

What to do....

Unofficial guide for beginners

AB IPBox 200S/ 250S PVR 350PRIME/ 400S / 422S



- rel 10.1 new -
191007

This guide is intended for beginning users of AB IPBox 200S/250S PVR/350PRIME/400S /422S receivers. There are described some new functions and features in this manual, that are not documented in Users manual.

It does not replace official Users Manual; it is just an unofficial amendment.

- **Initial software upgrade**
- **Receiver configuration for net-working**
- **Ftp access Setup**
- **Working in PC Editor**
- **EMU Newcamd / CCCam sharing configuration**
- **AB IPBox 200S/250S PVR / 350PRIME /400S / 422S Image versions description**
- **Internal EMU support in particular images**
- **Types of Files**
- **Usage and abilities of HDD in AB IPBox 250S PVR / 350PRIME /400S / 422S**
- **Video adjustment for recording on DVD**
- **Motor setup for AB IPBox**
- **DiSEqC switch setting for AB IPBox**
- **FAQ**
- **AB Enigma software**
- **Interesting links**

Warning:

Watching Pay TVs without paying proper payment is illegal and can be punished according to the laws.

This is a study material. Any usage of described procedures is on its own responsibility. Authors of this document disassociate from incorrect or illegal way of usage of described procedures.

Initial software upgrade (ORG versions)

Official software of your **AB IPBox** receiver does not support card readers. To enable this function (for example if you want to use Sky link, CS link, Gital or UPC cards) you must make software upgrade of your receiver.

At the present time we recommend **Highland Team 2.16** or **AB Enigma** image for **AB IPBox 200S, 250S** and **400S, 422S** receivers.

How to do it...

- there are four ways how to make a software upgrade:
 1. via USB from PC with installed Flash tools software (AB IPBox 400S)
 2. via RS232 from PC with installed Flash tools software (AB IPBox 200S, 250S, 350PRIME)
 3. via LAN from PC with PC Editor
 4. via internet (Network update menu)

1. Software upgrade from PC with Flash tools software.

Flash tools software is designed for flashing new software (image), databases, bootloaders (uboot) or welcome pictures into your receiver via USB (400S) or RS232 serial port (200S).

Installation of Flash tools and driver

Installation of USB driver into PC

You must install USB driver into your PC just during first running of Flash Tools software. This procedure (step 1 – 10) is necessary just for initial installation!!!

1. Download Flash tools software (version 1.0.2 or higher) into your PC, install it and restart your PC. The software is available on www.download.abcom.sk (registration necessary).
2. Turn off (Power switch) your receiver or press Standby and OK button at the same time (Cold turn off).
3. Connect your PVR (AB IPBox 400S) with your PC with suitable USB cable. PVR (receiver) must be switched off!
4. Turn on the receiver.
5. Press and hold on Standby button on front panel until there is "USB UPGRADE" message on display panel of your receiver.
6. PC will detect a new hardware and ask for installation of driver.
7. Wizard software will start installation of driver.
8. Select 'install from a list or specific location (advanced)' and click on NEXT.
9. Select 'Include this location in the search' and click on Browse.
10. Locate directory to C:/Program files/Flash_tools (the same place you have installed Flash tools) and click on NEXT.
11. Wizard software will start searching of driver.

12. Select 'USB FOR VESTA – c:/windows/inf/vestausb.inf' and click on NEXT.
- 12.1. If system is not able to find suitable driver you can locate it manually in c:/program files/Flash_tools/vestausb and then click on OK.
13. Wait until the end of installation and click on "Finish" button

Warning:

It is very important to follow this procedure step by step. It is necessary to install the driver properly if you want to update your receiver via USB.

AB IPBox 400S / 422S software upgrade

1. Connect PVR and PC with suitable USB cable.
2. Press and hold on Stand by button, turn on power supply switch and wait until there is "USB" message on front panel of your receiver.
3. Run Flash tools on your PC.
4. Click on USB item (upper toolbar), "USB Connected" message should appear in lower "Message" window
5. Click on "File" item and select desired software version to be downloaded to your PVR
6. Click on "Down" item, downloading of selected file should start
7. After finishing "DONE" message appears. If you want to download software that consists of several parts select another part of it (see 5.) and click on "Down" or press Standby button on RC or front panel of your PVR. PVR will restart

AB IPBox 200S, 250SPVR, 350PRIME software upgrade

1. Connect PVR and PC with suitable RS232 cable.
2. Press and hold on Stand by button, turn on power supply switch and wait until there is "SerI" message on front panel of your receiver.
3. Run Flash tools on your PC.
4. Set up corresponding serial port (if you use different port then COM1).
5. Click on "File" item and select desired software version to be downloaded to your PVR
6. Press OK button on front panel of your receiver.
7. After finishing "DONE" message appears. If you want to download software that consists of several parts select another part of it (see 5.) and click on "Down" or press Standby button on RC or front panel of your PVR. PVR will restart

Receiver configuration for net-working

Receiver supports automatic detection and configuration of the net-working. Select „IP Setup“ item in **Main menu – System Setup** (see pics.) :

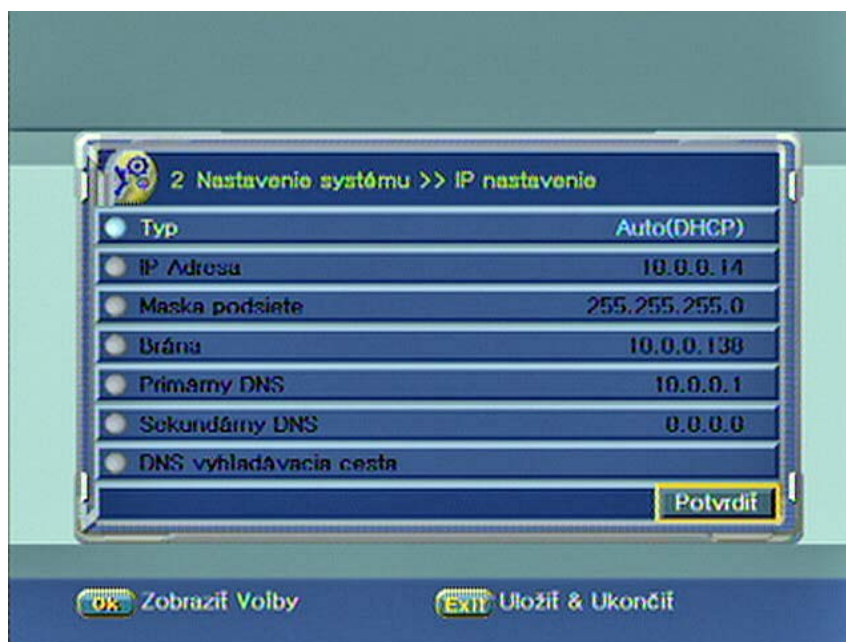


Select „**Auto (DHCP)**“.

Note: If the receiver is not connected to DHCP device, you can use connection through switch or cross-over cable. In such a case you must select „**Manual**“ and enter IP address manually.



Select „Submit“



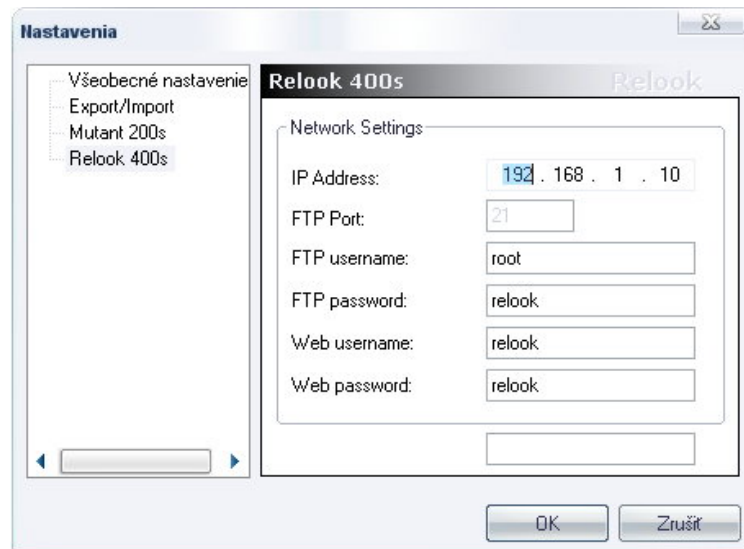
Receiver will configure net-connection automatically.

2. Software upgrade via LAN from PC with PC Editor.

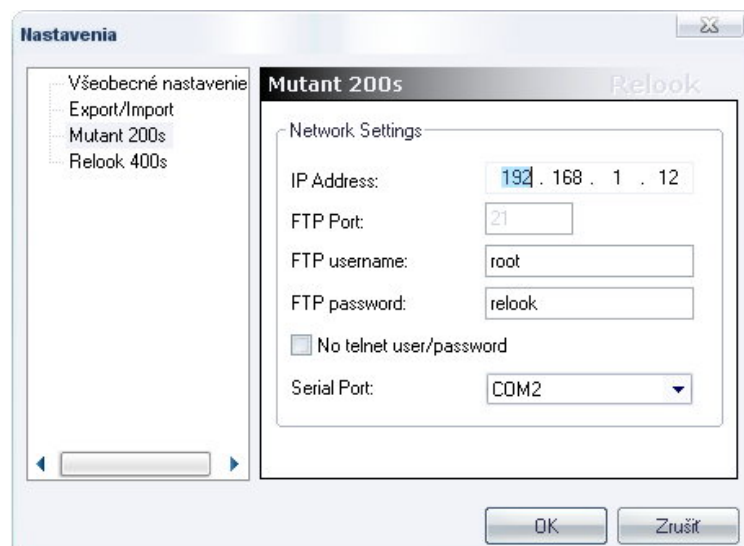
Run PC Editor software on your PC (1.2.35 version or newer one).



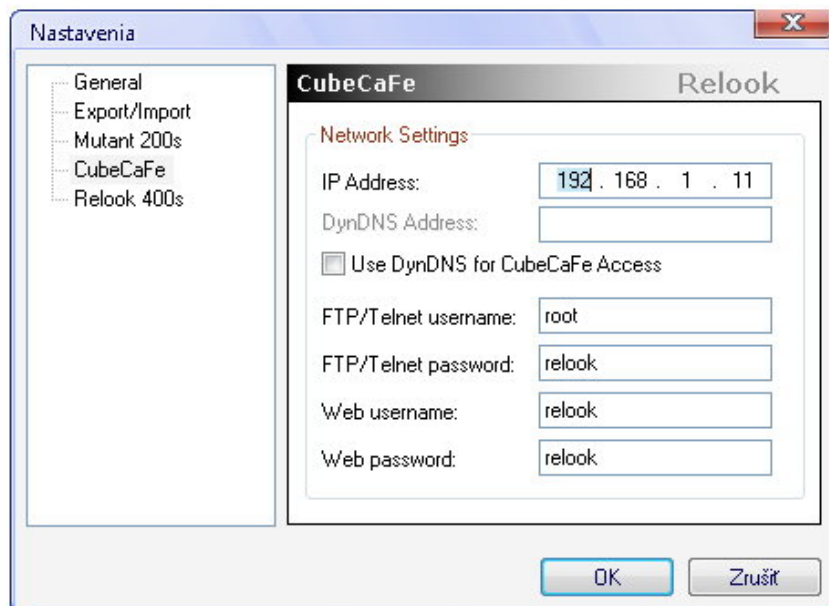
Select in menu **Options – Settings – Relook 400S** , enter appropriate IP address, FTP username „root“ or „relook“ (according applied version) and FTP password „relook“.



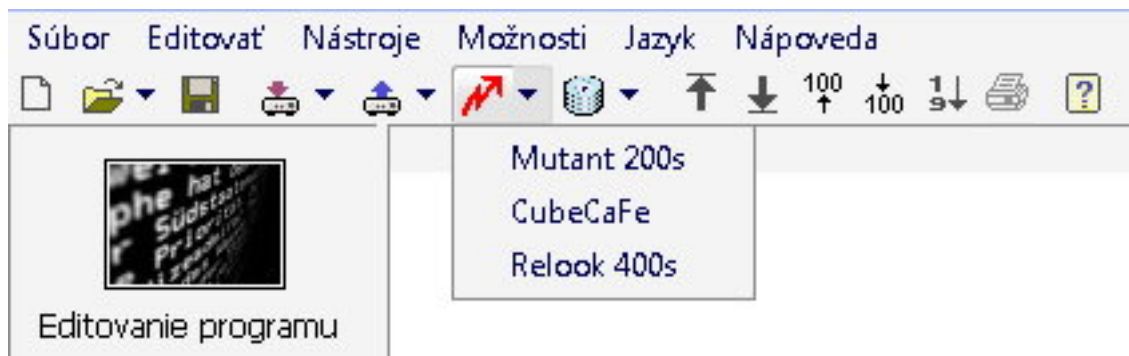
Select in menu **Options – Settings – Mutant 200S** , enter appropriate IP address, FTP username „root“ or „relook“ (according applied version) and FTP password „relook“ if you use AB IPBox 200S receiver.



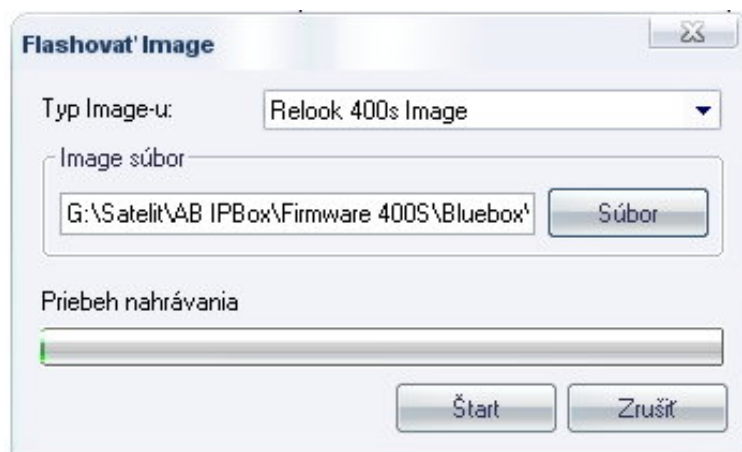
AB IPBox 250S PVR (PC Editor 1.2.41 or newer): Select in menu **Options – Settings – CubeCaFe** , enter appropriate IP address, FTP username „root“ or „relook“ (according applied version) and FTP password „relook“.



Select in menu Tools – Flash image select Relook 400S for AB IPBox 400S, Mutant 200S for AB IPBox 200S or CubeCaFe for AB IPBox 250S PVR.



Select a file to be flashed in „Flash Image“ window and press „Start“ button. Wait until finishing whole process.



Warning:

Software upgrade through PC Editor is not supported by older versions of images. In such a case use network software update to download a newer official version and then try software update through PC Editor.

Warning 2:

Use software upgrade through PC Editor only with software marked usb_all or usb_all_noboot that are consisting of one file. If you want to download software marked kernel root and db use Flash tools.

3. Software upgrade from z Internet via Network update

It is possible to download new firmware (images), welcome pictures (welcomes) and even settings directly from internet via Network update service.

Select „Network update“ item in Main Menu. You can set up server settings manually or simply download „update_server_list“ file from your receiver (in **/var** directory) and add necessary parameters (see any known server as model). This file is also available on www.satupdate.net (unpack and download into your computer – use for example Total Commander software).

See also ftp access setting and file extract below.



Parameters of **official** software are preset in your receiver.

Official software does not support card readers and does not contain any emulator.

server: dev.dgstation.co.kr
directory: pub/relook400/netupg (AB IPBox 200S : pub/mutant200/netupg)
user: anonymous
passwd: anonymous
mode: Manual

Unofficial software is available on IPBox Team server.

„Update_server_list“ file extract

There are parameters of server written in „update_server_list“ file (directory /var/ or /home/relook/dir_db – according to image version).

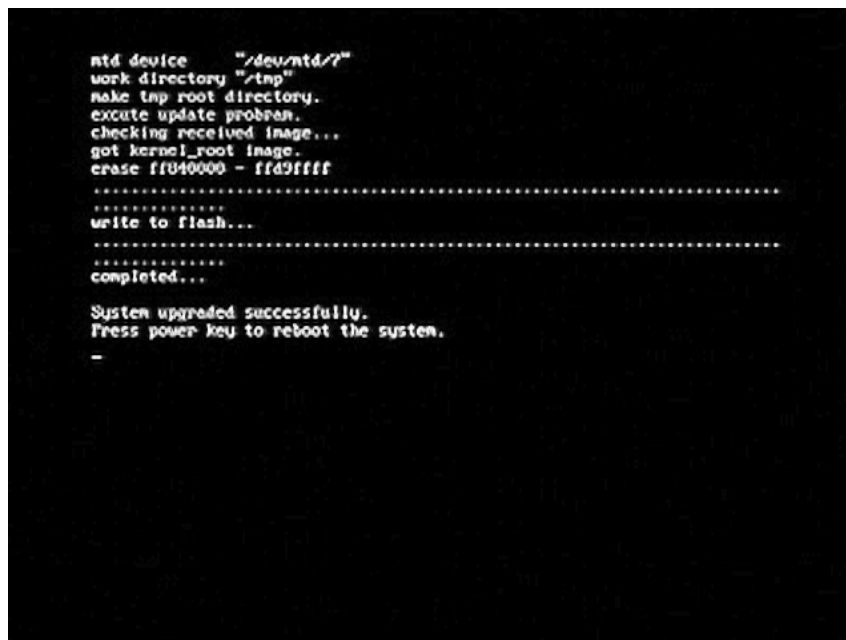
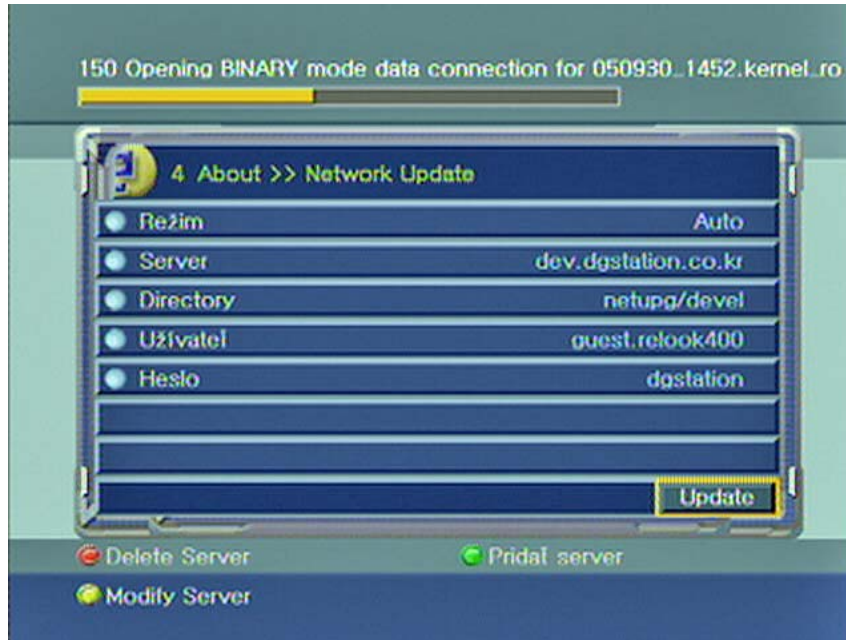
Download this file to your PC, write down the server’s parameters and upload the file back to your IPBox. IPBox is not allowed to be switched over in „ Network upgrade“ menu. You can use PSpad freeware (www.pspad.com) for writing down parameters in „update_server_list“ file.

It is necessary to keep writing rules according this model:

```
#####  
#####  
#  
#           === Update Server List ===  
#  
# < WARNING >  
# If you want to edit this file, keep the required file format standard.  
#  
# File format : A row must have Update Server, Directory, User ID, Password,  
#               each item should have more than one delimiter to be distinguished  
#               amongeach others.  
#               User ID can not exceed more than 32 characters, Password  
#               can not exceed more than 32 characters. Use alphabet or number  
#               only.  
#               You can add comment after #.  
#  
# Delimiters : Tab Key, Space Key  
#  
# example)  
#   dev.dgstation.co.kr   /home   my_id   my_password   # this is  
comment  
#  
#####  
#####  
  
#Server           Directory           User ID           Password  
dev.dgstation.co.kr pub/relook400/netupg anonymous          anonymous  
dev.dgstation.co.kr pub/relook200/netupg anonymous          anonymous  
dev.dgstation.co.kr pub/cubecafe/netupg  anonymous          anonymous  
www.abcom.sk       400S                user.abcom.sk     abcom  
www.abcom.sk       200S                user.abcom.sk     abcom  
www.abcom.sk       250SPVR             user.abcom.sk     abcom  
www.abcom.sk       350prime            user.abcom.sk     abcom  
ftp.ipbox.satupdate.net /400s               ipbox.satupdate.net ipbox  
ftp.ipbox.satupdate.net /250spvr            ipbox.satupdate.net ipbox  
ftp.ipbox.satupdate.net /200s               ipbox.satupdate.net ipbox  
ftp.ipbox.satupdate.net /350prime            ipbox.satupdate.net ipbox  
denktenk.com       /                    relook            relook  
ftp2.dreamusers.com /dreamusers/RELOOK/RELOOKUSERS/netupg ftp ftp
```

Installation

Select „**Network update**” in Main menu, choose required version of software on the server and submit.



You will see „ Press power key to reboot the system” message after installing new software. You will see „DONE” message on your display.

Press POWER key on front panel of your receiver. Wait until your STB restarts.

Ftp access Setup

FTP access allows downloading of recorded video/audio files. FTP access is available after setting up an ftp client. Parameters for setting (example: Total Commander)

In latest versions of images:

User: relook or **User:** root
Password: relook **Password:** relook

In Fantasyteam images:

User: root
Password: fantasy

Host name: IP address of receiver

User: anonymous
Password: anonymous

In **AB Enigme** images:

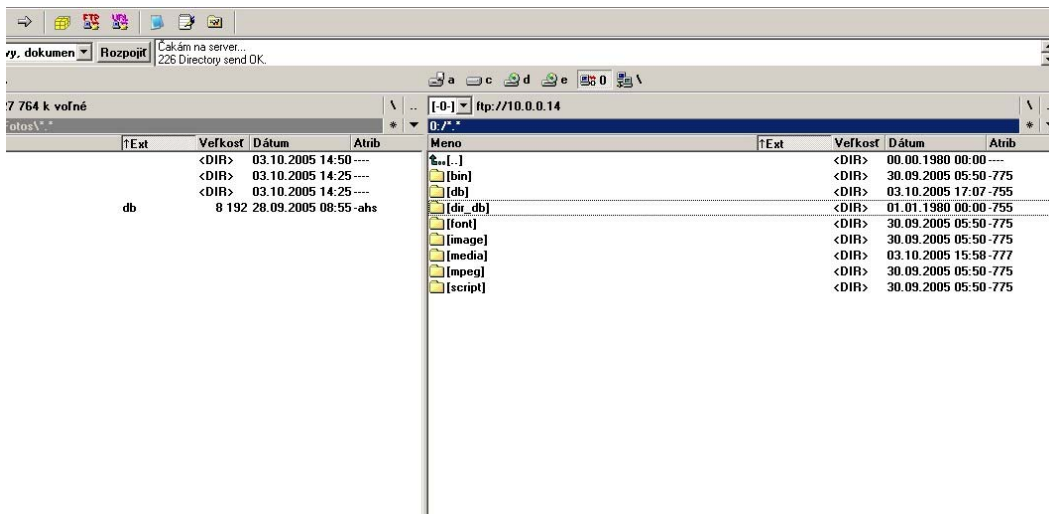
User: root
Password: ipbox

The image shows a configuration window for an FTP client. The fields are as follows:

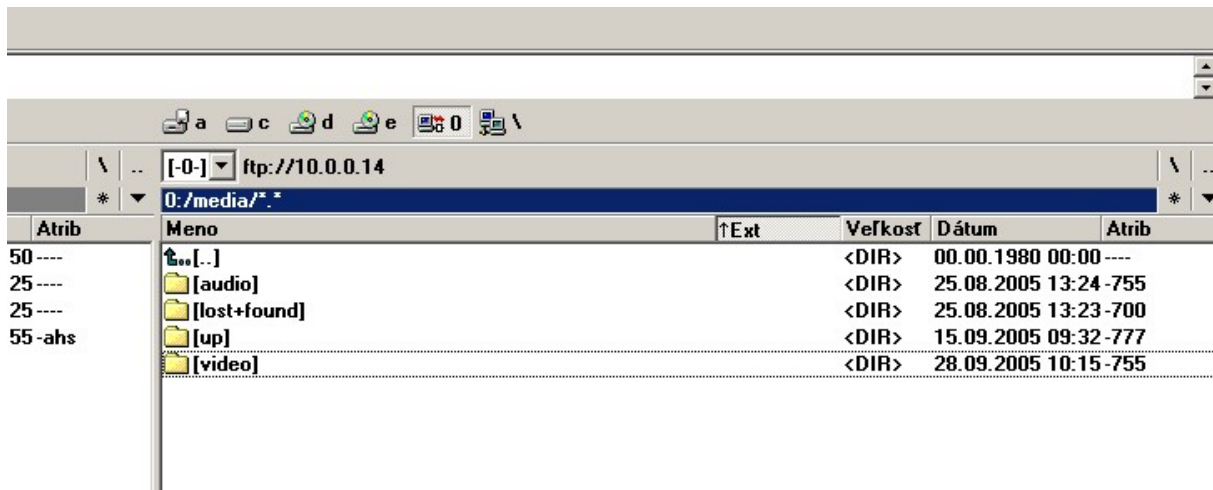
- Session:** AB IPBox 400S 200GB
- Názov Hostu:** 10.0.0.14
- Užívateľ:** anonymous
- Heslo:** [masked with asterisks]
- Pozor:** Uloženie hesla nie je bezpečné!
- Vzdialený adresár:** [empty]
- Lokálny adresár:** [empty] >>
- Poslať Príkazy:** [empty]
- Typ servera:** Auto detekcia
- Použi firewall (proxy server)
 - Definovať nový... Zmeniť...
- Použi pasívny mód pre transfery (ako WWW browser)
- Pošli príkaz na udržanie živého spojenia:
 - Príkaz: NOOP Interval posielania: každú 90 s

Buttons: OK, Storno, Pomoc

You will see directory structure of the HDD after connection. Records are saved in var/media/video directory.



You can copy audio or video files in common way after opening the directory.



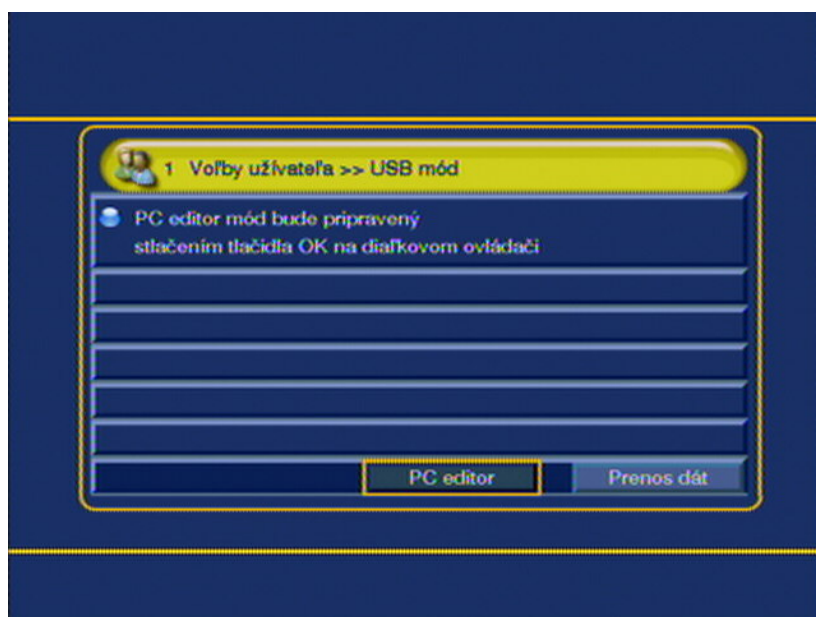
Working in PC Editor

You can use PC Editor 1.2.41 (or newer one) for editing of settings of your AB IPBox receiver. If possible use latest version of PC Editor. Settings for AB IPBox 200S, AB IPBox 250S PVR and AB IPBox 400S are not compatible!

Set up IP address of your receiver in Options – Settings menu after running PC Editor if you use LAN (see previous chapters).

Select correct serial port in Options – Settings – Mutant 200S menu if you use serial connection. Enable PC Editor (RS232) item in receiver menu.

Set PC Editor (USB mode) item in receiver menu if you use USB connection.



Receiver must be turn on for LAN connection.

PCEditor 1.2.35 by JonDoe - A3_A19_HB_db115_210506

Súbor Editovať Formát Jazyk Nástroje Možnosti Nápoveda

Či...	Služba	Provider	Typ	Satelit	Frekvencia	Symbolo...	P...	SID	Či...	Služba
124	Sinema TURK	TÁrkisch	TV	ASTRA 3A(23....	11673	27500	V	53511	149	STV1
125	CH1 Russia	Russisch	TV	ASTRA 3A(23....	11673	27500	V	53512	150	STV2
126	Unknown 1	Unknown	TV	ASTRA 3A(23....	11673	27500	V	53590	151	Markiza
127	EuroNews (F)	Div. Spra...	TV	ASTRA 3A(23....	11673	27500	V	53211	153	TV JOJ
128	EuroNews (GB)	Div. Spra...	TV	ASTRA 3A(23....	11673	27500	V	5321E	138	CT 1
129	EuroNews (I)	Italienisch	TV	ASTRA 3A(23....	11673	27500	V	5321E	139	CT 2
130	EuroNews (E)	Div. Spra...	TV	ASTRA 3A(23....	11673	27500	V	5321E	137	Prima TV
131	EuroNews (P)	Div. Spra...	TV	ASTRA 3A(23....	11673	27500	V	53217	3071	Noe TV
132	EuroNews (RUS)	Russisch	TV	ASTRA 3A(23....	11673	27500	V	5321E	152	TA3
133	ASTRA	SES Astra	TV	ASTRA 3A(23....	12031	27500	H	1000	141	CT24
134	H.264 1080i	SES Astra	Radio	ASTRA 3A(23....	12031	27500	H	2000	135	CT SPORT
135	CT SPORT	Czech Link	TV	ASTRA 3A(23....	12525	27500	V	8007	136	CS Film
136	CS Film	Czech Link	TV	ASTRA 3A(23....	12525	27500	V	8001	140	Galaxie Sport
137	Prima TV	Czech Link	TV	ASTRA 3A(23....	12525	27500	V	8002	230	Ocko TV
138	CT 1	Czech Link	TV	ASTRA 3A(23....	12525	27500	V	8003	233	Top TV
139	CT 2	Czech Link	TV	ASTRA 3A(23....	12525	27500	V	8004	959	Music Box
140	Galaxie Sport	Czech Link	TV	ASTRA 3A(23....	12525	27500	V	8005	317	TV Deko
141	CT24	Czech Link	TV	ASTRA 3A(23....	12525	27500	V	8006	879	Discovery CE
142	CRO 1	Czech Link	Radio	ASTRA 3A(23....	12525	27500	V	8018	576	Spektrum
143	CRO 2	Czech Link	Radio	ASTRA 3A(23....	12525	27500	V	8019	311	Viasat Explor
144	CRO 3	Czech Link	Radio	ASTRA 3A(23....	12525	27500	V	8020	318	Viasat Histor
145	Proglas	Czech Link	Radio	ASTRA 3A(23....	12525	27500	V	8021	952	CT1
146	CRO 2+6/CRO 7	Czech Link	Radio	ASTRA 3A(23....	12525	27500	V	8022	315	CT2
147	Cro Region	Czech Link	Radio	ASTRA 3A(23....	12525	27500	V	8023	958	Prima TV
148	CRO Feed	Czech Link	Radio	ASTRA 3A(23....	12525	27500	V	8024	962	TV Markiza
149	STV1	Slovak Link	TV	ASTRA 3A(23....	12565	27500	H	8002	956	TV JOJ
150	STV2	Slovak Link	TV	ASTRA 3A(23....	12565	27500	H	8003	963	TV Nova
151	Markiza	Slovak Link	TV	ASTRA 3A(23....	12565	27500	H	8001	312	AXN
152	TA3	Slovak Link	TV	ASTRA 3A(23....	12565	27500	H	8005	319	Cinemax
153	TV JOJ	Slovak Link	TV	ASTRA 3A(23....	12565	27500	H	8004	314	Film+
154	FUN-R.	Slovak Link	Radio	ASTRA 3A(23....	12565	27500	H	8014	568	TV Paprika
155	OKEY	Slovak Link	Radio	ASTRA 3A(23....	12565	27500	H	8015	878	Animal Planet
156	VIVA	Slovak Link	Radio	ASTRA 3A(23....	12565	27500	H	8016	883	Reality
157	SM 1	Slovak Link	Radio	ASTRA 3A(23....	12565	27500	H	8021	880	National Geogr.

Obľúbené

- SK CZ all TV
- SK/CZ radio
- Document
- Erotic
- easyTV
- Music
- Premiere
- Sky Italia
- Taquilla
- TPS
- Cifra+
- CS Film
- Galaxie Sport
- CanalSat radios
- Ocko TV
- Polsat
- ORF
- OIV Zagreb
- Film
- Spektrum
- News
- Children
- Russian

After downloading the setting you can adjust it in your PC, you can create Favorite, sort programs etc. After finishing, save the setting and upload it back to your receiver. Turn off and turn on the receiver.

You can change configuration of a particular LNB in „Edit LNB“ menu.

PCEditor 1.2.35 by JonDoe - A3_A19_HB_db115_210506

Súbor Editovať Formát Jazyk Nástroje Možnosti Nápoveda

Spojenie Oddelené Loop Thru

Nastavenie LNB

Tuner1 => Tuner2

Typ prepínania 3

Č...	Typ LNB	Miestna fre...	DiSEqC	Satelit	22 khz	Frekv. TP
1	UNIV_LNB	9750	A / -	ASTRA(19.2E)	AUTO	10832
2	UNIV_LNB	9750	B / -	HOTBIRD(13.0E)	AUTO	12577
3	UNIV_LNB	9750	C / -	ASTRA 3A(23.5E)	AUTO	10785

Uložiť

Editovanie LNB ✕

Satelit: ▾

Typ LNB: ▾

Miestna

DiSEqC 1.0 ▾

DiSEqC 1.1 ▾

22 khz: ▾

Frekv. TP: ▾

You can change settings of basic functions of your receiver in „Receiver Settings” menu.

Nastavenia hlavného menu ✕

Užívateľské nastavenia **Nastavenie zámku** Jazyk

Užívateľské nastavenia

Pomer strán obrazu
 ▾

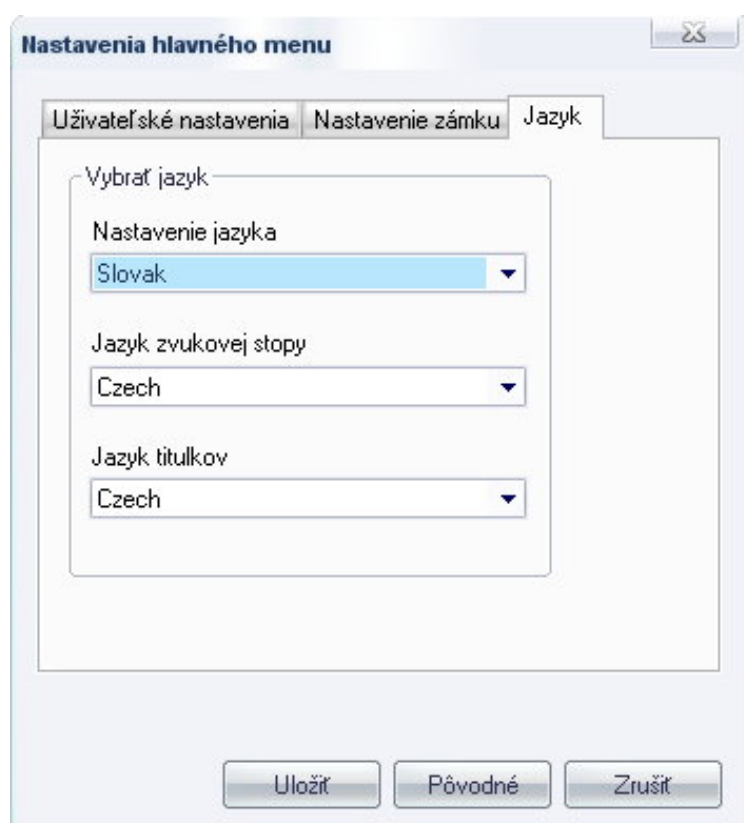
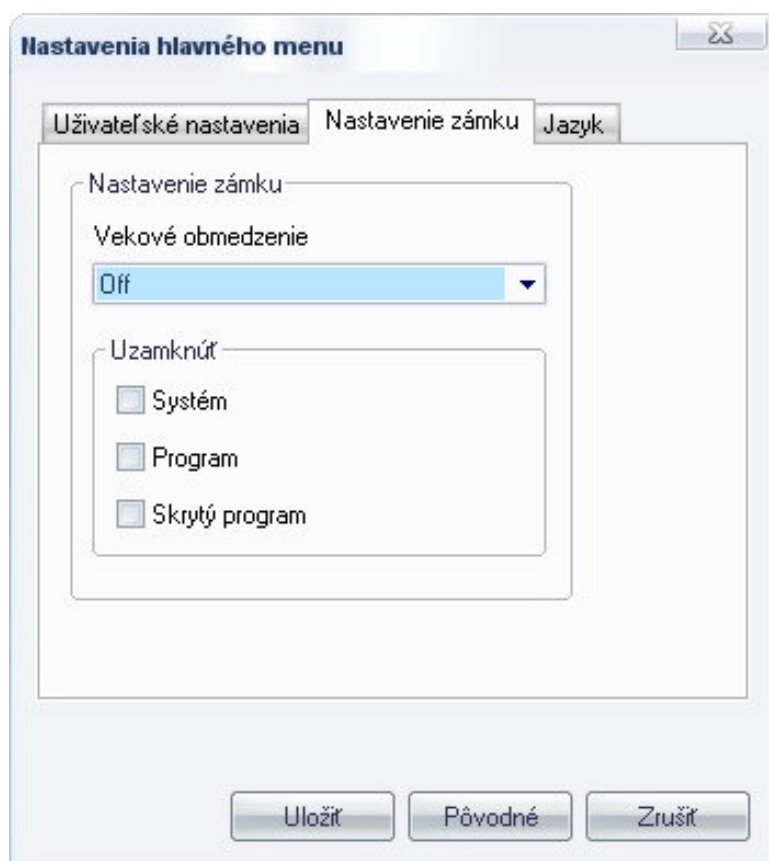
Doba trvania bannera (sekundy)
 ▾

Titulky Posun častí Fan

Typ bannera ▾

Timeshift Buffer ▾

Zahnúť časový posun pri nahrávaní



After finishing, save the setting and upload it back to your receiver. Turn off and turn on the receiver.

EMU Newcamd / CCCam sharing configuration

Author: Gereta

This kind of EMU contains for example Rudbox, Fantasy or Highland image.

Example of configuration: Server: 400S – Client: 200S

The procedure is the same if you use two 200S PVRs – just the server has one slot less!

This procedure is also usable with 200S. Test connection by using "netstat" command.

Session from the client on server port must be: 10000 or 10001 – status: ESTABLISHED.

If status is: TIME_WAIT: wrong configs or there is not net connection (test by ping).

Set file attribute to 777.

Configuration files in Server receiver (AB IPBox 400S)

Content of newcs.xml file (`/var/tuxbox/config/newcs.xml`) in **server** (AB IPBox 400S):

```
<newCSconfig>                                     # reader No.2 (not used in 200S)

<readers name="Card Readers">
<device>
<name>lower</name>
<type>Sci</type>
<node>/dev/sci0</node>
<export>yes</export>
<enabled>yes</enabled>
<blocksa>No</blocksa>
<blockua>No</blockua>
<blockga>No</blockga>
<boxkey>0000000000</boxkey>
<PTShandshake>yes</PTShandshake>
<crypto-special>no</crypto-special>
<carddetect>yes</carddetect>
<newcamd_port>10001</newcamd_port>             # port number of reader No.2
<priority>round</priority>

</device>

<device>                                           # reader No.1
<name>upper</name>
<type>Sci</type>
<node>/dev/sci1</node>
<export>yes</export>
<enabled>yes</enabled>
<blocksa>No</blocksa>
<blockua>No</blockua>
<blockga>No</blockga>
<boxkey>0000000000</boxkey>
<PTShandshake>yes</PTShandshake>
<crypto-special>no</crypto-special>
<carddetect>yes</carddetect>
<newcamd_port>10000</newcamd_port>             # port number of reader No.1
<priority>round</priority> <!-- hard is default -->

</device>
</readers>
<cache>
```

```

<emm>10</emm>
<ecm>-1</ecm>
</cache>
<debug>
<level>normal</level>
<type>init</type>
<output>tcp,console</output>
<logfile></logfile>
<console_options></console_options>
<file_options></file_options>
<udp_host>192.168.1.10</udp_host>
<udp_port>1000</udp_port>
<udp_options></udp_options>
<tcp_port>3001</tcp_port>
<tcp_options></tcp_options>
</debug>
<newcamdserver>
<enabled>yes</enabled>
<name>MOJSERVER</name>
<deskey>01 02 03 04 05 06 07 08 09 10 11 12 13 14</deskey>
<userfile>/tmp/users.txt</userfile>

<user>                                # User1 name/password setting
<name>mutant</name>                    # For internal readers in this case
<password>teletele</password>
<au>on</au>
</user>

<user>                                # User2 name/password setting
<name>server</name>                    # Every client must have got its own name/password
<password>server-pass</password>
<au>on</au>
</user>

</newcamdserver>
</newCSconfig>

```

Content of newcamd.list file (**/var/keys/newcamd.list**) in server (AB IPBox400S):

```

#This two lines set server to access to its own cards in slots – SERVER MUST BE ITS
OWN CLIENT !!!
CWS = 127.0.0.1 10000 server server-pass 01 02 03 04 05 06 07 08 09 10 11 12 13 14
CWS = 127.0.0.1 10001 server server-pass 01 02 03 04 05 06 07 08 09 10 11 12 13 14

```

127.0.0.1 - IP address, that is used for sharing of own cards. It is allways the same.

Configuration files in Client receiver (AB IPBox 200S)

Content of newcamd.list file (**/var/keys/newcamd.list**) in **client** (AB IPBox 200S):

```

CWS = 10.0.0.99 10000 mutant teletele 01 02 03 04 05 06 07 08 09 10 11 12 13 14
CWS = 10.0.0.99 10001 mutant teletele 01 02 03 04 05 06 07 08 09 10 11 12 13 14

```

10.0.0.99 is **SERVER** address – set according to your setting

If you use **CCCam** emulator, use the same settings but in CCCam.cfg file (var/etc/Cccam.cfg).

syntax for to add newcamd server connection

example:

N: ip port name pass des(14byte)

N: 127.0.0.1 10000 server server-pass 01 02 03 04 05 06 07 08 09 10 11 12 13 14

N: 127.0.0.1 10001 server server-pass 01 02 03 04 05 06 07 08 09 10 11 12 13 14

N: 10.0.0.99 10000 mutant teletele 01 02 03 04 05 06 07 08 09 10 11 12 13 14

N: 10.0.0.99 10001 mutant teletele 01 02 03 04 05 06 07 08 09 10 11 12 13 14

There are settings for NewCS cardserver and Mgcamd/Cccam emulator described above.

It is necessary to restart/turn on correct combination of cardserver and emulator after setting of configuration files.

If you use latest Highland team images you can use blue button control. Press Blue button, Plugin menu appears. Select „emud.plugin” and press corresponding combination of buttons (number button/ cursors /OK button) according displayed menu (e.g. Newcs + Mgcamd alebo Newcs + Cccam....). An information window with information about starting of EMU appears. Press EXIT button to leave this menu.

AB IPBox Image versions description

Warning: AB IPBox 200S, 250S PVR and 350PRIME receivers do not use the same software; corresponding software of your receiver depends on concrete model of the receiver.

Funteam - Funteam Images are based on the official software. They include own emulator which supports autoupdate of keys and Sharing just among IPBoxes. Latest version: 2.9c. No more developed.

Rudbox - Rudbox Images are one of the latest ones based on the official image. Ruimage Image does not support the Spider function. It includes Mgcamd and Evocamd emulators. Latest version: 2.3SVN42. No more developed.

Veenson - Modified Rudbox Images. Latest version: 2.3SVN42. No more developed.

Relookusers - Relookusers Images have been replaced by Neumo team Images with a new graphic interface. No more developed.

Neumo team - These Images are aimed at development of new functions of receivers and 256 colors graphic interface. They do not contain EMU.

Redbox/Bluebox - The most developed Images using Neumo graphic interface. They contain Newcs, Mgcamd, CCCam, Gbox EMUs.

Highland/Fantasy – The most advanced in common features at the present time. They use Nuemo graphic interface (from version 2.12). They contain Newcs, Mgcamd, CCCam, Gbox EMUs.

SF team - There was just one image published. No more developed. SF team is developing Enigma sw.

Ajax team - There was just one image published. No more developed.

ENIGMA – described next.

Internal EMU support in particular images

Internal CR support	CS	MgCamd	Evocamd	NewCS	Gbox	Newcamd	Radegast	CCcam	Remarks	
official	No	No	No	No	No	No	No	No	No	
Neumo	No	No	No	No	No	No	No	No	No	Imiges flashed by special way
Relookusers	No	No	No	No	No	No	No	No	No	Own web interface and plugins
Ronaldd	Yes	Yes(1)	No	No	No	No	Yes(4)	Yes(4)	No	
Funteam	Yes	Yes (2)	No	No	No	No	Yes (5)	No	No	
Rudbox	Yes	Yes (3)	Yes (3)	Yes (3)	Yes(3)	Yes (3)	No	No	Yes(3)	Works with menu-skripts
Ajax, Highland, Red/Bluebox, Fantasy	Yes	Yes (3)	Yes (3)	Yes (3)	Yes(3)	Yes (3)	Yes	Yes	Yes (3)	Works with menu-skripts and/or emu plugins.

(1) Sharing of the cards with Newcamd and Radegast servers. (IP setting menu 5>8>0>OK)

(2) Own CS format, just among AB IPBox receivers. (IP setting menu RCL>8>0>OK a EPG>8>0>OK)

(3) Managed via different config files

(4) Non-standard Emu-version. It is not possible to insert the keys.

(5) Non-standard Emu-version. It is not possible to insert keys. It is possible to insert keys in NTSC versions and 300S (menu mode: 5000/4000)

Types of Files

AB IPBox 200S/ 250S PVR / 350PRIME

Serial_kernel_root - a software without database – update through RS232. It can be updated only if there was used software with equal version of database in the receiver.

Serial_db - a database - update through RS232. To update a new version of software to receiver with older version of database you must update db after updating kernel without restarting the receiver.

Serial_kernel_root_db - kernel with database - update through RS232.

Serial_all_noboot - kernel with database – update through RS232.

Serial_welcome - installs welcome logo. Update through RS232.

Serial_uboot - a bootloader. Install only if any problem with software installation occurs.

AB IPBox 200S / 250S PVR/ 350PRIME / 400S

usb_kernel_root - a software without database – update through USB or netupgrade. It can be updated only if there was used software with equal version of database in the receiver.

usb_db - a database - update through USB or netupgrade. To update a new version of software to receiver with older version of database you must update db after updating kernel without restarting the receiver.

usb_kernel_root_db - kernel with database - update through USB, LAN or netupgrade.

usb_all_noboot - kernel with database – update through USB or netupgrade.

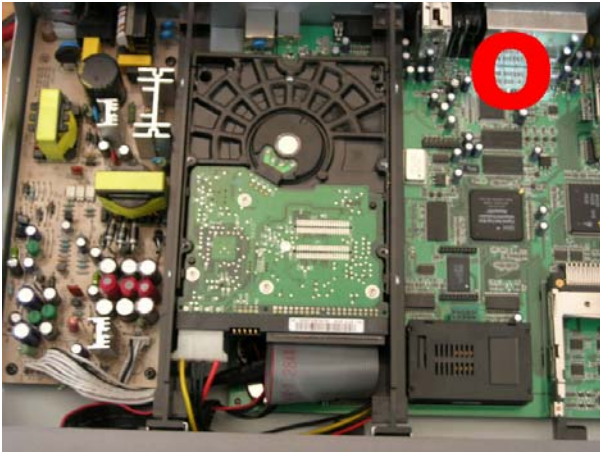
usb_welcome - file, which install welcome logo. Update through USB or netupgrade.

usb_uboot - a bootloader. Not to be installed, it is used when there is a trouble with software installation.

Usage and abilities of HDD in AB IPBox 400S / 422S / 250S PVR / 350PRIME

AB IPBox 400S HDD Installation

PVR supports unlimited HDD size. We recommend 3,5" AV HDD / 7200 revs. There is a complete mounting package supplied with receiver. Correct installation is shown on the left picture.



AB IPBox 250S PVR and 350PRIME HDD Installation

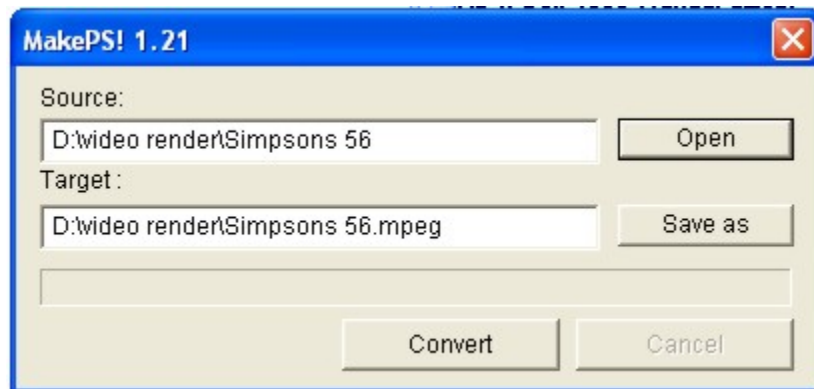
These receivers support 2,5" and 3,5" HDD with no size limitation. Manufacturer recommends to use 2,5" HDD with mounting case because of lower noise level and better cooling.



Video adjustment for recording on DVD

You can find your records in var/media /video or home/relook/media/video directory on HDD of the receiver. Use ftp connection to copy files without any extension. Files with .index extension are used by the receiver and it is not necessary to copy them.

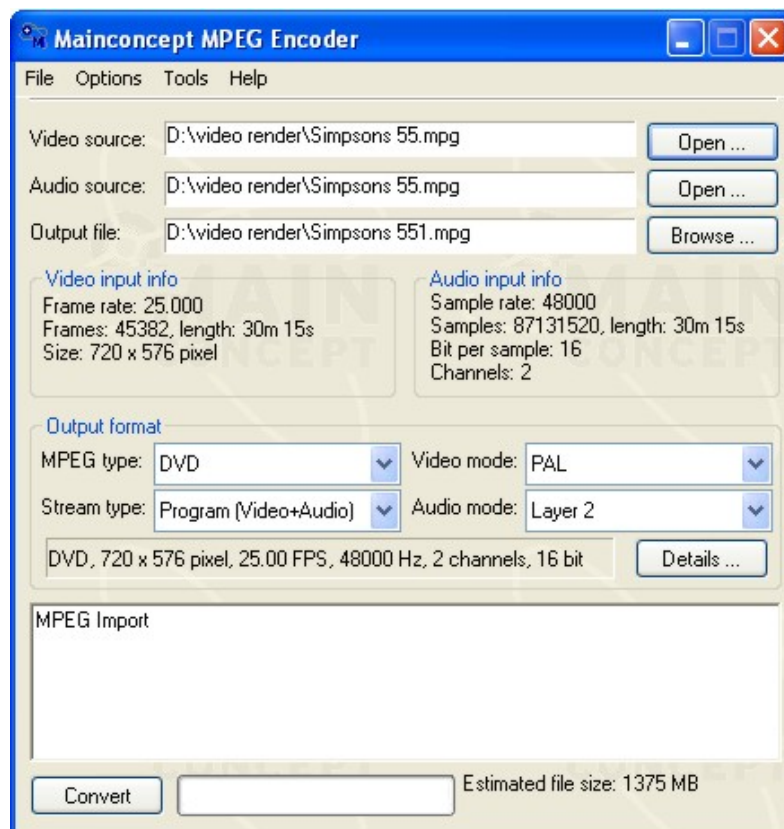
Run **MakePS xxx** sw and open the record. Then select „**convert**“.



You have to adjust the file to standard MPEG 2 DVD format by using a MPEG 2 encoder.

You can use Mainconcept Mpeg encoder for example.

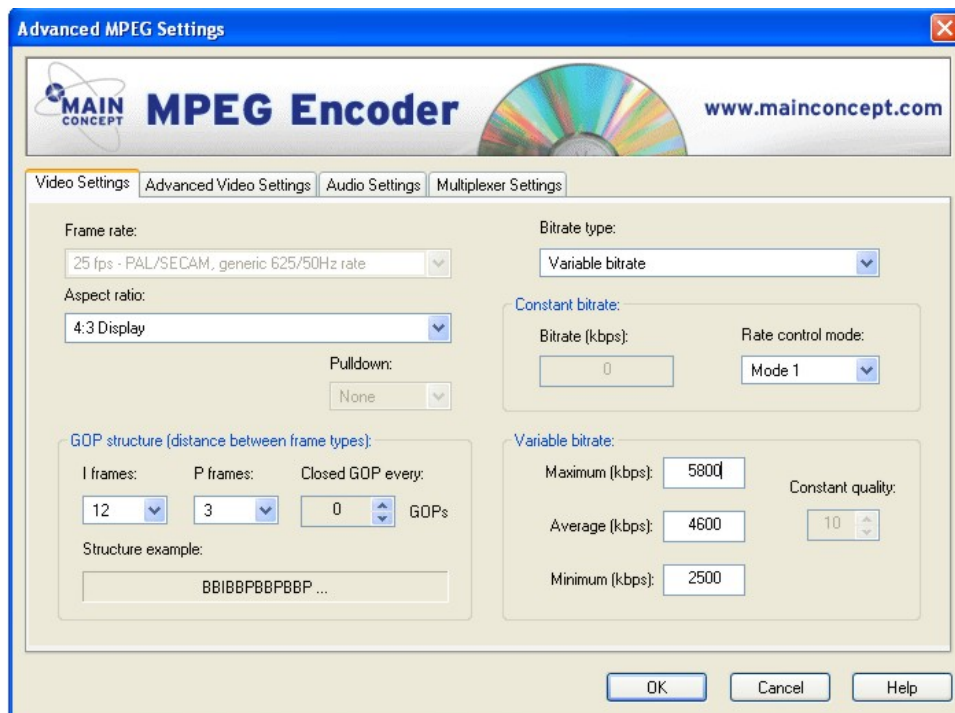
Set DVD profile.



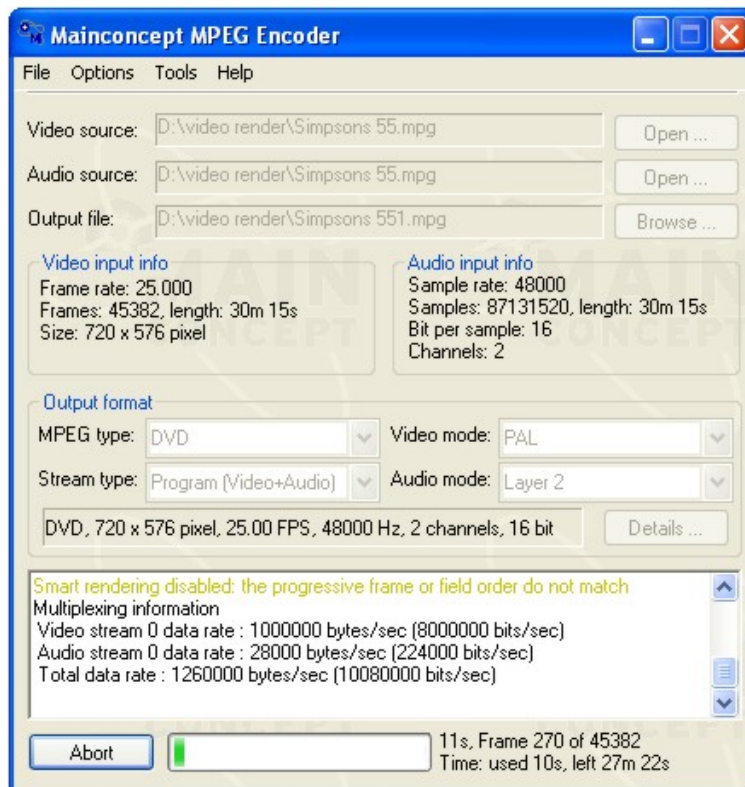
Enter „**details**“ – **field encoding** – select „**top field first**“.



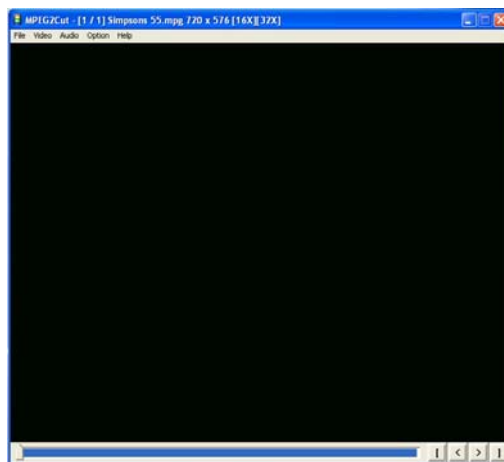
Select „**advanced**“, set „**variable bitrate**“ in Video Settings and set the values (common values: Maximum 5800, average 4600, minimum 2500).



Return to main page and select „**convert**“.



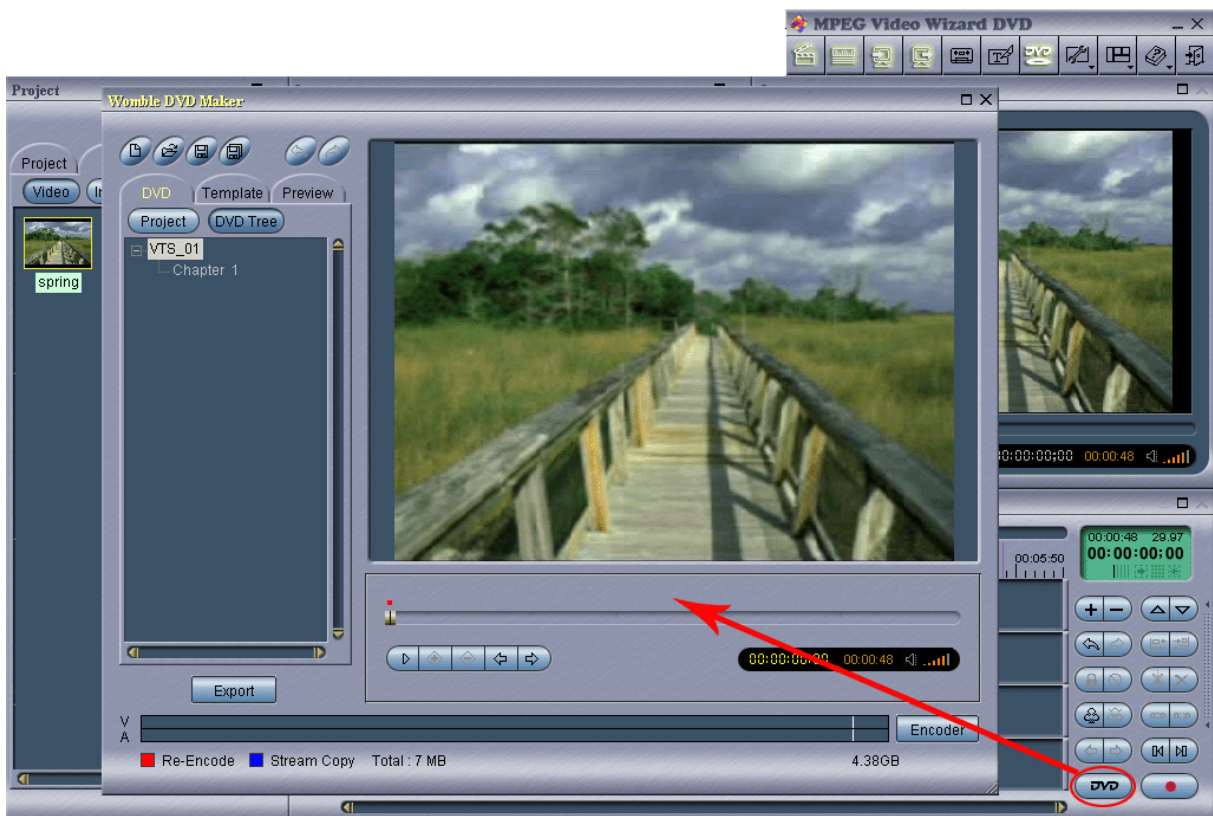
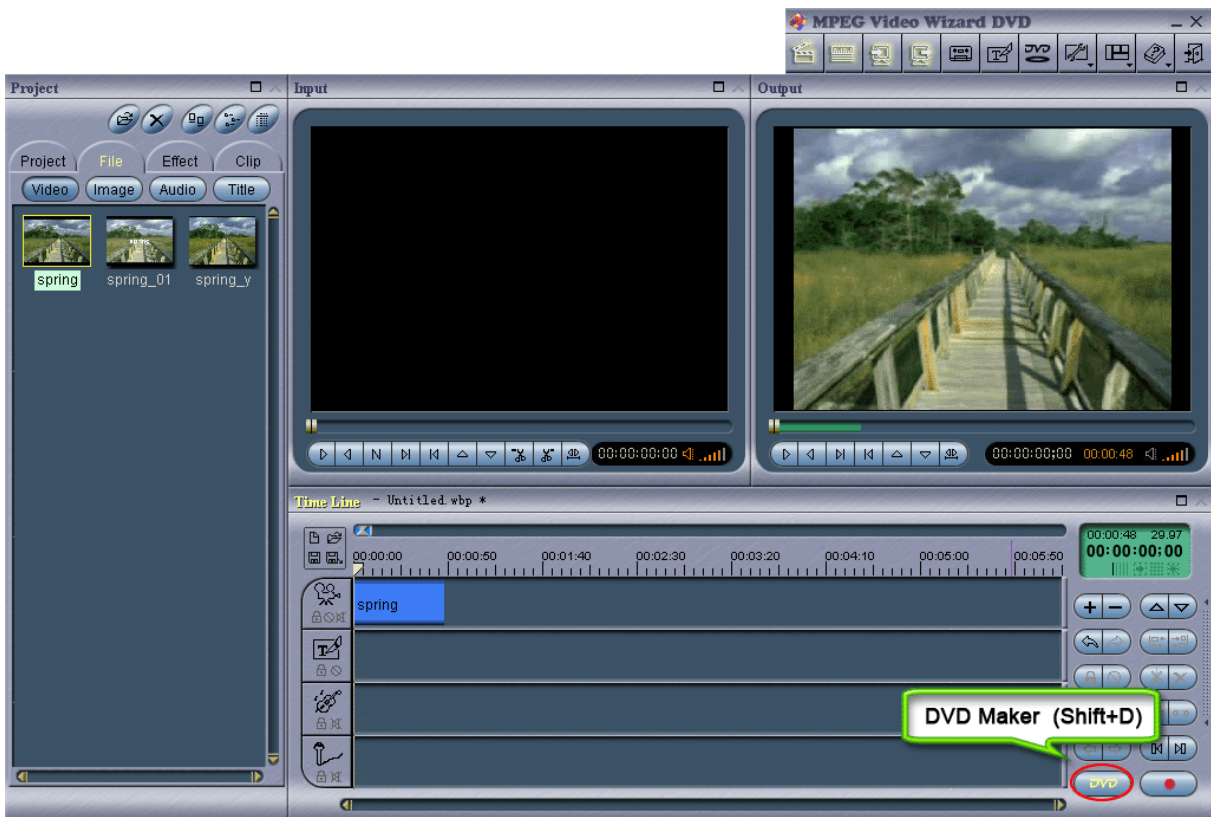
Run **MPEG2cut** sw after converting and adjust length of video.



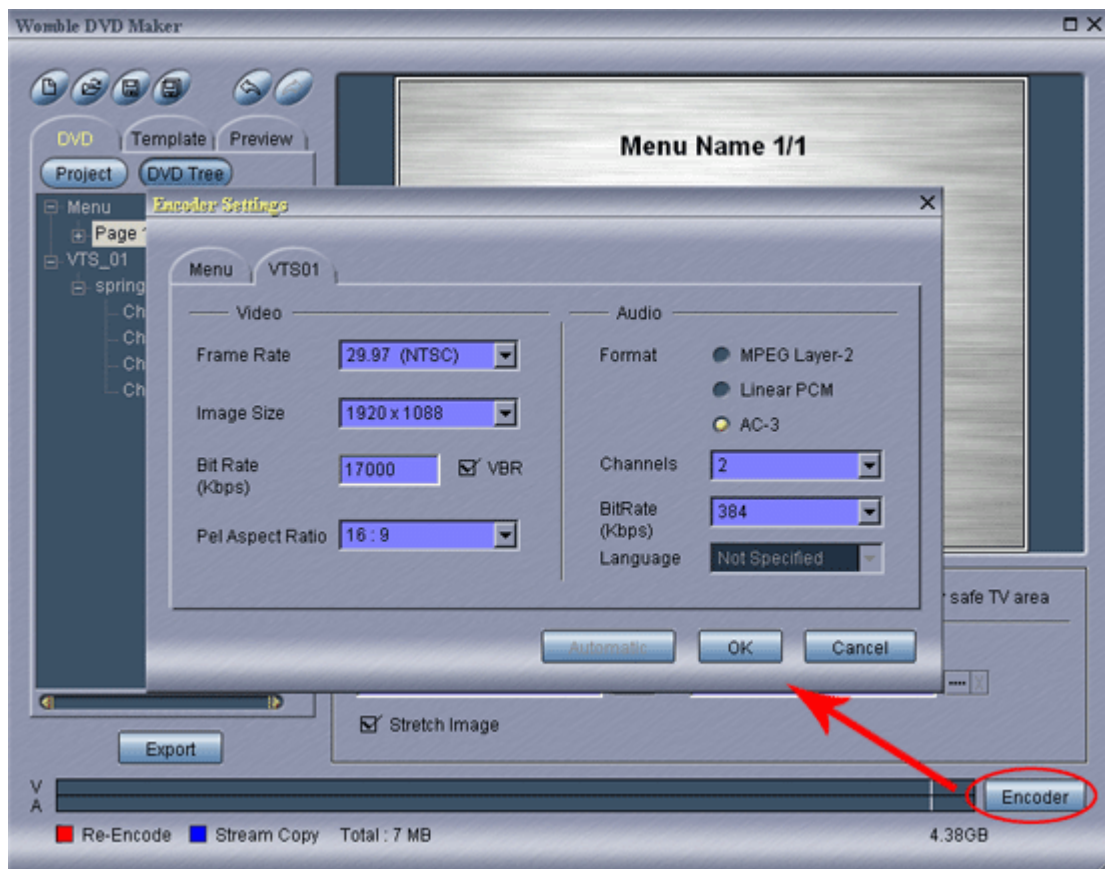
Save the video by selecting „**save this clip**“

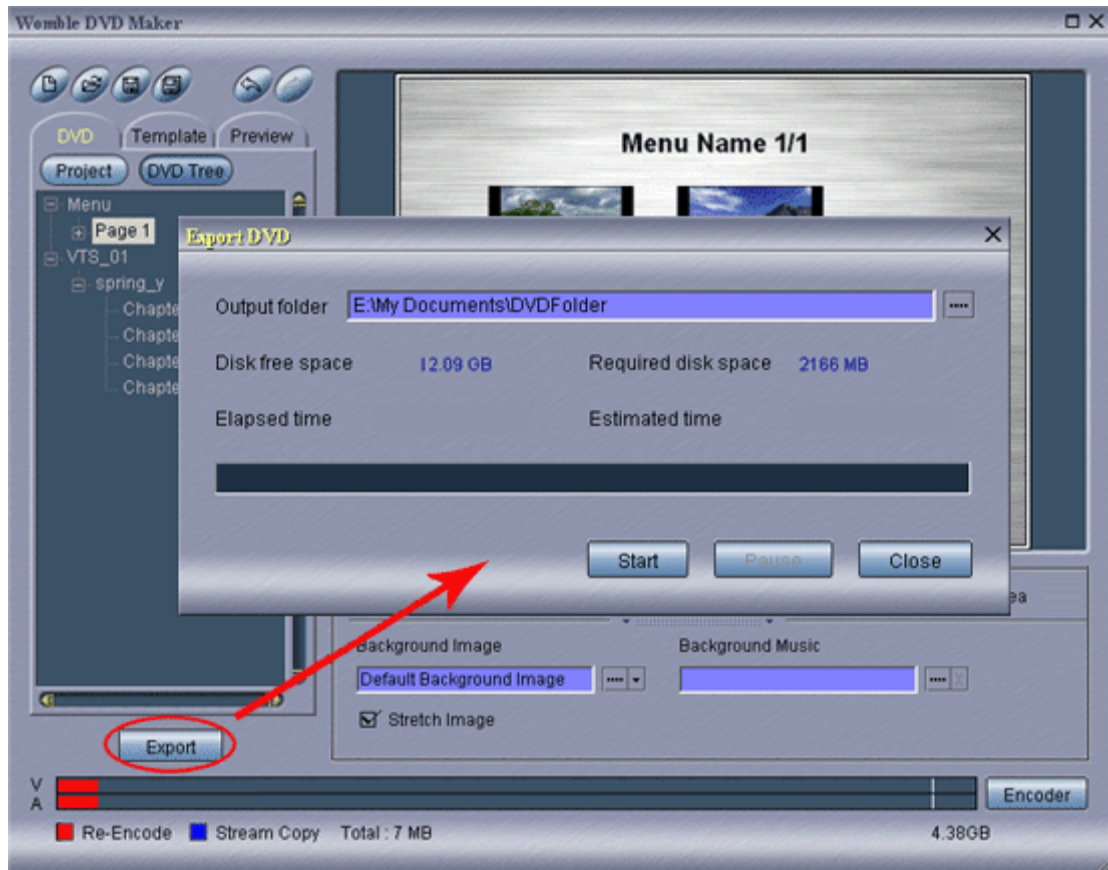
You can use such a video file in all DVD authoring software.

You can also use **MPEG Video wizard** software that enables simple adjustment of video files converted from **Make PS** and making of DVDs.
For more information visit: <http://www.womble.com/>









Picture adjustment for radiobackground

You can use any picture in MPEG2 video format as a radiobackground with 1.24 image or higher. To convert wished picture to MPEG2 use any suitable video editor (Ulead Media Studio Pro, Ulead Video Studio, Pinnacle Video studio, Adobe premiere etc.)

1. Input a picture into time axis wit one frame time length.
2. Select „create video file“
3. Set output format as: MPEG 2, 720x576 , Variable bitrate, max 9500 interlaced , video only
4. Save the video.
5. Change file extension from mpg to mpeg.
6. Copy the file to your receiver.
7. Select concrete picture or slide show in „User setting„ menu. Settings become valid after switching receiver from TV mode to RADIO mode.

Motor setup for AB IPBox 200S / 250S PVR / 350PRIME-S /400S / 422S receivers

We recommend **STAB HH90/100/120** and **SM3D12K** motors for these models of receivers.

AB IPBox receivers support **automatic control of motor** in STAB/USALS mode. Make *Factory setting* before setting of DiSEqC switch: **Menu – Factory setting – OK**.

1. **Menu – System setting - LNB setting**

/for 400S: **Connection** – select **Separated** if you use single dish for each tuner or **Loop through** if you use this type of connection/ set up **Number of LNBS** according the number of satellites you want to receive (whenever later you can add another satellites).

Select particular satellites according the **Satellite Name** and confirm them by pressing **OK** button.

You can also change TP frequency of checking transponder (useful for checking of received signal)

/for 400S: if you use 2 separate dishes with motors you can copy **Tuner 1** setting to **Tuner 2** by using Blue button/

2. **Menu – System setting – USALS setting**

/for 400S: if you use 1 dish with motor select **Tuner 1/** Select particular satellites according the **Satellite Name** and for each of them select **Activate** in **DiSEqC 1.3 (USALS)** window.

/for 400S: if you use 2 separate dishes with motors you have to activate USALS also for **Tuner 2/**

3. Enter longitude and latitude of receiving place (town) into **My longitude, My latitude** fields (in some versions of image after pressing green button).

Note: You can find out your longitude and latitude from the map, with help of GPS, or visit our web site www.abcom.sk – Support section – „Geographic coordinates for USALS“ – select your country and enter your place/town (no diacritics).

4. **Menu – System setting – Channel searching** select searching method and start scanning. Receiver will point the dish on selected satellite automatically and will start searching for programs.

Note: If receiver is unable to find some of selected satellites (if desired satellite is in operating range of your motor) please check adjustment of your antenna.

Warning: Do not use manual turning of your satellite dish by using the buttons on your RC. For manual control of motor use Menu – System setting – DiSEqC 1.2.

DiSEqC switch setting for AB IPBox 200S / 250S PVR / 350PRIME-S / 400S / 422S.

Set in **Menu – System Setup - LNB Setting** - number of LNBs according the number of satellites you want receive (you can add another satellites later on).

(only for **400S** : Set **Connection**: **separated** if you use separate antenna for every tuner or **Loop through** if you use Loop through connection).

Set particular parameters and confirm by **OK** button:

Enter name of satellite (**SAT name**).

LNB Type – set „Universal“ unless you use special type of LNB.

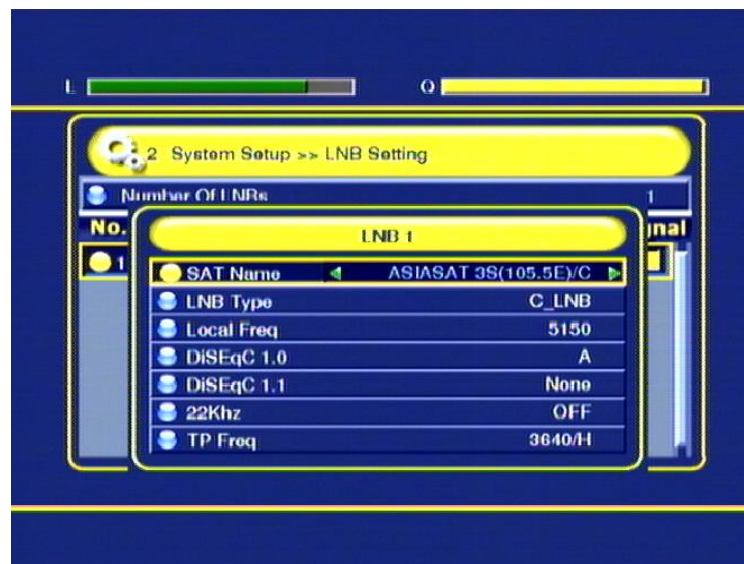
Local freq.- this parameter is preset for every individual LNB. Do not change it if you do not have a special reason.

Setting of DiSEqC switch:

If you use switch with maximum 4 inputs set A, B, C, D for 1, 2, 3, 4 inputs.

If you use switch with more than 4 inputs, e.g. S.168 with 8 inputs, set configuration as below:

Input number of DiSEqC switch	DiSEqC 1.0	DiSEqC 1.1
1	A	A
2	B	A
3	C	A
4	D	A
5	A	B
6	B	B
7	C	B
8	D	B



You can change TP frequency in this window (useful for checking of quality of reception)

(Only for 400S: if you use 2 separate satellite dishes with motors you can copy all **Tuner 1** settings into **Tuner 2** settings by using Blue button.)

FAQ, tips and tricks

1.

Problem (all): Receiver does not boot system after updating new software via Flash Tools, PANIC message appears.

Reason: Incompatible version of database and main software.

Solution: Make software update via Flash Tools through RS232 (200S, 250S PVR) or USB (400S) again. Use **all_noboot** or **db + kernel_root** software version.

2.

Problem (all): Receiver does not boot system after updating new software via PC Editor, PANIC message appears.

Reason: Incompatible version of database and main software. You may have downloaded „kernel root“ file that is incompatible with original database. You must download only compatible version of „kernel root“ file. To avoid such a problem always download only „all_noboot“ or „all“ files through PC Editor.

Solution: Make new software update via Flash Tools through RS232 (200S, 250S PVR) or USB (400S). Use **all_noboot** or **db + kernel_root** software version.

3.

Problem (200S, 400S): There was Enigma image in my receiver. Receiver does not boot system after updating new standard software, PANIC message appears.

Reason: Incompatible version of bootloader.

Solution: Download new „uboot“ bootloader file through Flash tools first. Do not restart your receiver. Then download „kernel_root+db“, „ all“ or „all_noboot“ image files.

4.

Problem (400S with installed HDD): There was Enigma or one of older standard images in the receiver. Receiver does not boot system after updating new standard software, PANIC message appears. Problem persists even after downloading new bootloader.

Reason: Problem in copying data into HDD. Incompatible version of bootloader or database on HDD.

Solution: Download new „uboot“ bootloader file through Flash tools first. Do not restart your receiver. Then download „kernel_root+db“, „ all“ or „all_noboot“ image files. Press Down arrow button on front panel immediately after restart of your receiver. Formatting of HDD starts (all data on your HDD will be lost).

5.

Problem (400S with installed HDD): It is impossible to change channel after starting of recording. All channels in list are grey highlighted.

Reason: There is not Tuner No.2 configured in LNB Configuration menu.

Solution:

1. If you use Single LNB converters with one output (there is only one cable leading from antenna to receiver) connect output of Tuner 1 (LOOP – lower connector) with input of Tuner 2 by short cable. Set *Loop Through* in LNB Configuration – Connection menu. In this case you can record/watch another channel, but only on the same transponder (e.g. SlovakLink – you can watch/record Markíza during watching STV1).
2. If you use Twin LNB converters with two outputs or two separate antenna dishes, connect one output to Tuner 1 and another one to Tuner 2. Set *Separated* in LNB Configuration – Connection menu. If you use two same antennas (or Twin converters on one antenna dish) you can copy Tuner 1 settings into Tuner 2 and vice versa. In this case you can record/watch another channel from any transponder or satellite.

6.

Problem (all):

1. Decoding from cards or from sharing does not work even after several EMU restarts. (in case of correct configuration).
2. It is not possible to control receiver by RC or there is long time delay between command and reaction.
3. There is PANIC message on display. It is not possible to turn off receiver.

Reason: Software error.

Solution: Restart your receiver. Simultaneously press Standby and OK button on front panel.

7.

Problem (400S / 250SPVR with installed HDD): After you had deleted one or several records from HDD free space on your HDD did not change.

Reason: You have to turn off your receiver to definite deleting.

Solution: Turn off your receiver into Standby mode and turn it on.

8.

Problem (all): Error message window appears shortly after selecting Update in Network update menu.

Reason:

1. Incorrect setting of network connection.
2. You set Auto mode in Network update menu. Most of servers support just Manual mode.

Solution:

1. Check setting of network connection in IP Configuration menu.
2. Set „Manual“ mode in Network update menu.

9.

Problem (400S):

1. Receiver spontaneously turns itself on after turning off.
2. There is not time memory after turning off power supply.

Reason: Wrong backup battery.

Reason: Contact authorized service or change backup battery on your own (may cause lost of warranty).

AB Enigma software

There was a new software AB Enigma released for AB IPBox receivers, that is planned to be the only official operating software for all AB IPBox-es except for AB IPBox 422S.

Enigma software originated from Enigma software for Dreambox receivers. Main advantage of this software is its stability, quick reactions and great amount of existing addons.

AB Enigma is supplied just as a official software without support for card readers and Emulators.

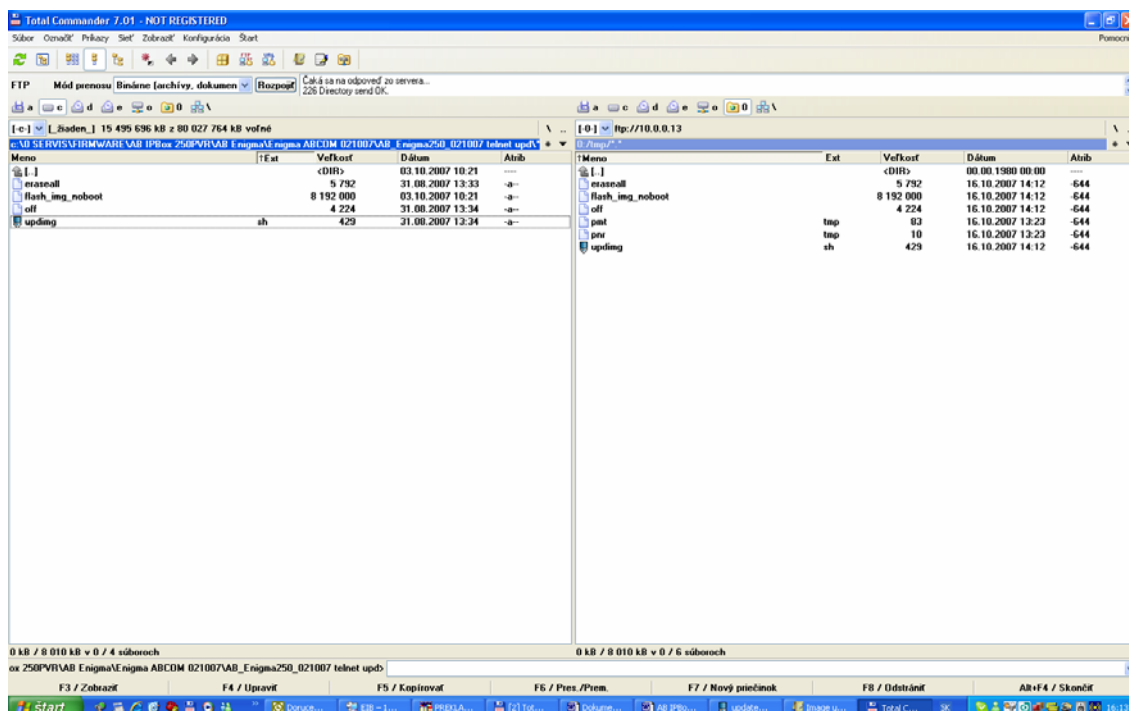
There is all_in_one panel available that enables installation of components for activating card readers and brings advanced functions.

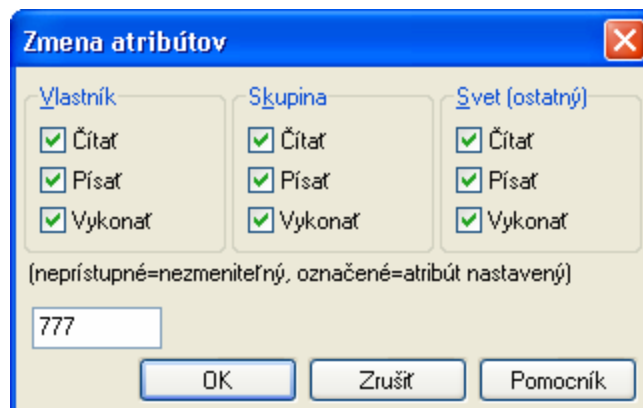
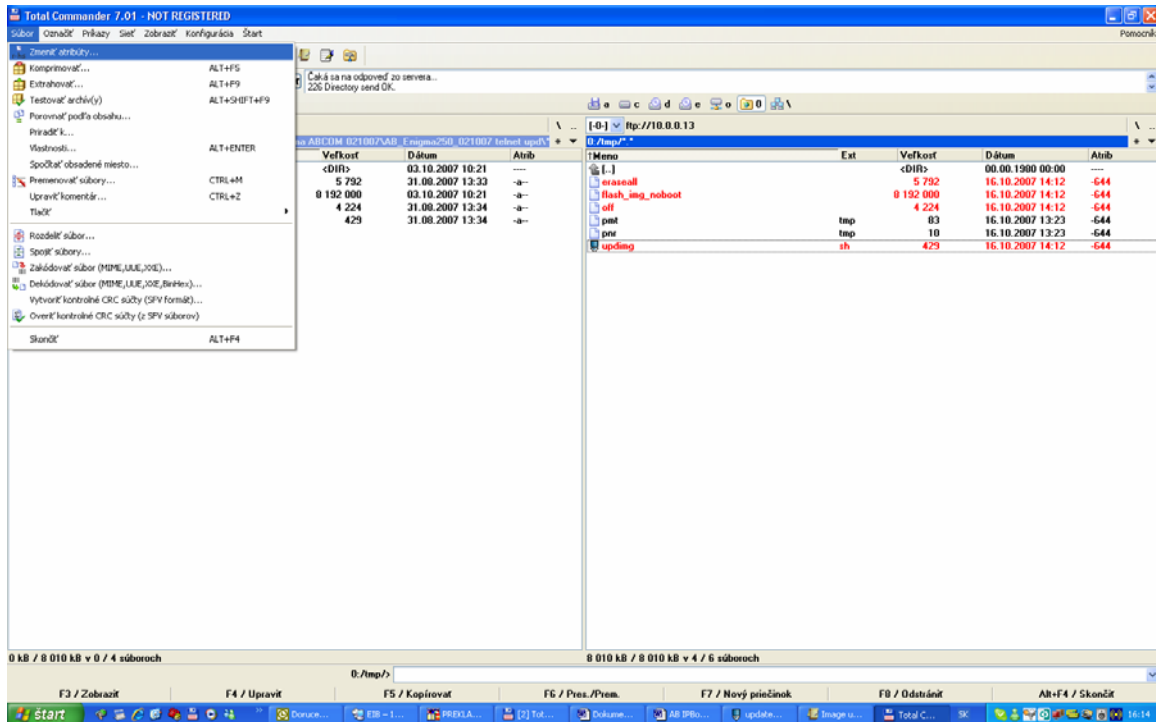
There are four ways of installation AB Enigma: via Flash Tools, Serial or USB cable and by Telnet Update (not for 200S).

If you are going to install AB Enigma software released after 1st October 2007 (011007) or newer into a receiver with older Enigma or ORG software always use „serial_all“ (usb_all u 400S) installation files or use telnet update (see next) and then download „serial_uboot“ file via serial port.

Installation via telnet update:

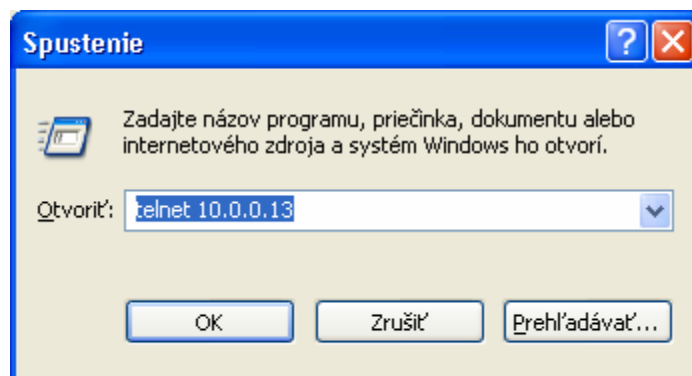
1. Set up IP in a box; connect to a box via ftp (see previous chapters).
2. Copy "eraseall", "flash_img_noboot", "upding.sh" and "off" files into /tmp.



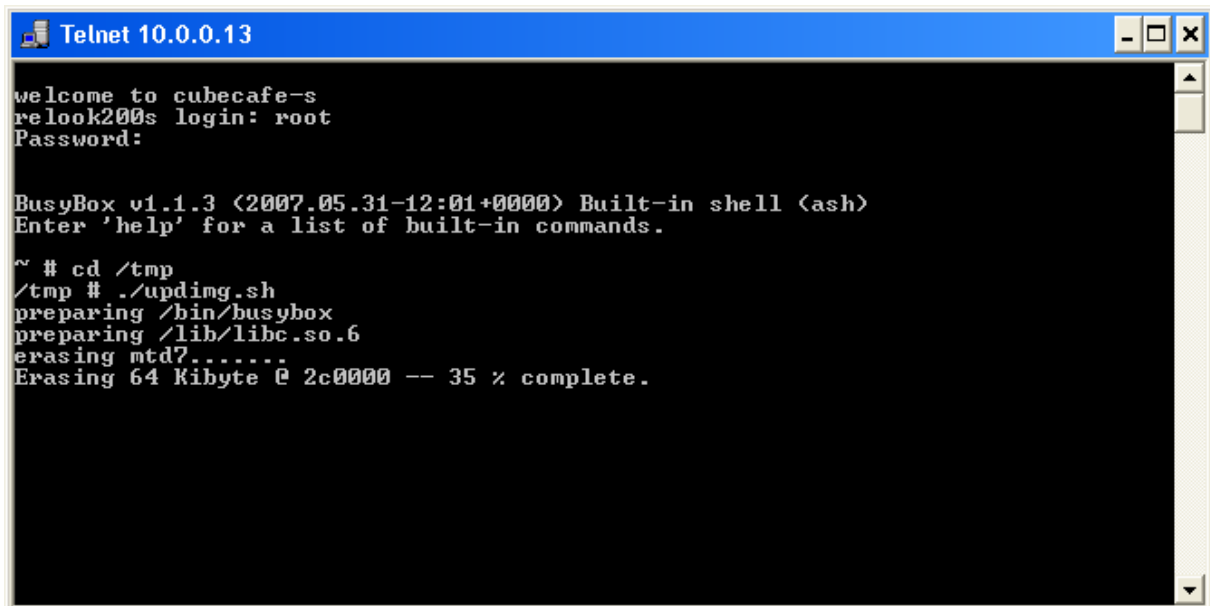


3. Set attributes for all files in receiver ("eraseall", "flash_img_noboot", "updimg.sh", "off") as **777**.

4. Connect to box through PC via telnet: START_Run_(telnet ip-address-of-box)



5. Enter name and password (**root, relook** or **root,ipbox** (for older version of AB Enigma)) after login in.
6. Write down **cd /tmp** command (use exact syntax) and press **ENTER** to change directory.
7. Run script by using **./updimg.sh** command + ENTER.



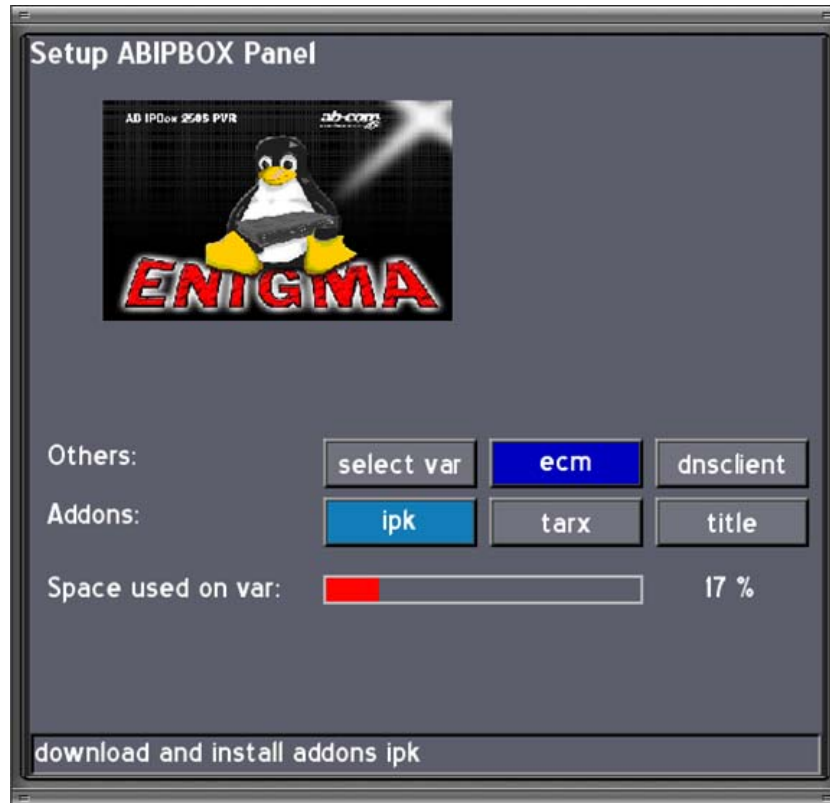
```
Telnet 10.0.0.13
welcome to cubecafe-s
relook200s login: root
Password:

BusyBox v1.1.3 (2007.05.31-12:01+0000) Built-in shell (ash)
Enter 'help' for a list of built-in commands.

~ # cd /tmp
/tmp # ./updimg.sh
preparing /bin/busybox
preparing /lib/libc.so.6
erasing mtd7.....
Erasing 64 Kibyte @ 2c0000 -- 35 % complete.
```

8. Wait until "**reboot now**" message appears. Press **Standby + OK** at the same time to turn off your receiver. Press **Standby** again, the receiver will start booting of AB Enigma.





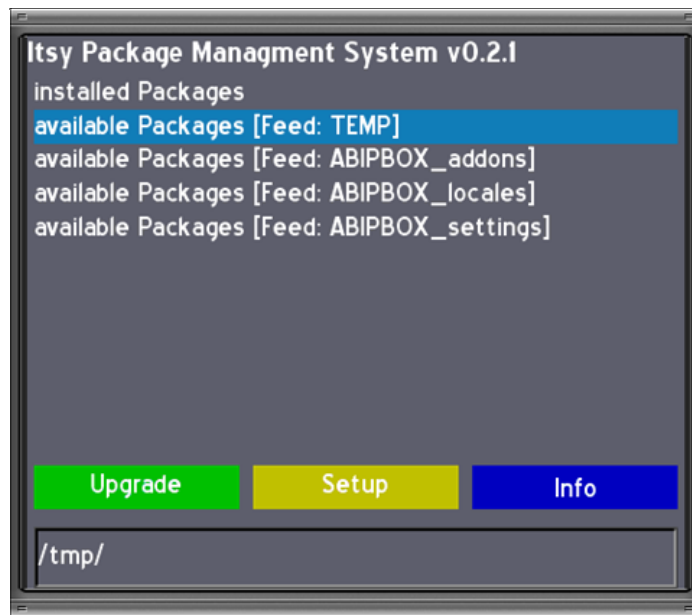
Press blue function button after installation of AB Enigma to get into All_in_one panel. This panel enables downloading of addons and from ABCOM server via IPK menu.

You have to install all_in_one panel by SF Team to enable support of card readers and EMU.

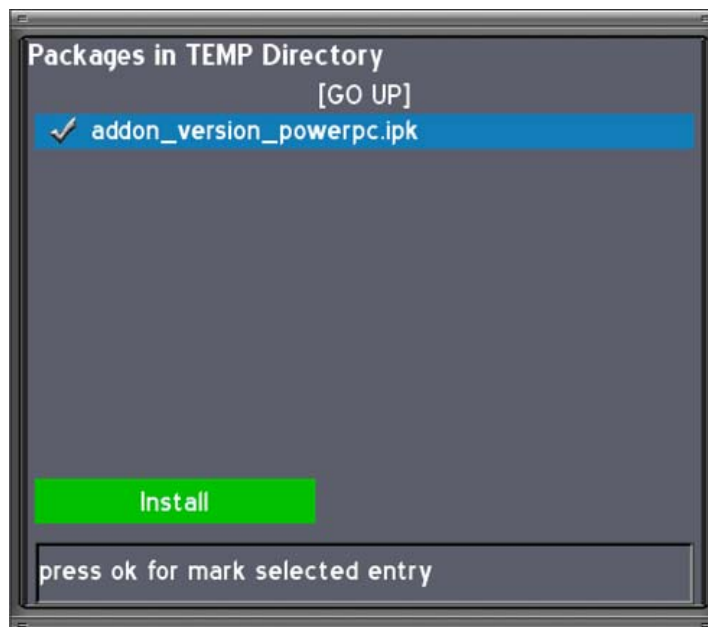
Warning: If you have installed a new version of AB Enigma (011007 or newer) and your receiver does not boot system turn off the receiver by pressing Standby + OK button at the same time. Connect the receiver to PC and press and hold Standby button until SerI (usb upgrade in 400S) message appears. Run Flash tools and download „serial_uboot ver1.2“ file into your receiver. Press Standby and restart the receiver.

Installation of All in one panel:

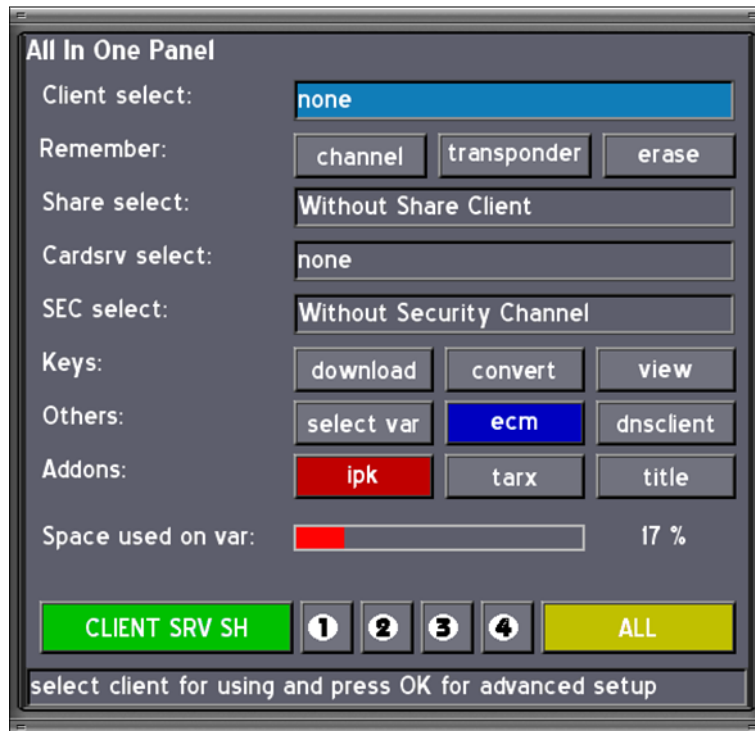
1. Connect to receiver via ftp – use **root/ipbox** for name/password.
2. Copy „**addon version powerpc.ipk**“ file into **/tmp** directory (always use the latest version) .
3. Press blue button, then red button to get into list of available packages.



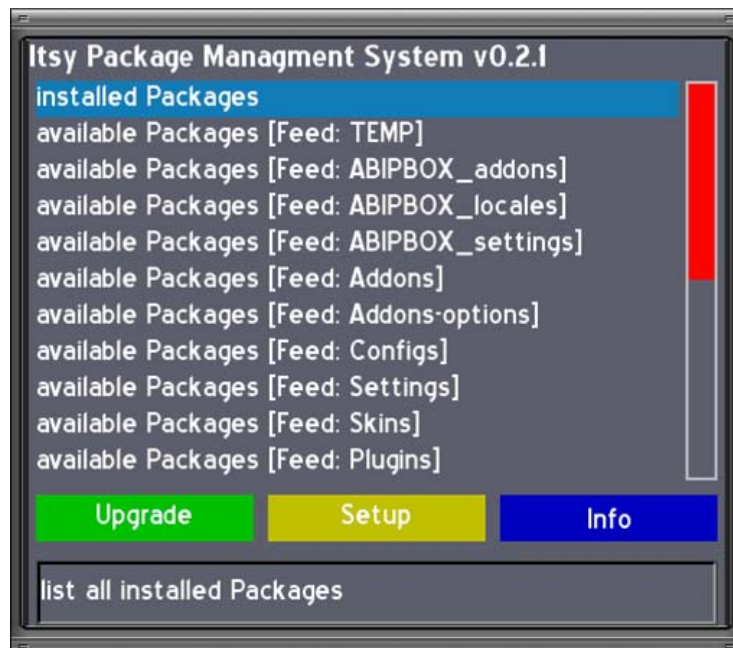
4. Select **Feed:Temp**, you will see installation file you copy there. Mark it a start installation by pressing green function button.



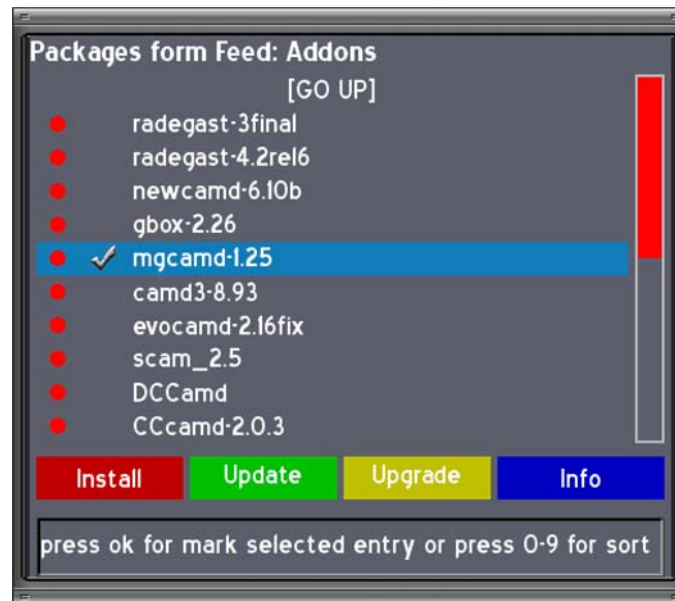
5. The receiver should reboot automatically after finishing the installation.
6. Press blue function button to get into extended all in one panel.



7. Press red function button to enter IPK (menu for download of addons).



8. Select Feed:Addons , press green function button for update of the list.

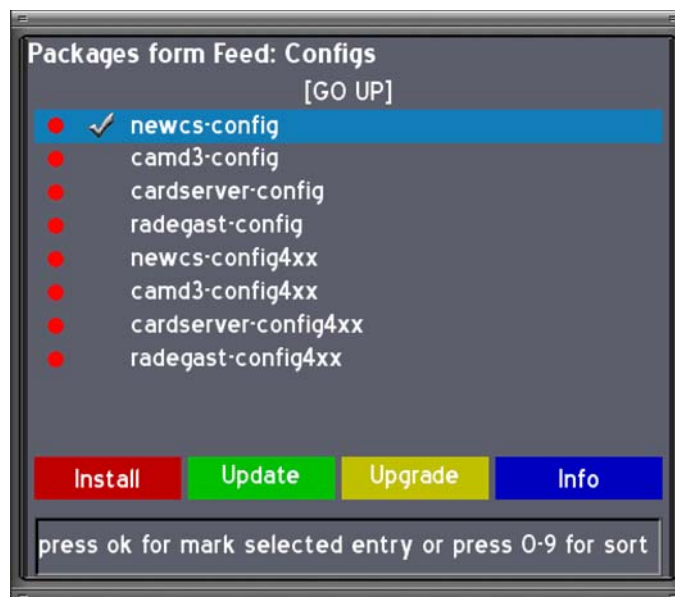
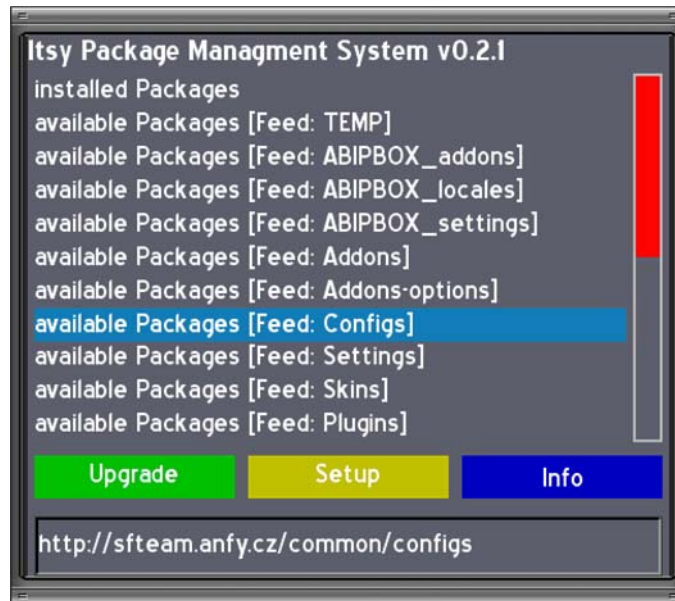


9. Select „mgcamd xx“ file for downloading (or another EMU addon) and press red function button to start automatic installation.

10. The same way install a „newcsxxx“ addon.

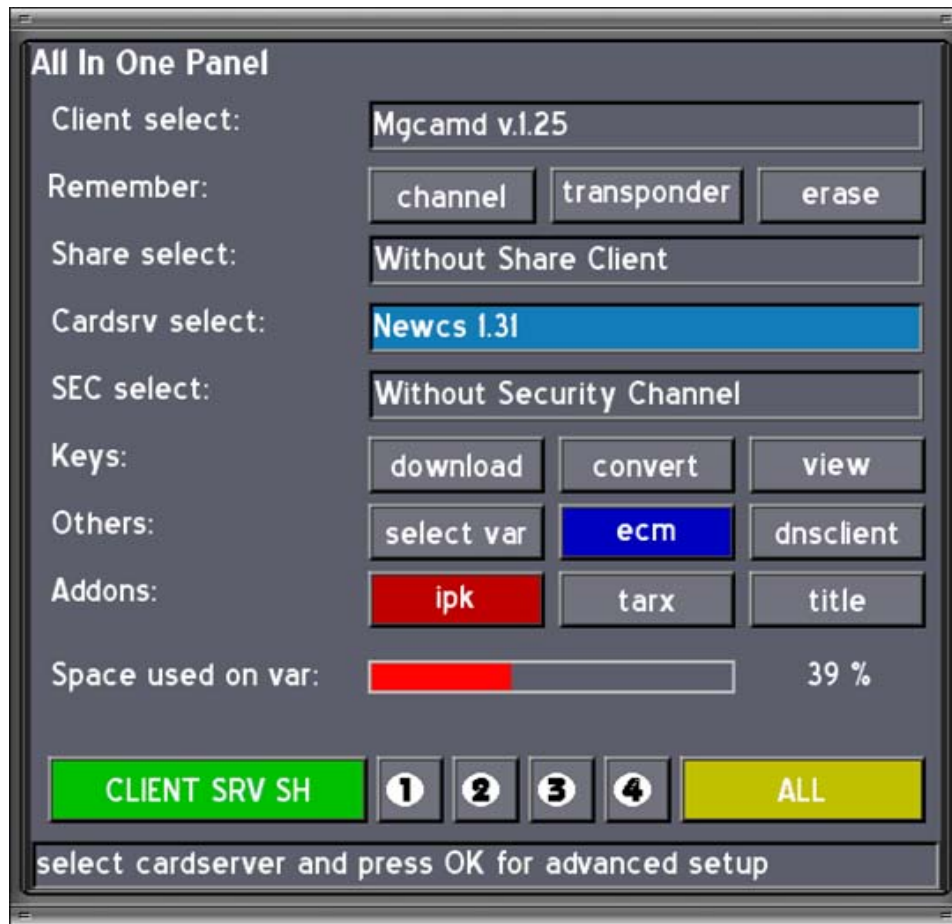


11. Press Exit button to return to the list of available files for download. Select Feed:Configs , press green function button for update of the list.



12. Select configuration file for your installed EMU (newcs-config in this case (for AB IPBox 4xx select newcs-config4xx)) and press red function button to start automatic installation.

13. Press Exit button to return to the all in one panel.



14. Move cursor to "Client select" and "Cardsrv select" and select installed EMU by using Left/Right buttons.

15. Press green function button to leave the menu and run EMU.

16. Receiver should be functional with support of cards.

If you want to configure cooperation with other receivers, find configuration files in **var/tuxbox/config** directory. Use **newcs.xml** for server and **wcamd.conf** for client.

Configuration setting is the same like in HL software (see previous).

Recommended versions of AB Enigma

We recommend to use **AB Enigma 021007** or newer for **AB IPBox 250S PVR / 4xxS** and **AB Enigma 031007** or newer for **AB IPBox 350Prime**.

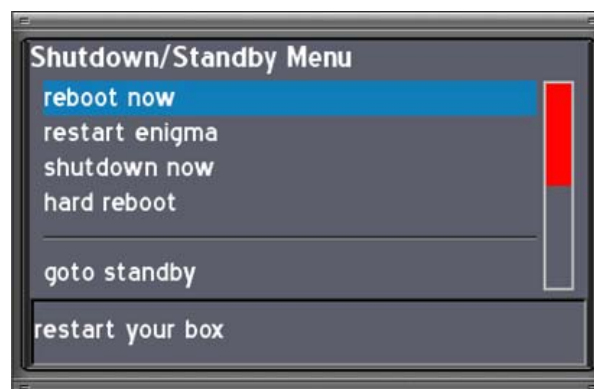
Remote Control logic has been adjusted to original AB IPBox RCs in these versions.

Also some software defects have been fixed and new functions added:

- fixed problems with Dual audio tracks
- solved incorrect operation of AB IPBox 400S with CA Cryptoworks modules
- optimized cooperation with EMU
- added new skins and settings opportunities
- added support for other USB devices for 350PRIME
- optimized default user settings

AB Enigma is supplied with preset user settings and except for AB IPBox 350Prime even with settings for connection with DiSEqC switch for three satellites: ASTRA 19,2E – AA(1), Hotbird 13E – AB(2), ASTRA 23,5E – BA(3). If you use such a connection your receiver is ready to operate just after installation (except for cooperation with cards).

There is not preset setting in **AB IPBox 350Prime** because of its plug and play architecture that enables usage of different kind of tuners. Configure your antenna after installation and search at least one TP (frequency). Then press and hold Standby button, Shutdown menu appears. Select „reboot now“ item to save configuration setting of your antenna. Setting is ready to be loaded after turning on the receiver.



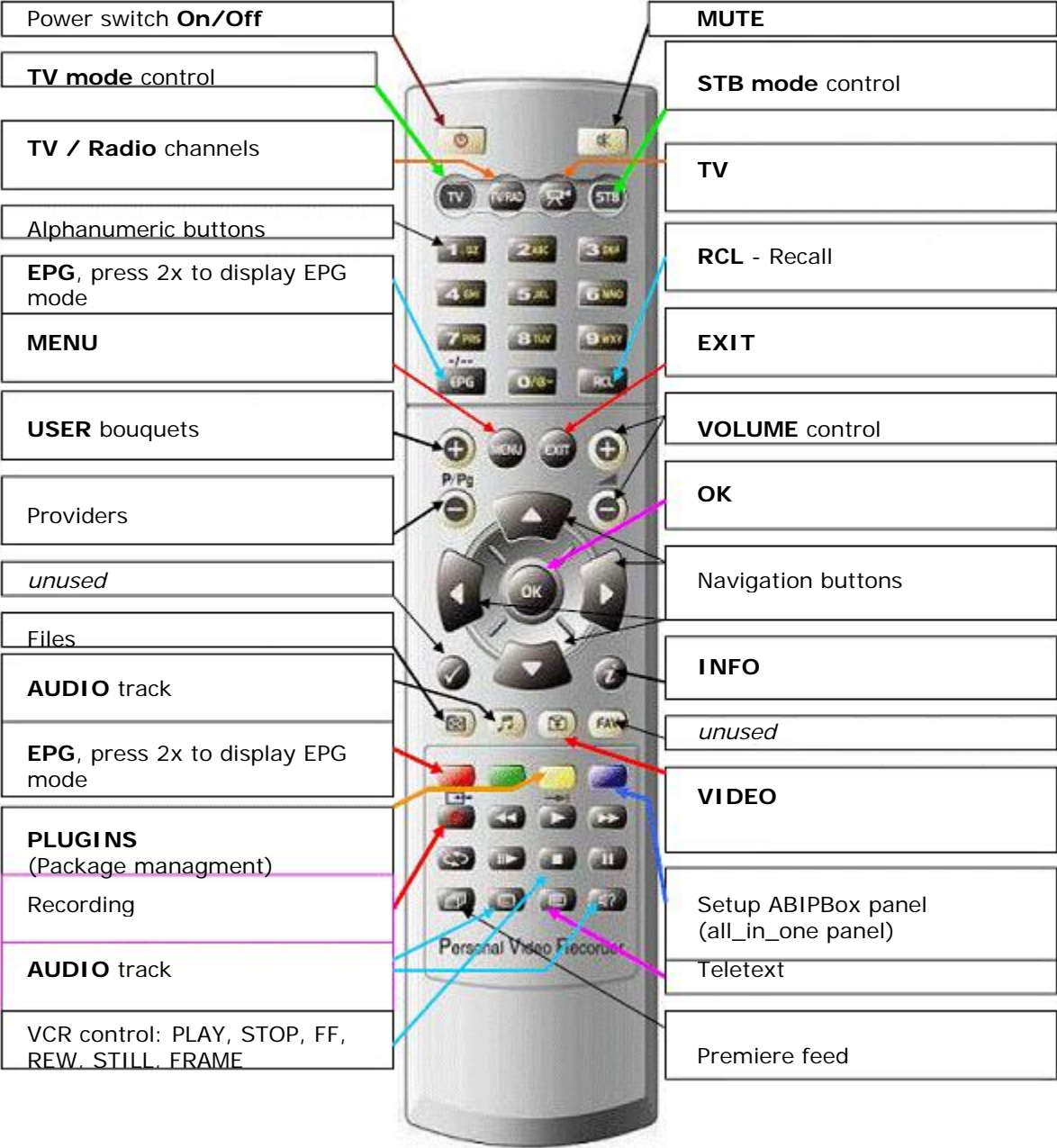
We recommend to use **AB Enigma 091007** or newer for **AB IPBox 200S**.

In this version of image user settings have been optimized and have been adjusted the size of clusters. External card readers, usage of GPRS modems, EMU Gbox and Radegast are supported in this version.

Basic features of AB IPBox models

AB IPBox	422S	420S	200S	250S PVR	350PRIME
Tuners	2	1	1	1	1
Exchangeable tuners	x	x	x	x	yes
Card readers	2	2	1	1	1
CA slots	2	2	x	x	x
LAN	yes	yes	yes	yes	yes
RS232	yes	yes	yes	yes	yes
RF modulator	yes	yes	yes	x	x
SCART	2	2	2	2	2
USB	ver.1.1	ver.1.1	x	x	ver.1.1
S/PDIF optical	yes	yes	yes	yes	yes
Power switch	yes	yes	x	x	yes
Display	alphanumeric VFD	alphanumeric VFD	LED 4-digits	LED 4-digits	LED 4-digits
Channels max.	10 000	10 000	4 000	10 000	10 000
HDD support	IDE 3.5"	IDE 3.5"	x	IDE 3.5",2.5"	IDE 3.5",2.5"
DVB-S	yes	yes	yes	yes	yes
DVB-C	x	x	x	x	yes*
DVB-T	x	x	x	x	yes*
* - exchangeable plug & play tuner					

AB IPBox with AB Enigma 021007 or newer firmware Remote Control – IPBox setting



Interesting links

<http://www.satupdate.net>

<http://www.download.abcom.sk>

<http://www.ab-forum.info>

<http://www.altsat.be/engels.htm>

<http://satelite.center.sk>

<http://www.satelitforum.com>

<http://www.relookusers.com>

<http://relook.actifforum.com/>

<http://www.dreamx.tv/ipbox/novinky.php>

<http://www.codeman2001.be/codeman/>

<http://www.dreamboxworld.com/dbw/main.htm>

<http://www.fantacyteam.com/>

<http://crypto.ws>

<http://www.satellites.co.uk/>

<http://www.denktenk.com/>

<http://www.dgs-relook-fan.be/blog/>

http://www.oozoon.de/main_fr.html

<http://www.dreamboxworld.com>

<http://ipbox.com.ua>

IPBox team 😊