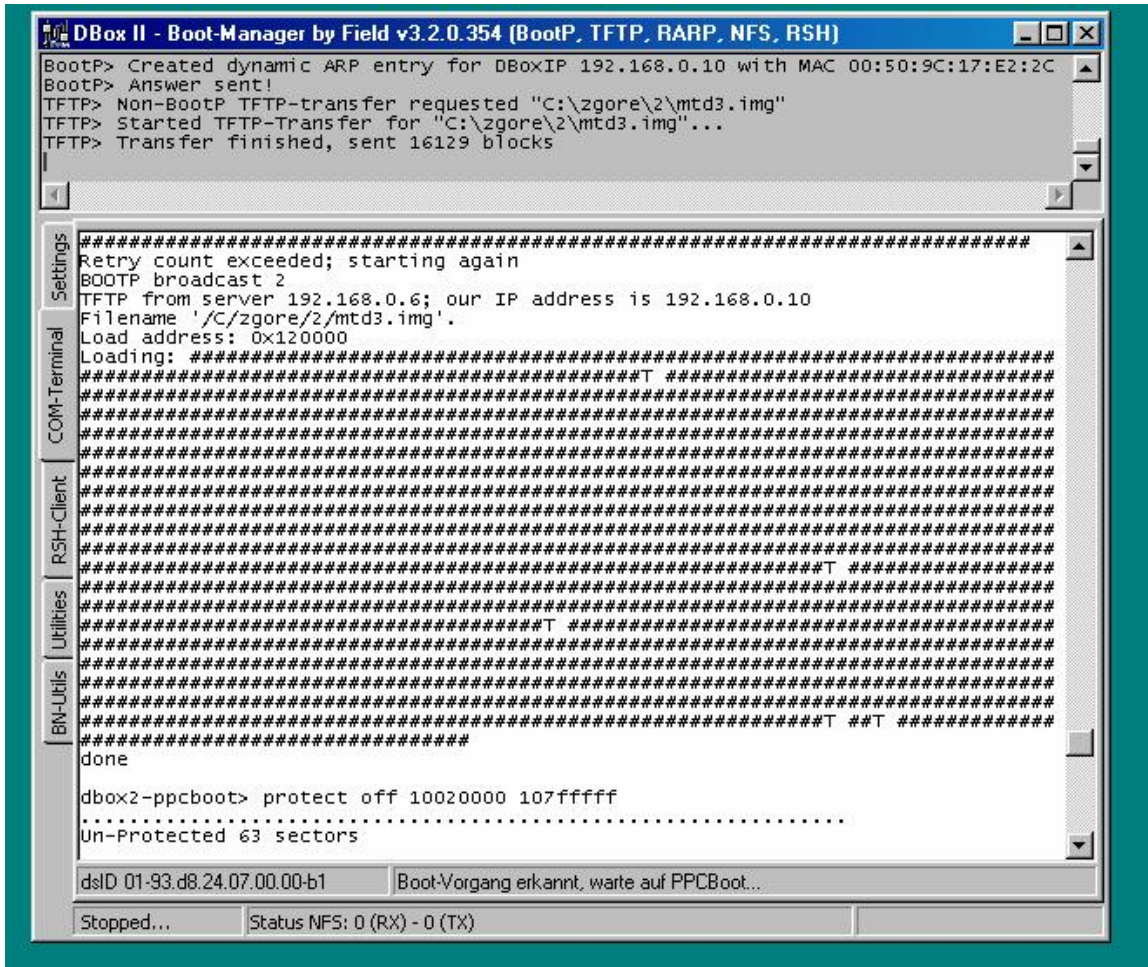
There is an excellent explanation of what the differences are at :

<https://modshack.co.uk/showpost.php?p=373224&postcount=13>

Once you have the ok box, click ok and power the dbox off then back on.

Watch the COM terminal output once it has finished outputting loads on the screen

You should get to something like this:



If you get lots of T's, then the flash may fail, providing you only get a few it should be ok, but really you shouldn't get any timeouts.

The display should say like: erase flash from 0x10020000 to 0x10etc, then says erased 63 sectors...copy to flash

You may then get something like in German...flashen abgeschlossen
Dbox manager...

Press ok, turn dbox off and back on watch the LCD and TV, the dbox-manager should go back to setting's menu.

If using the same image I did, on the LCD it should say neutrino right across it. This should be there all during the flash.

Neutrino on the LCD means the box has successfully flashed (some part at least)
Then on the TV it should say dbox 2 boot manager is working your flash
At this point reboot the dbox (disconnect serial lead first) the crossover cable can be left.

Connect the cable feed.

On re-boot you should see bmon screen on the (LCD)

If at this point nothing more happens then there could be 3 reasons:

- 1) Try disconnecting the serial and networking cable and rebooting to see if it fixes

it.

2) Your flash is still protected (i.e. during the debug method, you disabled/enabled write protect, did you remove it after?)

3) The most likely one:

You are flashing your 1xI box with a 2xI image or vice versa.

The LCD should come up with dbox II Neutrino& then get a channel, i.e. I got tele5.

Ok that's great, your box is now flashed with the neutrino GUI edited by zg0re. The things to do now (not in any order really other than changing the language really):

In this image there is no english.locale, so everything is in German until you ftp the file into the box.

1) Now we need to change / check the network settings on the box.

2) Press dbox on the remote.

3) Select Netzwerk.

From top to bottom the options are:

1.back.

2. Set-up network on start-up.

3. Test network.

4. Show current settings.

5. And set-up network

Below this you should have the current i.p. mask, gateway and dns servers.

If you plug the network cable, can you ping it from your laptop / pc?

You should be able to (hopefully).

If not you have to change the i.p. And mask of the dbox to match your subnet. i.e. 192.168.0.* subnet 255.255.255.*

Select 'set-up network now'.

What about standard gateway & nameserver?

Gateway and Nameserver -> put the same settings as the one entered on your PC
Not really important, but usefully if you have adsl or cable router at home, then you will be to access Internet from your dbox.

No = aus dhcp, only needed when you have a static i.p. address.

Now you have to apply these settings.

beim starten network setzen??

this should be set to ein (that means basically auto start network on boot up)

go to the top, select Back (or whatever it is in German)

then the top = einstellungen jetzt speichern command is the equivalent of Save Settings.

You should briefly see an info screen but maybe too quick to read, that's good network settings now saved.

Now do you flashftp on your pc? or another ftp client?

The next part assumes Flashfxp.

Start up ftp.

On start-up press F4.

New site.

Site name = dbox

i.p. add = the i.p. you entered in the dbox just 5 mins ago

username= root

password=dbox or dbox2

Leave port = 21

In Options

Click twice on Cache Directories, the box must change from greyed to ticked to empty; you want it to be empty not greyed not ticked.

Tick show hidden files

Click Apply then Connect, you should get a directory listing.

If you get a connection timed out message check the network settings are correct on the dbox go back in the network settings on the dbox.

Dbox on remote control

Einstellung

Netzwerk.

If you have a home LAN or a hub or a router with free ports, you can plug both the pc and the dbox into the same LAN using normal network cable (i.e. not X over) check if the ping working?

It is also worth giving ftp another go too as ping does not always work

If ftp times out too, reboot the dbox again (you can press all button at the front all at once soft reset.)

On reset you should get nice logo on TV now dbox-2!!

You can change that also there is a tutorial about it, pretty easy.

You should get the folder listing on the right.

This bit is important as you are now in the box, always make sure you are in the root of the flash / by default you only go in \var.

Now go to the root by double click on Parent Directory

Once you are in /

Ok now there are a few steps to carry on, I will list them then explain them

1) Upload english.locale from your pc to the correct place on the dbox, then change language to English -> will make it easier to do the rest.

2) Upload the profile file to set correct time zone.

3) Upload clock fonts in English (that's because it's using German fonts by default not very good for day names like Monday).

4) Get a services.xml for your area and upload it to dbox or

5) Create a cables.xml for your area & upload it & scan for channels

6) Upload the proper keys onto dbox

7) Enjoy channels in sofa with cold beer.

So do you have the file english.local? I said you would need it!

If you haven't got the files, then they are available on Modshack.

So you have both the english.local and the LCD clock fonts?

You extract clock.zip into a folder on your pc also rename english.locale.doc into english.locale (no extension)

Go back in flashfxp

Reconnect by pressing F4, so on one side you have your local pc, the other side the dbx, on the local pc side, go to the location where english.locale is, on the dbx side go to /share/tuxbox/neutrino/locale/ then transfer the english.locale onto the dbx. Flashfxp is the best ftp proggy, that's why people are using it, but ANY ftp client would work it would actually work with the free ftp client under your command prompt!

Ok now you have the english.locale file in the box if you press dbx on remote, einstellung, sprache, change German to English, should be able to change it now, you don't have to remove the German, just leave it there.

Then go back once and SAVE settings

What about permissions? Do you have to change read write etc??

No.

But the box is still saying only deutsch? What if I reboot? We will reboot later.

Now we will transfer the LCD font.

Upload the extracted fonts into /share/tuxbox/lcdd/clock

When asked to overwrite says Yes to ALL.

Reboot dbx now.

Then when rebooted change language to English then save.

Now we do the profile for the GMT time zone.

Ok make sure the file has NO extension and download this so you are left with a file called profile just remove the .rar or .zip & upload this file into /etc/ overwrite existing file once you have profile in /etc/ you should do a backup of your work so far.

Using remote press dbx, services, software update, expert functions, then select READ WHOLE PARTITION when finished press ok

Then with flashfxp, go into \tmp there is a 8mb file there called flashimage.img transfer it to your pc and rename it to something like backup131004.img and keep it safe, that will save you redoing what we did in the last 2 hours or so if you ever crash your box, just use bootmanager with this image and your dbx will revert back to the current state.

So now big question do you have a services.xml for your area?

If you don't, you will need to find one on the forum or request one, lets assume you have a services.xml.

Upload that services.xml file into /var/tuxbox/config/zapit/ overwrite if needed.

Assuming you have a bouquet, services & cable.xml.

DO NOT edit this file in any way!!

If you do in make sure you use Text Pad ONLY

NOT Notepad or any other editor.

Do you have the keys file?

Do you put bouquet, services & cable in same dir?

bouquets definitely goes in the same folder, cable doesn't matter really, it is not needed for now.

Cables is only used if you want to do a full scan, you won't need that if you already have all channels in services.xml.

Reboot the dbox now (let's hope it will reboot ok)
Do you have an auto update file? i.e. autoroll.key (for your provider, NTL, ex
C&W or TW)
Once booted up you will have channels.
auto update file should work ok; we will do that after reboot
select a free to air channel, it should clear up
Choose a channel that is free i.e. Front Row preview should be FTA
without the keys not much will show but if you have at least one channel
clearing up it's good.

Ok the front row is on & clear...good, perfect do you have the correct time on
the LCD?

What about EPG, is it available on the screen?
i.e. do you get channel name and programme name?

Ok check the time is good.

Is the epg good, excellent!

EPG will not work on front row channels by the way.

Ok only one thing missing now, the keys to clear up all your channels.

Until you put the keys file in, you can only view the channels that are NOT
encrypted.

You need the correct keys now, upload this file in /var/keys

Ok now you need to change the EMU cam to EvoCamd.

Select Dbox on the remote.

Then EMU Management.

Or press the blue button.

Now change cam to Evocamd then save if asked.

In this menu you can change the cam in use (between camd3, evocamd,
gbox...)

Then go back to a crypted channel and wait a few secs, its Auto Update keys
so should update soon.

Once one channel clears they should all be clear.

First thing you should do before opening the champagne...

IS TO SAVE YOUR IMAGE AGAIN or you may be sorry...

That's pretty much the hard work done now, the rest are tweaks with plugins,
streaming, recording, and other EMU cams... for that you will need to
familiarize with your box and check the other tutorials.

But I guess you should be running ok now?

& If you screw up you just reload saved image....

As easy as that!!!

Do you get all your channels then?

Inc PPV?

Yep... just check on front row

Now you can sit back, great big sigh of relief & a large beer.

DBOX2 Tutorial – How to scan and create a working cables.xml & services.xml without a DVB-C card with only a DBOX2

Required

Neutrino image (pref zg0re 170504 tested ok)

Enigma Image

Enconv program (credit to those who know who)

Dbox2bootmanager sw (installed in c:\dboxboot + serial cable + Ethernet cable)

Known symbol rate + default freq for your area

Intro

Right, you have your DBox2 and now need to get it working on UK cable.

The DBox2 is primarily designed for use in German cable systems, which are Davic based. As you are probably aware UK uses Davic & Docsis systems (EX C&W NTL = Docsis, Pure NTL = Dacic, TW tv = Docsis TW modem = Davic)

Davic system is older, Docsis is newer.

DBox2 with neutrino will scan properly on Davic but not on Docsis (partial scans can be obtained but never a full map of what is available unless many scans are performed and joined together = laborious)

1) Creating the files

To begin with we need to create a cables.xml for your DBox2 to scan files.

This is based upon the default freq and symbol rate for the area you are in.

This information can be obtained from the eng menu of a pace box (1st 2 pages) or from various links from the shack listing NETID, Symbol Rate + Default Freq

Right armed with his information run my Voxcalc prog.

It asks for basefreq, symbolrate + provider name (if using zg0re provider needs to be 'Kabel Deutschland' other images may not be fussy and allow any name in provider)

The prog then outputs a correct cables.xml for your area☺. You can now precede putting enigma on your box

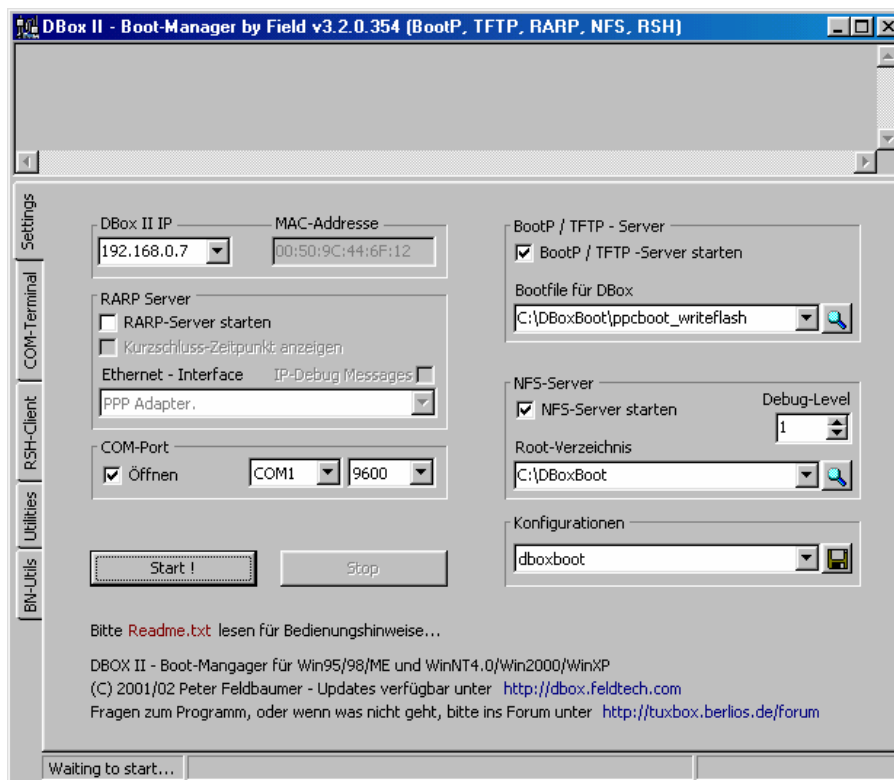
2) Flashing your box

Firstly we want the DBox2 to have a version of Enigma on it. This needs to be done by either ftp'ing the Enigma mtd3.img into /tmp in neutrino and flashing via the menu. (service,expert,software update, write 1 partition, flash without bootloader)

Or via dboxbootmanager. I am going to go thru this method as it helps you to recover a box if you ever have a problem with a corrupt flash and is also a good way of flashing

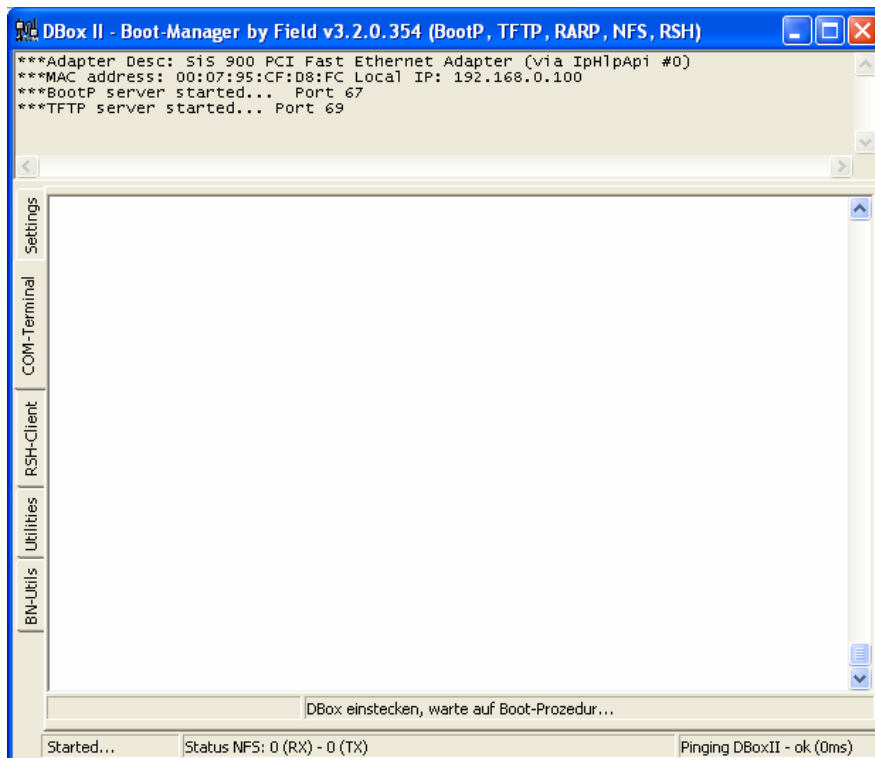
Load Dboxbootmanager

Make sure your DBox2 is powered up and has cat5 + serial connected.



- 1) make sure dboxbootmanager lives in c:\dboxboot.
- 2) Make sure Bootp / TFTP is ticked and is on ppcboot_writeflash
- 3) Make sure com port it ticked and it on correct com port + 9600
- 4) Make sure the IP is one which is on your range I use 192.168.0.7

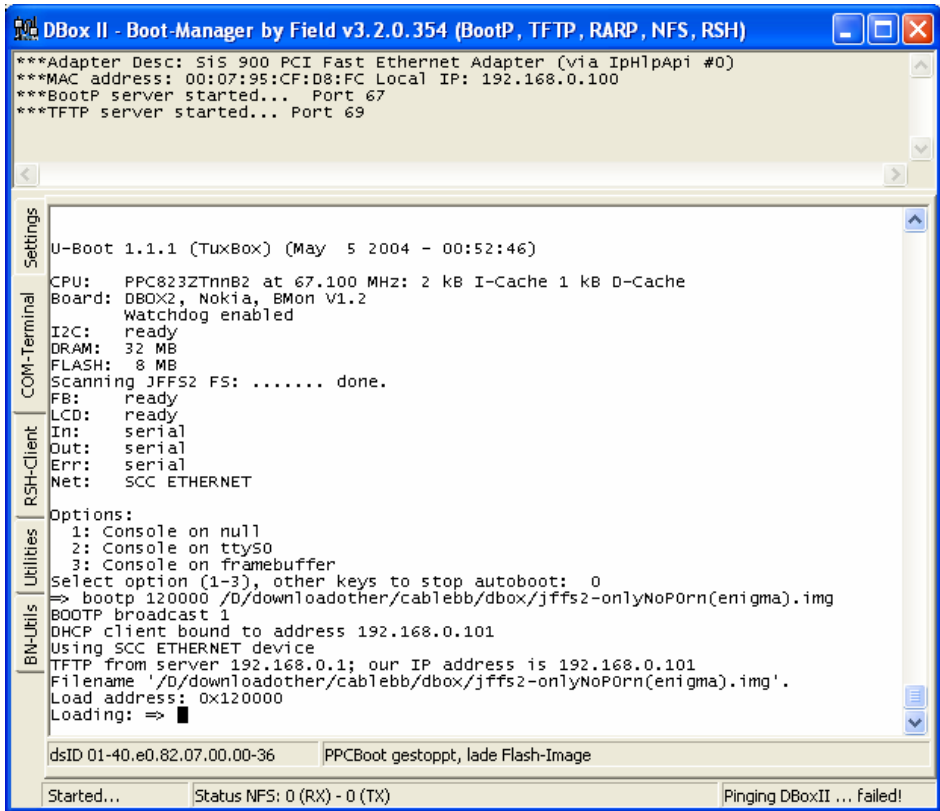
Now click on the 4th tab down "Utilities"



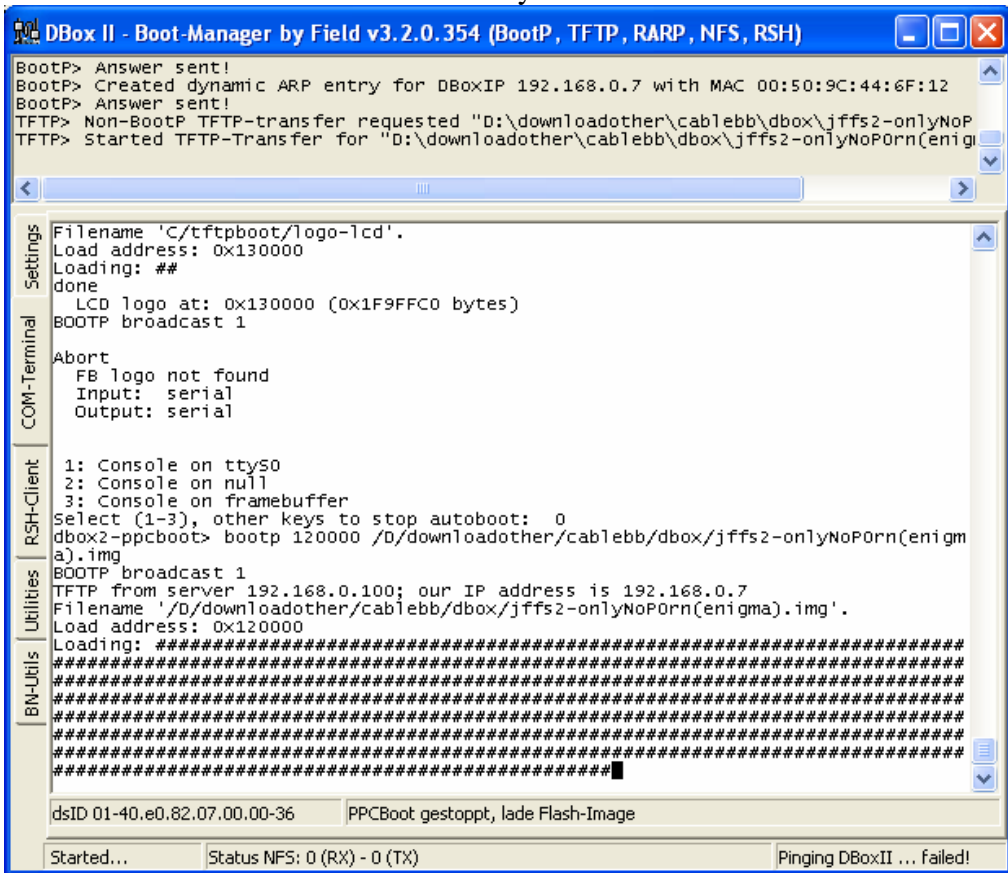
Switch off the box via remote or by removing the plug.
Restart the box by either remote or by inserting plug.

Lots of data should now be seen in the communications window
The window should display erasing and then programming of the flash and a new picture on the TV should say “Dboxbootmanager is working with your flash”.

If it does not and the window looks like this. with the loading=> prompt



type “reset” into the terminal window – this should reset the box and make it flash correctly. like



5 minutes later the box will be flashed.
Power up the box and now your new image should boot.

3) Scanning With Enigma + Converting the Output

You will need to modify the network settings, language to the desired ones via the menu
and set ip etc. (Menu 8 + Network)
Now ftp the created cables.xml from voxcalc onto your newly flashed image into /var/tuxbox/config/. If a cables.xml exists there (likely) delete it 1st then transfer your one over to box.
Now proceed to channels in Enigma Settings (Menu 8), Transponder scan, Auto scan.

In the network box should be your provider name you specified in your cables.xml. Select it and it will check for a signal. Few minutes later it should sat transponder found do you want to scan for services. Make sure erase all is ticked then click proceed.
It should now work all the way through cables.xml and find lots of channels !!!

Wait for it to finish then ftp to /var/tuxbox/config/enigma/

Copy the 'services' file to the same directory as the enconv program. This is your services that enigma has found.

Open a command prompt and move to the directory of the enconv program.
Type 'enconv services services.xml 3 3'
This will create a neutrino services.xml from the enigma output.

If you are using the zg0re image you will need to edit the outputted services.xml and edit out the
<cable name="MR_E 1"> to read <cable name="Kabel Deutschland">
That done your now ready to flash with the neutrino image.

4) Flashing To Neutrino

This process is exactly the same as in section 2 but instead of selecting the enigma file to flash with, choose the neutrino one.
After the box has flashed you will need to set IP, language etc for it.
Once done, ftp to your box and copy the services.xml from the enconv program to /var/tuxbox/config/zapit/ again if a services.xml exists delete it 1st as it is not always overwritten and the box wont see anything..
If you now press Menu, Service(5),Reload channel lists it should import your newly copied services.xml.
All your new channels should now be seen.
If all you see is a black screen but can select all channels then you need to edit the cam + key info.

5) Cams & Keys

I'm assuming you will be using Evocam for its AU ease of setup. I am not going into the AU setup just that you will have to do that legwork on your own ☺

Make sure Evocam is selected via Menu, Mainmenu.extra (7), scEmu.Choose, selectect evocamd.

Keys then.

You may or may not have seen the /var/keys/ dir in ftp. If not go find it ! its where all the decrypt keys are stored.

The file we are interested in is SoftCam.Key. If it does not exist go create it and remember, this is linux so its CASE SENSITIVE.

It should look like this

```
;NTL=====
N 5401 00 *****
N 5401 01 *****
N 5501 00 *****
N 5501 01 *****
```

```
;C&W=====
N 5C01 00 *****
N 5C01 01 *****
N 5D01 00 *****
N 5D01 01 *****
```

```
;Telewest=====
N 5A01 00 *****
N 5A01 01 *****
N 5B01 00 *****
N 5B01 01 *****
```

The keys are freely available at time of writing so please do some searching and you will find them. Create / amend the Softcam.Key file to read the above and you should now have a dbox which has channels that can be viewed ☺

All that's left to do is create a backup image of your setup via.

Menu, Service(5), software update, expert functions, read one partition, flash without bootloader

Ftp to /tmp and copy the mtd3.img to your pc and then your done !

Location of keys for all EmuCams

found on a german forum

GBox: /var/keys > irdeto, nagra, conax, seca, via

Camd: /var/keys > camd.key

Camd3: /var/keys > camd3.key

Evocamd(X-Mas Version): /var/keys > Keylist.txt(softCam.Key),
Autoupdate.Key(Autoroll.Key), Conax.key

Newcamd: /var/scce > keylist, ppuu, rsakeylist, tpscrypt

Mgcamd: /var/keys > SoftCam.Key, Autoroll.Key, Conax.key

Evocamd(X-Mas Version): /var/scce > ram3.bin, ram7.bin, ram10.bin, ram11.bin,
nagrarom3ext.bin, nagraepr3.bin, nagraepr7.bin, nagraepr10.bin, nagraepr11.bin

Newcamd: /var/scce > nagraram3.bin, nagraram7.bin, nagraram10.bin,

nagraram11.bin, nagraram3ext.bin, nagraepr3.bin, nagraepr7.bin, nagraepr10.bin,
nagraepr11.bin, strom3.bin

Mgcamd: /var/scce > nagraepr3.bin, nagraepr7.bin, nagraepr10.bin, nagraepr11.bin

PS: The Mgcamd also sometimes uses GBoxkeys

PS2: Older versions of the Evocamd have files into /var/scce partly changed * bin,
specified the above apply only to Evocamd 2.6(X Mas).

PS3: New keys are only read in with most Emu's after a restart of the box or the
respective Camd!

EDITED TO ADD THE FOLLOWING LINKS

/var/keys/Autoupdate.Key -> /var/keys/AutoRoll.Key

/var/keys/Keylist.txt -> /var/keys/SoftCam.Key

/var/keys/camd.key -> /var/keys/camd3.keys

Newcamd

Keysdirectory:/var/scce-keylist,ppuu,rsakeylist&tpscrypt

Programfiles:/var/bin-newcamd,cardserv,cardspider,betadserv

Configfiles:/var/tuxbox/config-newcamd.conf,cardserv.cfg,betad.cfg

AU files: /var/scce/ - nagraram3.bin, nagraram3.bin, nagraepr3.bin, sttestrom3.bin,
stmaprom3.bin, nagraram7.bin, nagraram7.bin, nagraepr7.bin, nagraram10.bin,
nagraram10.bin, nagraepr10.bin, nagraram11.bin, nagraram11.bin, nagraepr11.bin,
rsakeylist

UCAS/SCAM

Keysdirectory:/var/keys-SoftCam.Key,seca2,nagra,via,irdeto,conax

Programfiles:/var/bin-scram

Configfiles:/var/keys-softcam.cfg

AUfiles:/var/keys/-seca2/nagra_rom

CamX

Keysdirectory:/var/keys-SoftCam.Key

Programfiles:/var/bin-camxserver
Configfiles:/var/bin-configserverconfig
AUfiles:var/keys/-AutoRoll.key

Evocamd

Keysdirectory:/var/keys-Autoupdate.Key&Keylist.txt
Programfiles:/var/bin-evocamd
Configfiles:/var/keys-camd_cfg
AU files: /var/keys - Autoupdate.Key, /var/scce/ - nagraepr3.bin, nagraepr7.bin,
nagraepr10.bin, nagraepr11.bin, nagram3.bin, nagram7.bin, nagram10.bin,
nagram11.bin, nagram3ext.bin

Radegast

Keysdirectory:/var/keys-SoftCam.Key&AutoRoll.Key
Programfiles:/var/bin-rdgdcamd.rdgd,netpilot
Configfiles:/var/etc-radegast.cfg
AU files: Need a patched driver for older conax cards

Camd3

Keysdirectory:/var/keys-camd3.keys
Programfiles:/var/bin-camd3
Configfiles:/var/keys-camd3.conf,camd3.config
AU files: /var/keys/ - seca_hash.bin, seca2_hash_0070.bin, seca2_mask_0070.bin,
camd3.keys

MGcamd

Keysdirectory:/var/keys-SoftCam.Key&AutoRoll.Key
Programfiles:/var/bin-mgcamd
Configfiles:/var/keys-mg_cfg
AUfiles:

Gbox

Keysdirectory:/var/keys-seca,nagra,via,irdeto,conax
Programfiles:/var/bin-gbox
Configfiles:/var/keys-gbox_cfg
AU files: /var/keys/roms/ - eeprom10.bin, eeprom11.bin, eeprom3.bin, eeprom7.bin,
ram_10.bin, ram_11.bin, ram_3.bin, ram_7.bin, rom10.rom, rom11.rom, rom3.rom,
rom7.rom

Xcamd

Keysdirectory:/var/keys-Keys.txt,AutoRoll.key
Programfiles:/var/bin-xcamd
Configfiles:/var/etc-xcamd.conf
AU files: /var/roms/ - eeprom10.bin, eeprom11.bin, eeprom3.bin, eeprom7.bin,
ram_10.bin, ram_11.bin, ram_3.bin, ram_7.bin, rom10.rom, rom11.rom, rom3.rom,
rom7.rom

Options

Setting up Recording Capabilities using Dbox WinServer

ok that's an easy one , download the Dbox WinServer from [here](#)

(you want that one: Komplet Version mit UDRec 0.12,GGrab etc.)

I believe you also require the .NET Framework 1.1 that you can download for free on Microsoft's website

extract it and run dboxwinsvr.exe

Options are self-explanatory but here are a few things to do:

in Allgemein Tab:

Tick the box to start WinServer Minimized

Untick Beendet Windows nach der Aufnahme (or your computer will reboot once the Recording is finished)

in Einstellungen Tab:

Type the IP address of your dbox , leave the port number as per default

Make any other changes you feel you may require and stop and restart the Server (Stop Server, Start Server buttons)

To record a program (while watching it)

press the blue button and Start the Recording. Stop when needed

To Program a recording in the future

press the blue button and select timer list

Red button to add a new timer

Timer Type : Record

Set start time and finish time

Select Channel and Repeat (if needed, if not leave to once)

Voila

A folder containing the time, date, channel and programme name will be created in the folder specified in the software above (ie C:\18.22 - 03.07.04 - BBC TWO - Wimbledon 2004)

A Mpeg file will be created inside (ie Wimbledon 20041.mpg) ; you can play this file

on your PC using an MPEG player (Ie VLC) or on your dbox (see other tutorial on how to play Mpeg files).

Note: size of movie is 25 Mb per minute; for a 2 hours movie that is 3Gb !!!

Watch TV on your PC from your DBOX and Record

TuxVision

Download <http://www.dbox2.info/download.php?fileID=85>

You have to set the IP Address of your PC within Neutrino

DBox Key

Settings

Recording Settings

Recording Device SERVER

Set IP Address of PC

Enable Settings Now

Back

Red Key or Menu to save settings

Install the Software

After that the Software asks to be started.

You have to set the IP of your DBOX2





Standard Username root
Standard Password dbox2

You can watch the same channels as you can on your DBOX.
When you watch them Via PC the Person in front of the TV has to watch the same.

There are other Programs too, but the Guy who wrote this Software died in a Car Accident. All Credits to him !!

OR

Setting up your PC to 'watch' what's on TV

usefull if the dbox is in the lounge, your pc in a different room and you want to watch a tv program, while staying in front of the pc 😊

what you need:

[VLC](#) & [WingrabTV](#)

- 1) install VLC with default installation settings
- 2) starts WingrabTV
- 3) Select Konfiguration (if it did not open automatically)
- 4) Provide the IP of the Dbox
- 5) Provide the path of VLC (ie: C:\Program Files\VideoLAN\VLC\vlc.exe)
- 6) Tick Video Client Starten, Aktuellen Kanal streamen & Bouquet/ChannelList
restart WingrabTV
- 7) Select Channel to watch , VLC will open and play the TV Channel

How to mount CIFS Shares on your dbox2

this may come handy for a few, basically it explains how to map windows share (ie \\computername\mp3) onto your dbox (ie /mnt/mp3)

usefull for playback of video/audio and pictures

Tutorial written for NT, Win200x and XP Pro (win9x/me does not support sharing in the same way). For help creating users with XP Home, go

1) create a local user on your computer

Right Click My computer, Manage, User & Groups, Expand User & Groups, right click Users, New User. Username = dbox2 Password = dbox2
Untick 'User must change password at next logon'

Note: under NT you have to use UserManager for this step

2) share your folders on your computer. My computer, browse to your folders, right click, sharing & security, Share this folder

give the share a name that is meaningful

you now have 3 shares:

c:\Movies shared as **movies**

c:\pic shared as **pic**

c:\mp3 shared as **mp3**

if you use non default ntfs security, make sure that the user dbox2 has sufficient rights for these shares and ntfs securities.

3) setting up settings on your dbox (I am using z0gre 170504 but it should be identical or very similar on other images)

Press **Dbox** on the remote, **Settings, network, Mount NFS/CIFS volume**

edit the first 3 lines as below :

Select the first line, press OK,

type: **CIFS**

IP: **x.x.x.x** (the IP address of your computer where the shares are located)

directory share: **movies**

localdir: **/mnt/movies**

mount on startup: **yes**

mount options: **rw.soft.udp**

mount options: **noexec,rsync=8192,wsync=8192**

CIFS Username: **dbox2**

CIFS Password: **dbox2**
Select **Mount Now**

Repeat the next two lines but using these settings :

directory share: **mp3**
localdir: **/mnt/mp3**

directory share: **pic**
localdir: **/mnt/pic**

BACK (twice) + SAVE SETTINGS NOW

4) Testing that it all works 😊

-Press **Dbox** on the remote, **MP3 Player, Green Button**, Browse trough your mp3s, select a file, press **OK**, press **OK** ; playback should start

-Press **Dbox** on the remote, **Picture Viewer, Green Button**, Browse trough your pictures, press **Blue button** to start a slideshow

-Press **Dbox** on the remote, **Movie Player, PlayTS**, select a movie (press **BLUE** to swith filter off), press **OK** ---very unstable on mine, you better off using your xbox for playback (if you have one)

Enjoy 😊

For peeps on Windows XP Home edition, follow this method to create a local user account :

Start, Settings,Control Panel, USer Accounts

Create a new account

give it a name of dbox2

Create a password of dbox2

Change account type to computer administrator

now you have an andimistrator account called dbox2 with a password of dbox2

more info on http://www.wown.com/j_helmig/wxphusrm.htm

Setting up Movieplayer on Z0gre image (for DVD, SVCD, Divx,...)

this tutorial is heavily inspired from an article found [here](#) (credits goes to his author) , I have just removed some parts and edited a few others. This has been tested on the z0gre 17052004 image and is working fine

First Step if to install VLC from here <http://www.videolan.org>

Open a command prompt and go to C:\Program Files\Video LAN\VLC and type

vlc --extraintf=http followed by enter; this will allow VLC to be controlled via a HTTP interface listening on port 8080.

Test this with your browser on <http://127.0.0.1:8080> you should see a HTML user interface of VLC. Now close your browser.

Setting up Movieplayer to play VCD, SVCD or DVD

On the Dbox remote, press Dbox, Settings, Movieplayer

Set the StreamingServer to On

Configure the IP address to be the IP address of the PC where VLC is running

Configure the port to the port VLC is listening on. Default is 8080

Configure the DVD Drive (CD Drive) of the PC. This is usually D: or Z:

Configure the Directory (VLC) to the folder on your pc which contains movies (ie C:\Movies)

Leave "1000" for the video rate and "192" for the audio rate.

Leave the other settings to default (or change them if you know what you are doing)

Go back and save the settings

Testing Movie player with a VCD, SVCD or DVD

On the Dbox remote, press Dbox, Movie player

Insert a DVD, VCD or SVCD into the drive of the PC

Press the yellow button to start the playback of the DVD or blue for (S)VCD

After a while the playback will start (if not you will see appropriate error dialogs)

You can pause/resume playback using the yellow button (see "Known Bugs")

You can stop the playback using the red button

Setting up Movieplayer to play DivX, XVID, MPEG, PS (and others)

On the Dbox remote, press Dbox, Settings, Movieplayer

Configure the Directory (VLC) to the folder on your pc which contains movies (ie C:\Movies) Note: you do NOT have to share this folder on your PC

Go back and save the settings

Testing Movie player with a DivX, XVID, MPEG, PS (and others)

On the Dbox remote, press Dbox, Movie player

Press the red button to start the playback (File via VLC) and choose the file you want

to play.

After a while the playback will start (if not you will see appropriate error dialogs)

Note: if 'Buffering' keeps coming up every 10seconds or so, check your network settings,.... Make sure that the PC hosting the DVD drive and Divx is running at the max speed your network can handle (ie make sure that it is not running 10Mb Half if limited to that speed for Dbox Manager)

Also make sure that you want not selected a resolution too high for your network bandwidth (default of 352x288 does not have any issue on a 10Mb/half network)

Links

1. <http://www.dietmar-h.net/index.html>
2. <http://www.dboxsoft.com/upload/showtophits.php>
3. <http://its.no-enigma.de/de/include....p&contentid=123>
4. <http://www.dbox2-tuning.de/html/lin...oads.html#Tools>
5. <http://www.betacrypt2.com/upload/>
6. <http://www.sattech.at/download/db2/multicam.pdf>
7. <http://streamboard.host-boxcracker.de/Betatest/ULC/>
8. <http://home.t-online.de/home/g.stev...nderlisten.html>
9. <http://www.chatlogin.com/dbox2/chkdesign/> -- Tools & Skin
10. <http://www.tuxbox.mommel.com/>
11. <http://tuxbox.berlios.de/> -- developers home page
12. <http://funsoft.ath.cx/DBox2-Teil1/DBox2-Teil1.htm> -- virgin dbox2 setup how to
13. <http://dboxupdate.berlios.de/install.php> -- "Dbox2-Bootmanager" how to
14. <http://www.dbox2.info/download.php?catid=5&subcat=6>
15. <http://www.neutrino-anleitung.de/>
16. <http://www.chatlogin.com/dbox2/www...x2-HOWTO-2.html> -- virgin dbox2 setup how to
17. <http://www.chatlogin.com/dbox2/chkdesign/htdocs/start.php>
18. <http://www.tibupload.bc-host.de/>

Credits:

Some text extracts from this forum (thanks to all. YOU know who you are)