

# SetEditNAV for Echostar D1200/2200 DVR5000/7000

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# 1 General

SetEditNAV is a program to change the settings (program sequence, names of channels etc.) of the Echostar D1200/2200 DVR5000/7000 digital satellite receivers.

You can easily make your own channel lists, edit them, print them and write them into your receiver. You can enter new channels or new transponders, edit, delete and save them, change the names of channels, sort, search, copy and paste channels.

With SetEdit you can edit settings of different receivers, exchange channels between settings files of different receivers or convert a settings file of one format into another (e.g. SetEditDVB2000 into SetEditNAV). If you have other receivers you can add new "modules".

The settings are read from the receiver and written into the receiver via the RS232 interface with a null modem cable.

With this program you can't change the receiver firmware; to do this, please use the tools you can find on the Echostar homepage.

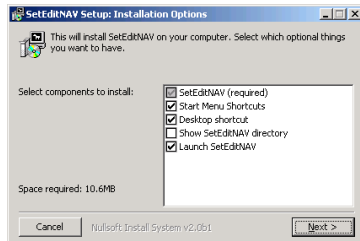
In the following guide you will find a step by step description of how to use this program. In the other chapters there is a short description of all functions divided in file, channel, provider, satellite, transponder and favourite list functions and the configuration.

## 2 Installation

System requirements:

PC with Windows 95/98/ME/NT/2000/XP, one free serial port and 20 MB of free disc space.

If you like to install SetEdit for the first time, please start the file SetEditNAV\_installation\_en.exe.



In this window you can select, if you get in addition to the program a desktop shortcut and an entry in the start menu. Furthermore you can select that after the installation SetEdit is launched and/or the SetEdit directory is shown in the explorer.

When you click on "Next", you can select the installation directory.

The installation contains the program itself, some pictures and a sample settings file.

If you already have a SetEdit version and simply want to upgrade to SetEditNAV, please copy the file SetEditNAV.dll in the existing SetEdit directory.

In your SetEdit directory, you will now find the DLLs that are the modules for the different receiver types.

There are no changes made to the Windows system files.

You will also find the file SetEditNAV.ini in this directory. Your personal configuration is saved in this file.

To uninstall SetEditNAV simply delete all these files.

If you have more than one receiver (with the right DLL modules), you can decide with which type of SetEdit the program should start. You just have to change the name of the exe file. Example: If you start SetEditNAV.exe after the installation of SetEditNAV\_installation\_en.exe the program will start as a EchoNAV editor. If you change the name of the SetEditNAV.exe file into SetEditDVB2000.exe, the program will start as DVB2000 editor. Of course you can open additional SetEditNAV if required.

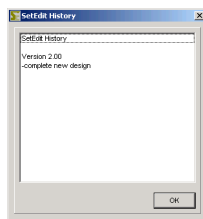
## 3 Step by step

I assume that the program has been installed on your PC as described in chapter 2. Also it is assumed that you are using SetEditNAV for the first time. In the following I will describe how to transfer the settings from the receiver to the PC and back (chapter 3.a and 3.f). By means of examples you will see how to get order in your settings (chapter 3.b), how to use the provider functions (chapter 3.c), how to put channels into the favourite lists (chapter 3.d), how to work with the transponder menu (chapter 3.h), how to enter new channels by hand (chapter 3.h), how to handle the peculiarities of German Premiere World channels (Formula 1, soccer, pay-per-view) (chapter 3.h) how to adjust settings from other sources to your requirements (chapter 3.i and 3.j) and how to convert one settings format into another (chapter 3.j).

### 3.a Load and back up a settings file

Please connect your receiver to the PC with a serial null modem cable (no 1:1 cable).

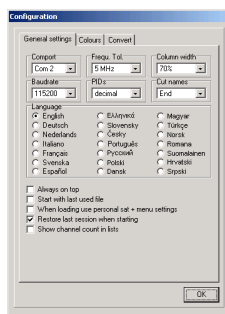
If you start SetEditNAV for the very first time you will get a window with the history of the changes from previous versions.



The first thing you should do is to make a backup of the channel settings in your receiver. You can restore such a backup at any time into your receiver and the receiver will be the same as it was at the time you made the backup.

To do this, you have to enter in the configuration the comport you have used to connect your receiver to the PC. Please click on the button "Config."

You will get the following dialogue:



(Here you find three pages. If you are on the page "Colours" or "Convert", please click on "General settings" to get the menu shown above.)

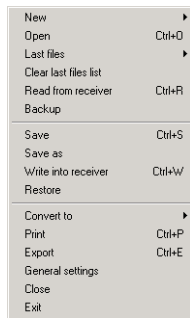
Please enter in the box "Comport" the correct comport.

In the section "Baud rate" you enter the speed for the serial communication.

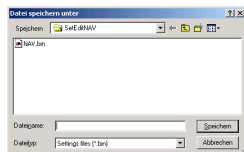
When you have entered these parameters, please click on "OK".

All other options of this menu are explained in chapter 5.b in details.

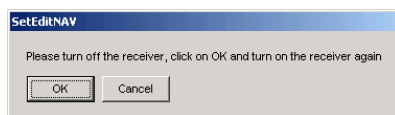
Now click on the button "file". You will get the following menu:



Here you select the function "Backup", you get the following window:



In this window you enter the directory and the filename for your backup. (*Note: the language of this window depends on your windows version, so don't worry if you see German buttons here.*) As soon as you have clicked on "save", the following message will appear:



Now you have to turn off the receiver, click on "OK" in the message above and then switch on the receiver again.

Now the settings are read from the receiver and saved on your hard disc.

If you make some unintentional changes in your settings when you experiment with SetEditNAV you can always restore this backup file into your receiver and reverse any changes.

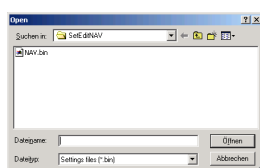
Now it depends on whether you want to change your own receiver settings with this program or if you want to adapt a settings file that you found on the Internet to your own requirements and write it into your receiver (chapter 3.i or 3.j).

If you want to change your own receiver settings please click on the button "File" and select the menu item "Read from receiver". You get the same message you know from the backup function, so continue as described above.

The settings are now transferred from the receiver to the PC, but this time the settings are not saved, but shown in SetEditNAV.

If you want to adapt settings that you found in the Internet to your own requirements and then write them into your receiver, you have to load these settings first. Please click on the button "File", and then select the function "open" from the file menu.

Now please select the file you want to load from the list you see



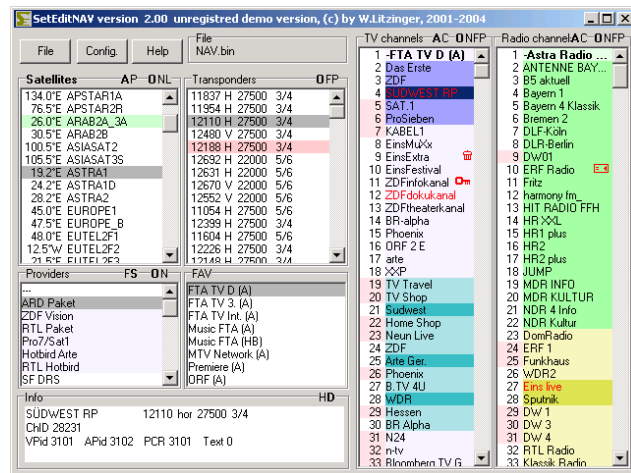
and click on "Open" or double click on the file you want to load.

*Note: If you want to write settings that you have found in the Internet into your receiver, you have to be careful:*

*A settings file does not only contain the channel information, it also includes the general receiver settings (menu language, parental pin, ...), the LNB and the satellite configuration. These configuration settings will usually not fit to your receiver.*

*Therefore you should better overwrite these configuration settings with your own configuration settings (see chapter 3.j or 5.e.)*

When you have loaded a settings file or read the settings from your receiver, you get the following window (depending on the window size and some personal settings the picture may differ).



You see the digital TV channels (light blue background) and the digital radio channels (light green background) as well as a transponder list, a satellite list, a provider list and the favourite lists (FAV).

Some of the SetEditNAV supported receivers have additionally an analogue tuner.

Analogue TV channels have a blue background colour and analogue radio channels are marked with a yellow background.

If you select an item in the satellite list, you will see all channels and all transponders that are assigned to this satellite.

If you select a transponder, provider or a favourite list, you will only see the channels that are assigned to this transponder, provider or this favourite list.

When you select a channel, the satellite, transponder, provider and FAV list (if the channel is in a FAV list) of this channel are marked grey.

Channels that are in a favourite list are marked in the channel list with a darker background colour.

Transponders and providers marked in red are empty; they contain no channels.

If the channel number is marked with a red background colour, the channel is assigned to a vertical polarised transponder. If the channel number has a white background colour, the channel is assigned to a horizontal polarised transponder.

If a satellite has a green background colour, it is activated. You can only watch channels that are on such an activated satellite with your receiver.

(You can change all these marking colours in the configuration menu, see chapter 5.b.)

When you click with the right mouse button in the channel list (TV or radio) and select from the popup menu the entry "Info" you will get the number of TV channels, radio channels and transponders that are in your settings.



### 3.b Arrange settings

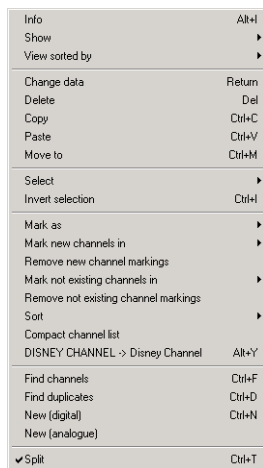
Now you have the settings (from your own receiver or from the Internet) in SetEditNAV.

The most important functions will be explained now in detail with some examples, while in the chapter functions all functions are briefly described.

The most important function of SetEditNAV is to get order in your channel list. This can be by deleting channels you don't need (e.g. channels that are scrambled and you have no subscription for), getting the channels into a useful order, assigning the channels to the favourite lists or the providers and correcting wrong channel settings (e.g. wrong channel names).

First let us suppose that we want to delete a channel. To do this we have to select the channel first. Please click with the mouse on the channel. Then the satellite, the transponder, the provider and the FAV list(s) (if this channel is in a FAV list) of this channel are marked grey in the respective list. Sometimes it is useful to change this colour (similarly for other colours, for example the colours used for new channels (for the import) or duplicate channels), e.g. because the colours are too pale on a laptop. You will find a description how to do this in chapter 5.b.

Now click with the right mouse button in the channel list and open the channel menu:



Please select the item "delete" in this menu and the selected channel will be deleted from your settings.

If you delete a channel within the favourite list, this channel is only removed from the FAV list but not deleted from the main list.

*Note: There is no undo function yet, so be careful.*

To delete a channel, you can also select the channel and then hit the Del key on your keyboard.

To delete multiple channels please click for example on channel 5, then press the shift key and keep it pressed and then click on channel 7. The channels 5 to 7 are now selected. Now you can delete these channels as described above.

To select channels that are not consecutive (e.g. the channels 5, 20 and 39) please click on the first channel (here channel 5), then press the Ctrl key on your keyboard, keep this key pressed and then click on the other channels you like to delete.

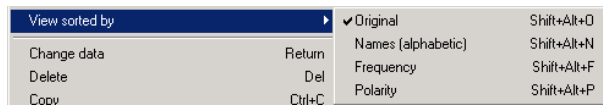
Now assume we want to move a channel, e.g. ZDF to position 2.

*Note: You can show your channel lists in original order or sorted by alphabet, frequency or polarity.*

*Moving channels is easier when the channel list is shown in its original order. If the channel list is shown in alphabetical order and you move a channel, only the channel number will change but not the position of the channel in the channel list (the name is still the same). To show the channel list in*



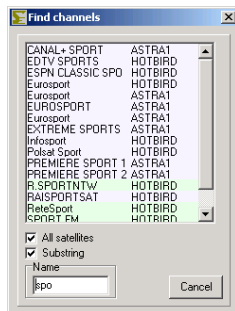
original order, please click with the right mouse button into the channel list and select from the menu item "View sorted by" the option "Original".



To change the viewing mode of the channel lists you can also click on the letters "O" (original), "N" (Name), "F" (frequency) or "P" (polarity) in the border of the channel lists.

First we have to find out the position of the channel ZDF at the moment. To find all channels you first have to click on the satellite "all" to see really all channels, independent of the satellite the channels belong to. Then you can search for ZDF by entering the first letters of the channel name. Please click anywhere in the channel list and hit the "Z" key on your keyboard, now all channels whose names begin with "Z" are selected. Now hit the "D" key on your keyboard. Now all channels beginning with "ZD" are selected. You can do this of course with the third, fourth letter etc. If you wait for more than three seconds between two letters a new search is started, so that the last letter entered is taken as the first letter of the name that is searched.

You can also use the "find channels" function to find channels by name. Open the channel menu and select the function "find channels" from this menu. You will get this window:



You can choose whether you want to search on all satellites or only on the actually selected satellites. Click on the field beneath "all satellites" to search on all satellites (if you have selected "all" in the satellite list you won't see this option because all satellites are searched anyway).

If you now enter "ZDF" in the field "Name" you will see in the list above all channels whose names begin with "zdf", e.g. the channel ZDFtheaterkanal. If you click on the white square to the left of the text "substring" you will see all channels that include the entered letters as a part of the channel name (beginning, middle or end, upper/lowercase is ignored). If you enter for example the word "sport" the channel "Eurosport" is found too.

Now you can move channels from this list to another position in the channel list or assign them to another satellite, transponder, provider or a favourite list. The channels will not be removed from the find list, but when you click on such a channel you will see that the new satellite, transponder, provider or the new favourite list is now marked in grey.

Within this find function you can also delete channels. Simply select the channel in the list of the find function and hit the Delete key on your keyboard.

Now you have found for example ZDF. There are several ways to move the channel.

The first way is to move the channel by drag & drop: click with the left mouse button on the channel you want to move, keep the mouse button pressed and drag the channel to the position you like to have it. The channel will be placed in front of the position the mouse is on.

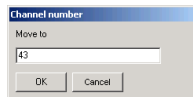
To drag a channel on the last position in the list, you have to drag it behind the last channel.

You can also move the channels with the arrow keys of your keyboard. Please select the channel(s) you want to move, then press the Ctrl-key on your keyboard and keep this key pressed. Now you can move the selected channel(s) with the arrow keys on your keyboard. If you press the key "Home" or

"End" while the Ctrl key is pressed you move the selected channel(s) to the beginning or the end of the list.

With both methods described above you can move of course more than one channel.

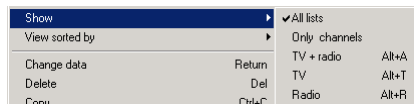
Another possibility is to move a channel directly to a position (e.g. channel 20 to position 5). Please select the channel, then click with the right mouse button in the channel list and select from the channel menu you get the function "Move to", the following dialogue appears:



Here you can enter the channel number you like to move the selected channel to (in this example 5). The selected channel will be moved now in front of the channel that was previously at this position. If for example KABEL1 had a channel number higher than 5 before, it will be moved to channel 5. If the channel had a lower channel number before (e.g. 3) the channel will be moved in front of the channel that was at position 5. Because one channel is now missing in the list (the channel you are moving) all channels are moved up one position (i.e. to lower numbers), so in this case your channel will be moved to position 4.

Especially if you use the drag & drop method it is often a problem that not all channels can be seen on the screen, so you have to scroll. If you want to move a channel from position 500 to 10 you have to keep the mouse button pressed while you move to position 10. If you move the mouse some pixels up and down at the border of the list, then the list will scroll in this direction.

There are some functions that make moving channels more comfortable. For example you can hide one of the lists (TV or radio) to have more space for the channels. You can even hide the satellites, transponders, the providers, the favourite lists and the data window. Please call the channel menu and select on "Show" what you want to see (TV, Radio, TV and Radio, "Show only channels" or "All lists").



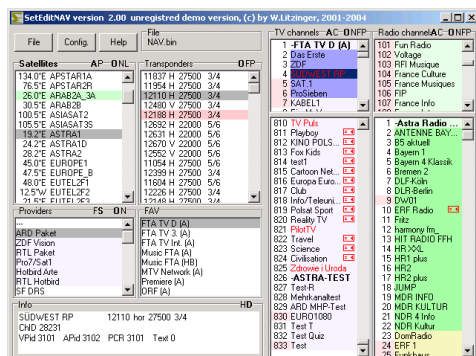
If you double click on the name of a channel list the other list will be hidden.



With a second double click on the name you will see both lists again.

When you click on the letter "C" in the border of the channel lists, the satellites, transponders, the providers, the favourite lists and the data window are hidden. When you click on the letter "A", you will see all lists again.

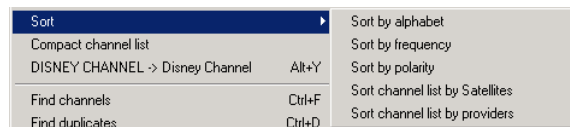
Another function that makes moving by drag & drop easier is the "split" function. Please click with the right mouse button in the channel list to open the channel menu and select the function "Split" from the popup menu.



All channel lists (depending on what is shown/hidden) are now shown twice. It is of course the same list, but you have two different views of it. Changes in one of these lists will affect the other list too. You can move channels from the upper list to the lower list, because it is the same list but from different points of view, the entry is changed in both windows.

If you make many changes to the channels, please remember to save from time to time. To do this hit the "file" button. From the file menu please select the item "save" to save the file. If you want to keep your original file and save the file with a different file name, you should use the "save as" function in the file menu. Enter the file name and click on the "save" button.

With the function "Sort" in the channel list menu, you have several possibilities to sort the channels.



Contrary to the function "View sorted by" the channels are not only shown in a different order, they also get another channel number. You can sort the complete channel list by providers (see chapter 3.c) or by satellites. This may be helpful if you have got a motorized dish. If you have sorted your channel list by genres for example, your dish would always move between the different satellite positions, when you zap in your channel list.

If you want to sort channels alphabetically, by frequency or polarity, you first have to mark the channels you want to sort.

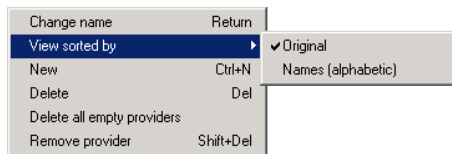
### 3.c Provider

In chapter 5.d there is a short summary of the provider functions.

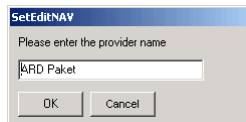
*Note: Analogue channels have no provider. So you can't assign them to any provider.*

It is possible to create new providers that can be used to combine channels that usually belong to different providers. This enables the SetEdit user to group channels without using the favourite lists.

To create a new provider, you have to click with the right mouse button in the provider list, you will see the following menu:



Now please click on "New", you get the following message:



Here you have to enter the name of the new provider (e.g. Sport).

The new provider is marked in red colour because it is empty.

You can also change the name of an existing provider. To do this, you have to select the provider and select the function "Change name" of the menu shown above (you can also make a double click on the provider). You get a dialogue, where you can enter the new name.

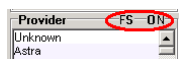
Because self-created providers are often used you can move this provider - same as channels - within the provider list. You can move it with the Drag&Drop function or while the Ctrl-key is pressed with the arrow keys of your keyboard and the keys Pos1 and End.

Now you can move channels from different providers to your new provider. It is recommended to select the satellite "all" to see all channels. Now select a channel you like to assign to your new provider and move it by Drag&Drop on the name of the desired provider.

You can also change the provider of a channel in the channel data menu, (see chapter 3.e).

Often you can't see all providers at once in the provider list, so you have to scroll the provider list. To do this while you try to drag a channel to a provider just move the mouse towards the border of the provider list, then the list will scroll towards this direction.

If you want to move many channels to one provider it is easier to fix the provider list. To do this click on the "F" in the frame round the provider list.



Now the provider list does not jump to the provider of the selected channel.

If you want that the provider list scrolls to the provider of the selected channel again, click on the "S" in the frame around the provider list.

A channel can only be in one provider. Sometimes you would like to have a channel in more than one provider. To do this you can create channel duplicates (which will have different channel numbers). To create a channel duplicate please click on the channel you like to create a duplicate of, then open

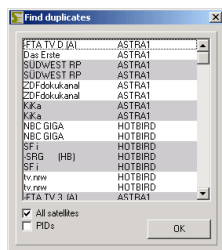
the channel menu and select "copy" from this menu. Now select the desired position of the duplicate in the channel list and select "paste" from the channel menu. The original channel and the pasted channel are now marked red to show you that this is a duplicate channel. If you don't want to open the channel menu every time you can also use shortcuts for these functions, Ctrl-C is for copy and Ctrl-V is for paste.

There are two ways to find such a duplicate later:

When you move the mouse over a channel that is marked in red, you get a hint showing the number of a channel that is a duplicate of this channel.

To find such a channel, first click on the channel list, then you can enter the channel number from the keyboard, so if you hit the key "1" channel 1 will be selected, "1" + "4" will select channel 14 etc. As with finding the channels by name, you have to enter the numbers within 3 seconds, otherwise the last entered number is taken as the first digit.

You also have the possibility of using the "Find duplicates" function. Click with the right mouse button in the channel list and select "Find duplicates" from the popup menu you get. You will see the following window:



All duplicates are shown. The different pairs of duplicates are marked in different colours. This function does not distinguish between different types of channels, i.e. it can happen that you see a pair of TV channel duplicates first and then a pair of radio channel duplicates. Relevant for this search are the transponder data and the channel ID, but not the name. If you activate the option "PIDs", the video, audio and PCR PIDs are compared too.

For the "Find duplicates" window there are the same functions as for the "Find channels" window, i.e. you can delete and move channels from this window into another list and select if the duplicates are searched on all satellites or only on the selected satellite.

To remove providers from the provider list there are three functions in the provider menu:

- You can use the "Delete all empty providers" function to delete all providers that don't contain channels.

- With "Delete" you can delete a selected provider with all channels that use this provider. You can also hit the "Del" key on your keyboard.

- With "Remove Providers" you can delete a provider from the provider list, without deleting the channels too. The channels, which used this provider, will stay in the channel list and are assigned to the provider "---".

If a provider only contains TV channels, it is shown in the provider list with a light blue background. Providers with only radio channels have a light green background colour. If a provider contains both channel types, it has a white background. Empty providers are marked with a red background colour.

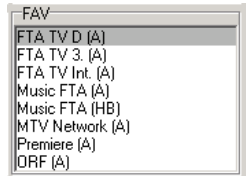
When you have created a new provider with you 20 most important channels, the channel numbers will be more or less random in this provider. You have your most important channels at on glance when you open the channel menu in the receiver, but zapping is difficult. The solution for this problem is to move your new provider to the first position of the provider list, open the channel menu and select the function "sort" -> "sort channel list by providers". Now the channels are sorted in the order they appear in the providers. Your 20 most important channels for which you have created your own new provider are now channel 1-20 and in the next provider you will find channel 21 to ...

Another possibility to sort channels is to sort them by satellites (see chapter 3.b) or to sort them alphabetically or by frequency or polarity.

### 3.d Favourite lists

The EchoNAV receivers have eight TV favourite lists and eight radio favourite lists for your favourite channels. The advantage of favourite lists is that you can put a channel in more than one favourite list without the necessity to create a duplicate of this channel (with the consequence that one channel has two different channel numbers). This can be useful for families because every family member can create his/her own favourite list.

To assign one or more channels to a favourite list simply move the selected channels by drag & drop on the name of the favourite list.



To remove one or more channels from a favourite list you first have to select the FAV list you want to remove channels from. Then select the channels you like to remove and select "Delete" from the channel menu or hit the "Del" key on your keyboard.

When you delete channels from a favourite list, the channels are only removed from this favourite list but not from the main list.

You can also use the "Mark as" function in the popup menu of the channel list to assign one or more channels to a FAV list or remove them from all FAV lists.

Channels that are in a favourite list are marked in the channel list with a darker background colour. To change this colour please see chapter 5.b.

Within a FAV list you can change the order independent of the order in the main list. If you change the channel order within the FAV list by using the drag & drop function you will only change the order within the FAV list but not the order of the main list. In opposite the order within the FAV list is unchanged when you change the order within the main list.

To change the name of a FAV list please make a double click on the FAV name, you will get the following window:



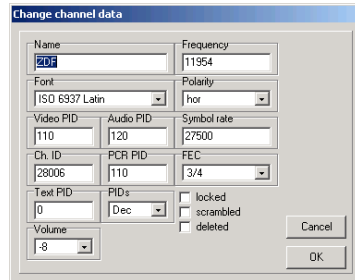
Here you can enter the name of the FAV list.

In the case of the EchoNAV receivers you have the possibility to enter to names for each FAV list (for radio and TV).

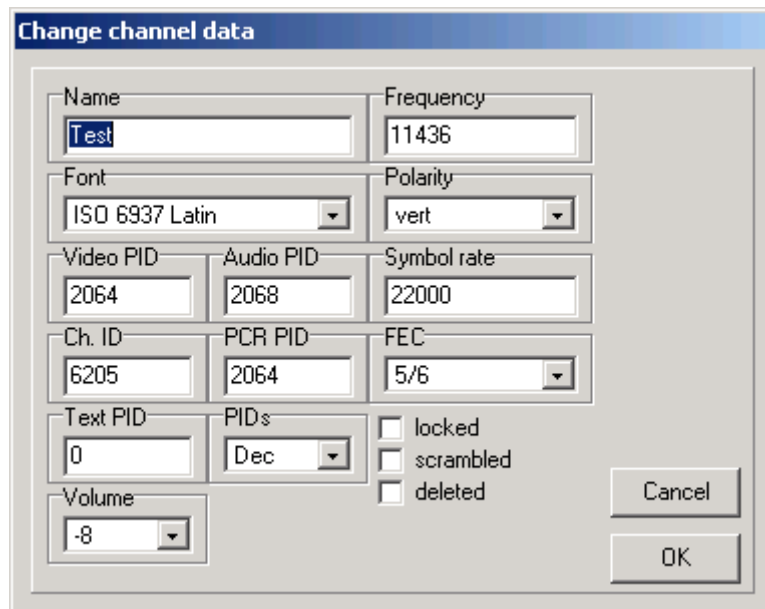
### 3.e Channel parameters

Some of the SetEditNAV supported receivers have additionally an analogue tuner.

To rename a channel (e.g. "Das Erste" to "ARD") please select the channel and choose from the channel menu the function "change data" (or double-click on the channel), then you get the channel data menu:



(for digital channels)



(for analogue channels)

#### Digital channels:

In the field "Name" you can now enter the name of the channel.

In the field "font" you can select the font that is used for the channel (e.g. Greek fonts for Greek channels).

Within this menu you can also assign the channel to another provider.

Furthermore you can change the transponder data (frequency, polarity, symbol rate and FEC) the PIDs and the Channel ID of the channel (see chapter 3.h).

With "PIDs" you can choose whether the PIDs are shown decimal or hexadecimal.

You can also mark channels as "scrambled", "locked" or "deleted" within this menu or remove these markings.

If you lock a channel this means you have to enter the parental pin to watch this channel. These channels will be marked in the channel list with a key symbol. Scrambled channels are marked with the following symbol:



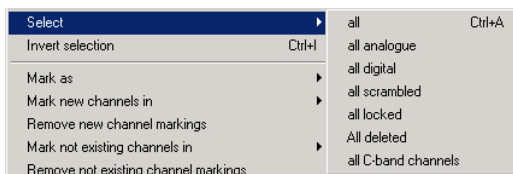


*Note: If you remove the scrambled symbol this does not mean that the channel can be watched for free. This is just the marking of the channel.*

When you delete a channel in the Echostar receiver this channel is not really deleted but only marked as deleted and you won't see it in the receiver channel list anymore. In SetEditNAV these channels are marked with the following symbol:



Note: When you make a channel search in the receiver, the formally available channels will be marked as deleted and the new channels will be inserted. Due to this it can happen that you get out of memory even your channel list is not full (you won't see these deleted channels in the Echostar list, but they still need memory). With SetEditNAV you can remove these channels that are marked as deleted "hard" from the channel list. To do this please use the function "select" -> "all deleted" from the channel list menu.



With "Volume" you can change the volume for each channel separately.

### Analogue channels:

Here you can also change the name of the channel.

In the following sections you can enter or change the frequency, polarity, audio frequencies, picture brightness, band widths, audio deemphasis, etc.

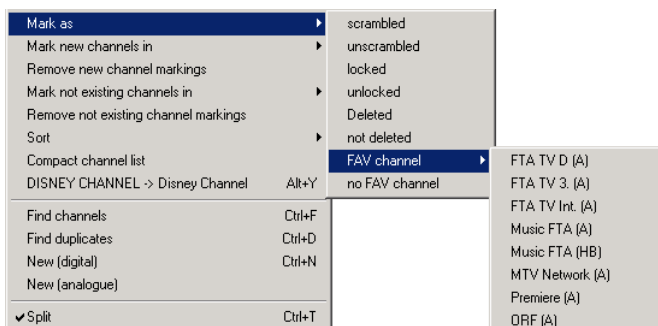
Analogue channels can also be marked as "locked", "deleted", "C-band channel" or "stereo".

With "Volume" you can change the volume for each channel separately.

In chapter 3.h these parameters will be explained in detail.

With the function "mark as" from the channel list menu you can change the following properties for more than one selected channel at once. You can:

- Mark channel(s) as "(un)locked", "(not) deleted" or "(un)scrambled"
- Assign channel(s) to a FAV list or remove it/them from all FAV lists



Many channels are only shown in uppercase letters. To change this, you don't have to enter a new name for each channel. Simply select the channels whose name you want to change and select the function "DISNEY CHANNEL -> Disney Channel" from the channel menu.

The first letter of the individual words is never changed by this function. If mixed upper/lower case

letters occur in the word, nothing is changed (example: EinsMuXx). Words with less than 4 letters are also not altered, so that abbreviations such as CNN stay unchanged.

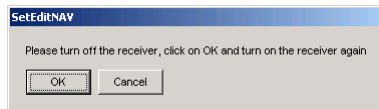
In the file SetEdit.ini there are lists of exceptions (which can be changed) to these rules. There is a list of 10 words that are not converted although they contain more than 3 letters, (example: ESPN, CNBC) and a list of 10 words that are converted although they are shorter than 4 letters (example: "CO" so that from KRIMI&CO you get Krimi&Co).

The reasons why you might be interested in changing the channel names to lower case are that mixed-case writing is easier to read and lowercase letters are often narrower than uppercase letters, so that when you have more lower case letters in the channel name more letters can be shown in the channel list of the receiver. Channel names that do not fit within the channel list are truncated.

### 3.f Write settings into the receiver

When you have finished making your personal settings you have to write them into the receiver before you can use them. To do this, please click on the button "File" and select the function "write into receiver" from the file menu.

You get the following message:



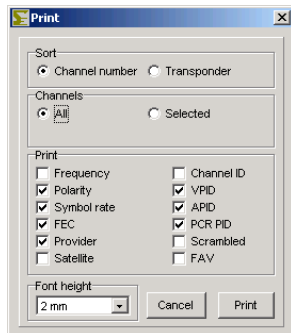
Please turn the receiver off, click on "OK" in this message and then turn the receiver on again.

Now the settings are transferred into your receiver.

The EchoNAV receivers only accept settings from the same receiver type. If you like to write settings from other sources into your receiver, you should exchange the satellite configuration of these settings with the satellite configuration of this receiver type (see chapter 3.j).

### 3.g Print or export settings

You can print your settings. To do this click on the "File" button and select from the file menu the function "Print". You get the following dialogue:



First you have to select if your printout should be sorted by channel numbers or by transponders (frequencies).

If you print your channels in number sequence, you can also select whether you want to print all channels or only the selected ones.

There are some options. You can choose if you also want to print the frequency, the satellite, the PIDs, if the channel is scrambled or if the channel is in a FAV list, etc.

Finally you can enter the Font height for your printout. Then please hit the button "Print". A printing dialogue will appear, whose layout depends on the printer you have installed.

With the "export" function you can export your settings to a plain ASCII file that can be opened with Word or Excel or other applications. The tab character (0x09) separates the different parameters.

Besides this the export works the same as printing. Select "Export" in the file menu, then you select the optional parameters as described above and click on the button "Export".

You get a window where you can enter the filename and select the directory of the exported file.

### 3.h Using the transponder functions and entering new channels by hand

There is a short summary of the transponder functions in chapter 5.f.

Possibly when you read the settings from your receiver you wondered about channels with strange names and that some channels were missing in your list (e.g. German Premiere, soccer, Formula 1 or pay-per-view channels).

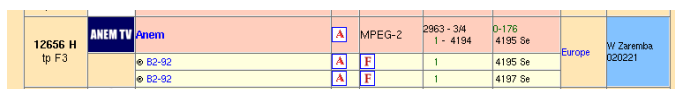
Channels that share place (like the German ARTE/Kinderkanal) can only be found in the receiver if they are active at the time you make the channel search. Some of the Premiere Direkt, soccer and Formula 1 channels are found, but not with the right name.

In the following you find a description how to enter new transponders (and channels) and how to change wrong transponder data.

In the Internet there are sites (e.g. [www.lyngsat.com](http://www.lyngsat.com)) where you can find all channel settings (including the missing pay-per-view or soccer channels). In the following you find an explanation how to enter channels and transponders from such lists by hand.

Suppose you discover on [www.lyngsat.com](http://www.lyngsat.com) that on satellite X a new transponder is active, but your receiver can't find this transponder at the moment, for example because it does not send at the moment (feed) or your antenna is not aligned to this satellite. In the following you find one example for a digital and one for an analogue transponder.

#### Digital transponders:

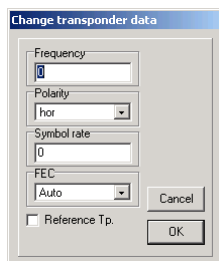


Frequency	Service	Modulation	Symbol rate	TS ID	TS ID	Region	Country
12656 H	ANEM TV Anem	A	MPEG-2	2963 - 314	0-176	Europe	W Zaremba
	Ⓜ B2-92	A		1	4195 Se		020221
	Ⓜ B2-92	A		1	4197 Se		

Here we see that transponder 12656 horizontal is new and one scrambled TV channel (Anem, the orange background shows you that the channel is scrambled) and two audio channels (B2-92 with two different audio PIDs) are active on this transponder.

Now you have the possibility to create a new transponder first and then enter the channel on this transponder. Or you can directly enter a new channel with the right transponder data on the satellite. Both methods may be useful, so both will be described in the following:

To create a new transponder, you first have to select the satellite of this transponder. Then you click with the right mouse button in the transponder list and select in the transponder menu the function "New" -> "Transponder". You see the following window:



Change transponder data

Frequency: 12656

Polarity: Hor

Symbol rate: 2963

FEC: 3/4

Reference Tp.

Cancel OK

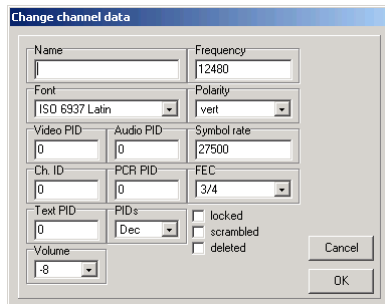
For the example mentioned above you enter 12656 for the frequency and HOR for the polarity. The symbol rate in this case is 2963. In this example the FEC is 3/4.

The green numbers in the Lyngsat chart are the NETWORK ID and the TS ID (here NET ID = 0 and TS ID = 176). These IDs are not used in SetEditNAV.

Please confirm with OK then you will find the new transponder at the end of the transponder list.

Now you can enter the new TV and radio programs on this transponder.

To do this select the new transponder and click with the right mouse button in the now empty channel list and select the function "new" from the channel menu you get. You get the following window:



You can also click with the right mouse button in the transponder list (the new transponder has to be selected too) and with "New" you can select the function "TV channel on this transponder" or "radio channel on this transponder".

You will get the same window.

The correct transponder is already entered.

If you want to enter a channel directly, please select the satellite for this channel, click with the right mouse button in the channel list and select the function "New" from the menu you get.

You will get the same window as with the other method again, except that in this case the transponder data has to be entered in the fields "Frequency", "Polarity", "Symbol rate" and "FEC".

In the field "Name" you can enter the name of the channel (here "Anem") and in the section "Font" you can select the font that is used for the channel (e.g. Greek fonts for Greek channels).

Then you have to enter the PIDs and the channel ID.

In the field "Provider" you can change the provider of this channel.

With "Volume" you can change the volume for each channel separately.

The TV channel "Anem" for example (see list above) has the video PID 4194 and the audio PID 4195. The channel ID (service ID) is 1 and the PCR PID is as a rule identical to the video PID, so don't forget to enter it!



For the Audio (radio) channels of course no Video PID is given. Usually you use the VPID 1FFF (hexadecimal) or 8191 (decimal) to indicate that this PID is not used.

The text PID is used for the teletext information.

If you don't find this PID, you can enter 1FFF (hexadecimal) or 8191 (decimal) instead, i.e. "not used". For "normal" channels you don't need this PID.

When you have entered all the parameters please click on OK and the new channel will appear at the end of your channel list.

#### Analogue transponders:

11553 H tp 23		Tele 5 (Germany)		PAL	7.02:7.20 G	BH2	V Playcak 020428
------------------	-------------------------------------------------------------------------------------	------------------	-------------------------------------------------------------------------------------	-----	-------------	-----	---------------------

Here you see that transponder 11553 horizontal is new, containing an analogue TV channel (Tele 5, the background colour white shows you that this is a analogue, unscrambled channel).

To add this channel, please select from the channel menu the function "new (analogue)":

The screenshot shows a dialog box titled "Change channel data". It contains the following fields and options:

- Name: [ ]
- Frequency: 11053
- Audio left: 702
- Audio right: 720
- Polarity: hor
- Deemp.: 50 µs
- Audio bandw.: 130
- Decoder: off
- Video level: 1
- LT: 0
- C (invert)
- Stereo
- locked
- deleted
- Buttons: Cancel, OK

In the field "Name" you enter the name of this channel.

In our example you have to enter 11553 for the frequency and select HOR for the polarity.

This channel has 2 audio frequencies (7.02 and 7.20 MHz); it's a stereo channel. For this reason you should activate "Stereo" and enter these two frequencies in the fields "Audio left" and "Audio right". The frequencies 7.02/720 are the most common in Europe and so they are taken as default.

With "Video level" you can enter the picture brightness.

With "LT" you can use the "Low Threshold extension" if the signal is too weak.

In the field "deemp." you enter the audio deemphasis. The possible values (with or without Panda Wegener) are 50 µs, j17, 75 µs; 50 µs is the most common in Europe.

You also have to enter the audio bandwidth ("audio bandw."), You find the values 130, 150, 230, 280, 380, 500 and 600 kHz, in Europe 130 kHz is the most common value.

With "Decoder" you can activate an external analogue decoder.

In addition you can mark the channel as "locked", "deleted", "C-band channel" or "stereo".

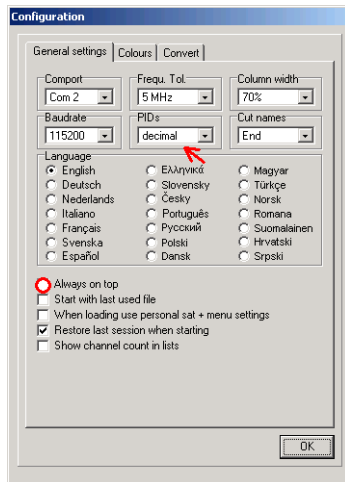
With "Volume" you can change the volume for each channel separately.

Now click on OK, the new channel will be placed at the end of the channel list.

*Note: You can only watch channels on activated satellites with your receiver. (see chapter 5.e)*

If you want to enter channels that differ only in few parameters, it is useful to create a duplicate of a channel (please use the copy and paste function from the channel menu) and then change only the different parameters.

*Note: In some lists the PIDs are given in decimal notation, in others in hexadecimal notation (see chapter 8). You have to be aware of that when you enter the PIDs. In the configuration menu and in the channel data window you can specify if you want to see/enter the PIDs in decimal or hexadecimal form.*



When you enable the option "always on top" in the configuration menu, SetEditNAV will always be in the foreground on your desktop. This can be useful when you work with such Internet lists, as the SetEdit window will not go into the background when you click in the browser.

You also change the notation of the PIDs if you click on the "H" for hexadecimal or "D" for decimal in the border of the "Info" section.

To compare your settings file with lists in the Internet that are often sorted by frequencies you have the possibility to sort the transponders of your settings file by frequency. To do this click with the right mouse button in the transponder list and select "view sorted by" -> "frequency" from the menu you get. Alternatively you can also view the transponder list sorted by polarity.

You can also set the viewing mode by clicking on the letters "O" (original), "F" (sort by frequency) and "P" (sort by polarity) in the frame of the transponder list.

### 3.i Import of channels

You have the possibility to get ready-made settings lists from the Internet. These lists can be used partially or completely. You can find such lists for example at the following URLs:

The most current settings lists for the DVB2000 (Nokia 9500/960x) are on [www.dxandy.de](http://www.dxandy.de). It is possible to import channels from these settings into your settings list (especially exotic channels are up-to-date in this list).

On [www.lyngsat.com/nokia/index.shtml](http://www.lyngsat.com/nokia/index.shtml) or on the SatcoDX site (you can find a link on my homepage) you will also find listings of all satellites.

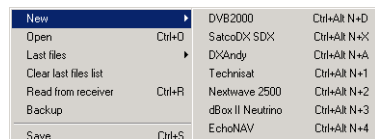
There are three possibilities to use such settings files. In this chapter you find a description how to add some channels from an other settings file into your settings file.

#### The import function

You can import channels from all settings formats that are supported by SetEdit into your SetEditNAV settings. In the standard version you can import channels from SetEditNAV settings, DVB2000 settings, Lyngsat DAT charts and SatcoDX SDX files.

You can add other formats by copying the corresponding modules (SetEditXXX.dll) into the SetEdit directory (see chapter 2.)

Please click on "File" -> "New" and select the format of the settings file, from which you want to import channels.



A second window with the chosen settings file will be opened. In the same way you can open a third or even more settings files. Each of these lists is equivalent. Every format (EchoNAV, DVB2000, SatcoDX, Lyngsat or other added formats) has its own symbol. SatcoDX and Lyngsat files are only Internet lists, so the functions "Read from receiver" and "Write into receiver" do not exist for these formats.

Now you can easily transfer one or more channels by drag & drop from one window into another or "Copy" and "Paste" them with the corresponding functions from the channel lists menu.

Some of the SetEditNAV supported receivers have additionally an analogue tuner. You can import analogue and digital channels. If you receiver has no analogue tuner, it will ignore the analogue channels.

*In the configuration of the SatcoDX settings file you can choose, if you only want to see analogue or digital channels or both.*

In the different settings formats there are different channel parameters. If a parameter only exists in the destination list but not in the source list (e.g. there are no Text PIDs in the SatcoDX files), a standard value will be taken for this parameter.

You can also drag and drop groups of channels (for example entire transponder with all its channels) from one window into another.

#### Source:

Channel list: The selected channels will be transferred.



All other lists (satellites, providers, labels, transponders, etc): All channels of the selected list will be transferred.

Find window (e.g. "Find channels", "Find duplicates"): the selected channel will be transferred.

#### Destination:

Channel list: The imported channels will be pasted at the location the cursor is on at the moment you paste the channels. Sometimes it is only possible to paste a channel, if a definitely assignment (e.g. to a satellite) is possible in the destination list. In a SetEditNAV settings list a satellite has to be selected, if you want to paste a channel. If the entry "All" is selected in the satellite list, you can't import channels from another window.

Transponder: A transponder is always definitely assigned to a satellite. So if you assign a channel from another window to a transponder, these channels will be assigned to the satellite of this transponder and will get the transponder data of this transponder.

If you drag and drop a transponder from one window into the transponder list of another window, this transponder with all its channels will be added as a new transponder.

*Note: If you import a transponder from another window, this transponder will be added to the satellite that is selected. If "All" is selected in the satellite list, the new transponder will be added to the satellite of the transponder the cursor is on.*

If you drag and drop a satellite with all its channels to the transponder list of another window, all these channels will be added to the transponder the cursor is on. This will also happen to channels that come from another FAV list, provider, label, etc.

*Note: It may happen that you can't receive a channel, if you assign it to the wrong transponder.*

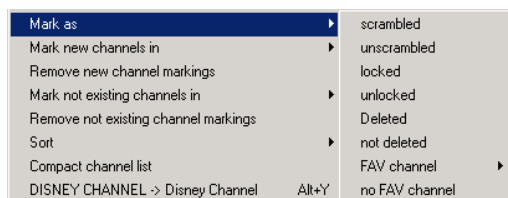
Satellite: The imported channels will be added to the satellite the cursor is on. Transponders that don't exist yet in the transponder list of the destination settings file, will be created.

Favourite list: A direct import into the favourite lists is not possible.

General note: If there is a possible assignment, you can copy channels from each list of one window to each list of another window. For example you can transfer channels from the "Find channels" function of a SatcoDX list to a satellite of a EchoNAV list.

In the popup menu of the channel list there are two functions that may help you to compare the channel lists of different settings files. These functions are only available in the channel list menu, if two or more SetEdit windows are opened.

With the function "Mark new channels in" you can mark in another window the channels that do not exist in your actual list. (The channel number of these channels will be marked in green.)



If more than two lists are opened, you have to select in which list you want to mark the new channels. If only two windows are opened, only one possibility is given.

With the function "Mark not existing channels in" you can mark in your actual list those channels (the channel number will be marked in red) that do not exist in another window.

If more than two lists are opened, you have to select the channel list that you want to compare your actual list with. If only two windows are opened, only one possibility is given.

With "Remove not existing channel markings" or "Remove new channel markings" you can remove the corresponding markings. These functions will only appear in a channel list menu, if there are such markings in the channel list.

If you have marked the "new channels" or the "not existing channels" in a channel list, you can select them all.

Please click in the channel lists menu on select and choose the corresponding entry: "all not existing" or "all new". This entry will only be shown in the menu, if there are such markings in the channel list.

*Note: For the import of channels it is useful, to choose in the configuration the value 5 or even 10 MHz for the frequency tolerance. It may happen that the frequency of the same channel differs just a little bit in different lists. If the frequency tolerance is 0, these channels will be marked as "new" or "not existing" too. But a difference of only some MHz is insignificant to the receiver, so you don't need to import these channels.*

### 3.j Other settings and how to convert a settings file

In the following you find a description how to use a settings file found for example in the Internet completely and how to convert a settings file into the format you need.

#### Other SetEditNAV settings files

You can load SetEditNAV settings directly into the SetEditNAV main list (with File -> Open) and then write them into the receiver.

If you like to take settings you find in the Internet completely you may get problems because in addition to the pure channel data also the receiver menu settings (menu language, parental pin, ...), receiver type, satellite and LNB configuration are included in the settings file you got from the Internet. It may be possible that you don't want this configuration or that this configuration does not fit to your receiver (LNB configuration). You have the possibility to save your own configuration separately and load it after opening the Internet file into this file.

Please select in the satellite menu "save satellite configuration" to save your configuration, your satellite and LNB configuration is saved on your disc.

If you load a settings file from the Internet, you can use the function "Load satellite configuration" from the satellite menu to overwrite these settings with your previously saved settings.

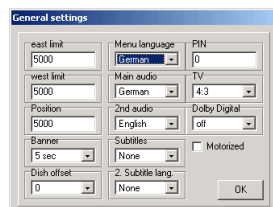
The satellite configuration of a settings file is saved separately for each satellite. To check it please double-click on the satellite or select "change data" from the satellite menu.

The other functions of this menu are explained in chapter 5.e.

If you often take settings from the Internet but always want to keep your satellite settings, you can enable the option "When loading use personal sat + menu settings" in the configuration menu. Then this part of the settings is always taken from your previously saved configuration.

The EchoNAV receivers only accept settings of their own receiver type. With SetEditNAV you can edit settings of different EchoNAV receivers. If you have more than one EchoNAV receiver it is recommended to read the settings of each receiver model and save the settings file. If you like to transfer the settings file from one EchoNAV receiver into another EchoNAV receiver, you should first open the settings file that you have read from this receiver, then save the satellite configuration and then load the settings file you want to write into this receiver and then use the function "load satellite configuration" to get the receiver settings of this receiver type.

In the file menu you can find the function "General settings". Here you can check and change the general settings of your receiver (like menu language, parental PIN etc.)



#### Convert a settings file

You can convert all settings formats that are supported by SetEdit and for that you have got the corresponding module (in form of a DLL file) into the SetEditNAV format.

In chapter 2 is described how you can add other SetEdit modules.

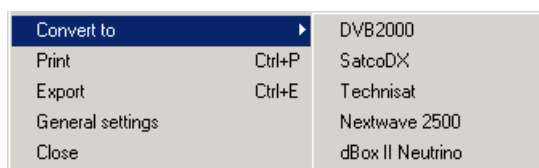
Please open with "File" -> "New" an additional editor window with the format of the file you wish to convert.

Then please load with "File" -> "Open" the settings file you want to convert into another format.

*You can only convert a settings file into the SetEditNAV format, if you have already saved your satellite configuration with the function "Save satellite configuration" in the popup menu of the satellite list (see above). If you want to convert a SetEditNAV settings file into another format, it depends on this format, if you first have to save the satellite configuration for this format or if this is not necessary (e.g. DVB2000, SatcoDX or Lyngsat).*

**Important: If you convert a settings file only the pure channel and transponder data is taken from the source settings file. The satellite configuration and the general settings of your receiver are taken from the satellite configuration that has to be saved before (see above). If some channel parameters don't exist in the source settings file, a default value is taken for this parameter.**

Now you can convert the loaded settings file. To do this, please click on "File" -> "Convert to" and select the format you want to convert this settings file to.



Now you see the loaded settings file in the new format with the corresponding SetEdit version on your screen.

*Note: The different settings formats often contain different information, so you will always loose information, when you convert a settings file. If you convert e.g. a SetEditNAV settings file into the DVB2000 format and back, you will see that all analogue channels have disappeared because the DVB2000 only support digital channels. In the same way it may happen that certain PIDs (e.g. the text PID), volume information or flags for "locked" or "scrambled" get lost.*

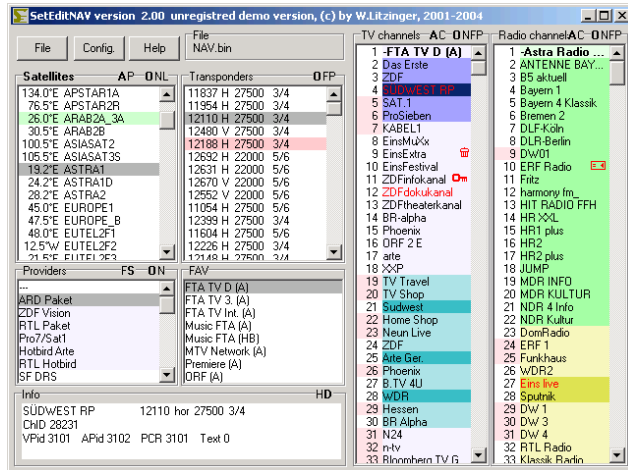
In the configuration in the menu "Convert" you can enter the options that should be used, if you convert into this format (see chapter 5.b).

If you want to convert another settings file into the SetEditNAV format, you can for example sort the channels by satellites or take the FAV lists from the source list. As the EchoNAV receivers only have eight FAV lists, only the first eight FAV lists will be taken from the source list.

If you want to convert a SetEditNAV settings file into another format, you have to choose these options in the configuration menu of this other format.

## 4 Program use and personal configuration

SetEditNAV is mostly used with the mouse. You can also reach many functions with keyboard shortcuts.







On the main window you will find a group of buttons for the general functions ("File", "Config." and "Help") and the lists that contain the transponders, satellites, providers, favourite lists (FAV) and the channels. If you hit the right mouse button in the satellite, provider, transponder or one of the channel lists you will get a popup menu with the specific functions for this list.

With "Help" you can open the help file or look for updates of SetEdit.

In some frames you find uppercase letters. If you click on these letters you can change some viewing modes.

You can close every window that comes in SetEditNAV (except the main window) with the Esc-key on your keyboard.

In some lists you may find the following red symbols. These symbols indicate:

-  Scrambled channels
-  Locked channels
-  Deleted channels
-  Reference transponder

If a channel name is marked red there is a duplicate of this channel in the settings.

Transponders and providers marked in red are empty; they contain no channels.

Digital TV channels appear in light blue, digital radio channels in light green.

If you receiver has an analogue tuner the analogue TV channels appear in blue and analogue radio channels in yellow.

Channels that are in a FAV list are marked in the channel list with a darker background colour.

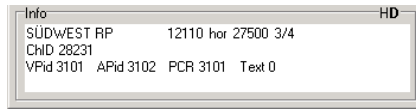
If the channel number is marked with a red background colour, the channel is assigned to a vertical polarised transponder. If the channel number has a white background colour, the channel is assigned to a horizontal polarised transponder.

If a satellite has a green background colour, it is activated. You can only watch channels that are on such an activated satellite with your receiver.

When you select a channel, the transponder, the satellite, the provider and the favourite list (if the channel is in a favourite list) are marked with a different colour.

You can change all colours in the configuration menu.

In the lower left corner you will find an "Information" section, where you see the parameters of a selected transponder or channel.

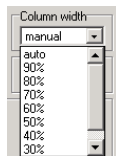


When you select a satellite in the satellite list only the transponders and channels that are in that satellite are shown. When you click in a transponder, provider or favourite list only the channels that are in this list are shown.

### You can adapt the design of SetEditNAV to your personal wishes.

To change the size of the main window you can either click on the maximise button in the upper right corner or drag one of the margins of the window.

If the main window is large enough, the channel lists can be shown in more than one column. Then you have more channels in view. You can change the width of these columns in the configuration menu on the tab sheet "General settings". In the section "Column width" you can enter if a new column is created, when 100% (auto) or 90-30% of the channels are shown completely. The other channel names are cut.



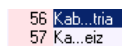
With "manual" you can enter the column width by hand. Select the function "Setup column width" from the menu of the channel lists and then you can click on the position where you want to have the right border of the first column.

*Note: There is a minimum width for the columns. If the window is too small to show more than one column the column width has no effect.*

In the section "Cut names" you can enter if the channel name is cut at the end,



or if a part of the channel name is cut from the middle.



In the configuration on the tab sheet "General settings" you can change the menu language of SetEdit (this concerns all opened SetEdit windows) and specify whether the PIDs are shown in decimal or hexadecimal form (see chapter 8).

If you activate on the same tab sheet the option "Show channel count in lists" the number of channels of each satellite, transponder, provider and each FAV list is shown behind the name of this list.

Especially when you want to move channels from the beginning to the end of your list, it may be useful to use the split function. With this function you can split your list into two parts, one showing the beginning and the other showing the end of your settings (see chapter 3.b.)

With a double-click on the frame "TV channels" or "Radio channels" only the chosen channel list is shown. With another double-click on this frame both lists are shown again. With the "show" function of the menu of the channel list you have also the possibility to choose, if you only want to see the TV, the radio channels, or both channel types.

You can also change the viewing mode of the PIDs, if you click on the letters "H" for hexadecimal or "D" for decimal in the frame of the "Information" section.

For some functions you also have shortcuts for keyboard using:

Ctrl-O: Open a settings file

Ctrl-S: Save settings

Ctrl-R: Read settings from the receiver

Ctrl-W: Write settings into the receiver

Ctrl-P: Print settings

Ctrl-E: Export settings

Alt-R: Show only radio channels

Alt-T: Show only TV channels

Alt-A: Show TV and radio channels

Ctrl-0 (zero): Load the last used file

F1: Help

F2: Satellite list

F3: Label list

F4: Transponder list

F5: Provider list

F6: FAV list

F7: TV list

F8: Radio list

F10: Configuration

F11: Toggle between "Show only channels" and " Show all information"

Depending on the editor you are using, some lists are not available, for example the DVB2000 has no satellite list.

To close a SetEdit window please click on the "close" button:



or select "Close" from the "File" menu. If only one editor window is opened you close the complete program.

If you select "Exit" from the "File" menu all open editor windows are closed. In the configuration you can enter with "Restore last session when starting" that all opened editor windows are restored when you start the program the next time.

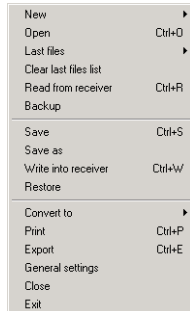
When you like to use this function you have to finish from SetEdit with the "File" -> "Exit" function. If you close all windows one by one only the last opened window will be restored.

*Note: If you have unsaved changes you are asked if you want to exit or first save these changes.*

## 5 Functions

### 5.a File functions

To get the file functions, please click on the "File" button. You will get the following popup menu:



With **New** you can open another window of SetEdit with the same or another format, e.g. for the import of channels or if you want to compare different channel lists (see chapter 3.i.)

With **Open** you can load settings from your disc.

With **Last files** you get a list of the 10 last used files, which you can load.

With **Clear last files list** you can remove all entries from the last files list.

With **Read from receiver** you can read the settings from your receiver into SetEditNAV. You get a message on your screen. When you have followed the instructions in the message, the settings are read from the receiver and shown in SetEditNAV.

With **Backup** you can transfer the settings from the receiver directly to your hard disc without having them in SetEdit. You will first get a window where you can enter the directory and the file name. Otherwise the procedure is similar to "Read from receiver".

With **Save** or **Save as** you can save the current settings to your disc.

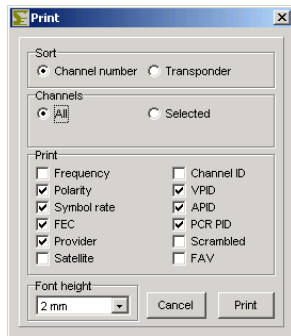
With **Write into receiver** you can transfer the settings from SetEditNAV to your receiver. You also get a message. When you have followed the instructions in the message, the settings are written into the receiver.

With **Restore** you can transfer settings from your hard disc directly to your receiver. First you get a window where you can select the file you like to transfer into the receiver. Otherwise the procedure is similar to "Write into receiver".

With **Convert to** you can convert your actual loaded settings file into another settings format (e.g. SatcoDX). If you want to convert another settings format (e.g. SatcoDX) into the SetEditNAV format you first have to open a new editor window (with File -> New) with the corresponding SetEdit format (e.g. SatcoDX) and then you can load the Settings file you want to convert in this editor window. To do this you first have to save your satellite configuration (see chapter 3.j).

With **Print** you can print your settings.





You have two ways of printing your settings. You can either sort the list by the channel numbers (to have a printed channel list) or by the transponders of the channels (to compare your settings with lists in magazines).

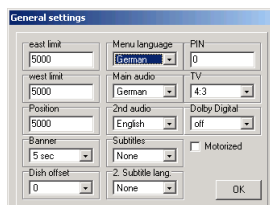
If you print your channels in number sequence, you can also select whether you want to print all channels or only the selected ones.

The channel number and name are always printed; additionally you can print the transponder data (frequency, symbol rate, polarity and FEC), the satellite, the provider, the PIDs, the Channel ID and the flags for "scrambled" or "FAV".

In the field "Font size" you can enter the size of the font that is used for printing. If more than one column will fit on the page you will get a multi column printout.

With **Export** you can export your settings as an ASCII file (e.g. to open it with Word). You have the same options as with the print function.

With **General settings** you can enter the parameters of your receiver menu (menu language, parental PIN, ...).



With **Close** you close the actual active SetEdit window. If only one window is opened you close the complete program.

With **Exit** you exit from SetEdit. All open editor windows are closed. In the configuration you can enter with **Restore last session when starting** that all opened editor windows are reopened when you start the program the next time.

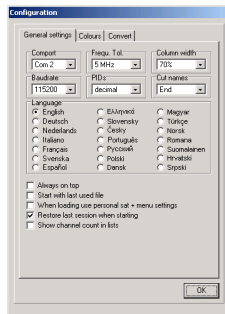
When you like to use this function you have to finish from SetEdit with the "File" -> "Exit" function. If you close all windows one by one only the last opened window will be restored.

## 5.b Configuration

Click on the "Config." button to change the general settings of SetEdit. There are three tab sheets in the configuration menu.

### General settings:

If you click on "General settings" you get the following menu:



In the field **Comport** you can select which comport of your PC is used to connect to your receiver.

The value **Frequ. Tol.** (Frequency tolerance) is used when importing and indicates the tolerance a transponder frequency may have relative to the imported one to be considered to be the same. If you have for example a transponder with the frequency 11721 MHz in you settings and you import a channel with the frequency 11720 MHz and the frequency tolerance is set to 5 MHz no new transponder is created. This tolerance is also used for the transponder list.

With **Column width** you can select if 100% (auto) or 90-30% of all channels have to fit completely to a column. All other channel names are truncated. With "manual" you can enter the column width by hand. Please select the function "Setup column width" from the menu of the channel lists and then you can click on the position where you want to have the right border of the first column.

*Note: There is a minimum width for the columns. If the window is too small to show more than one column the column width has no effect.*

With **Baud rate** you change the speed for serial communication (see chapter 3.a).

In the field **Cut names** you can enter, if channel names that are too long (see column width), are cut at the end or in the middle.

In the field **PIDs** you select how the PIDs are shown/entered (decimal or hexadecimal). You can also switch between these two viewing modes, if you click on the "H" for hexadecimal or the "D" for decimal in the frame of the "Information" section.

With **Language** you can select the menu language you would like. This language is taken for all opened SetEdit windows.

With **Always on top** SetEditNAV always stays on top of your desktop.

With **Start with last used file** SetEditNAV opens automatically the last used file every time you start the program.

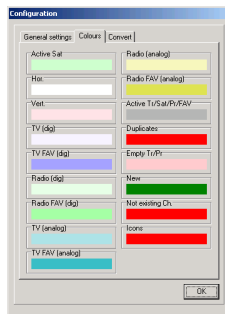
With **When loading use personal sat + menu settings** you can, after you have once saved your satellite configuration (the general settings are also saved, see chapter 3.j), use this configuration automatically when loading settings. For example you can use your satellite and you general settings always when you load settings from other sources.

If **Restore last session when starting** is activated, all editor windows that were opened when you closed the last session are reopened (see chapter 5.a.)

If you activate **Show channel count in lists** the number of channels of each satellite, transponder, provider and each favourite list is shown behind the name of these lists.

### Colours:

If you click on the tab sheet "Colours", you will get the following menu:



Here you can change the colours that are used to mark the following states:

#### Activated (programmed) satellites

7.0°W Nilesat  
19.2°E Astra  
28.2°E Astra2

#### Horizontal polarised transponders, vertical polarised transponders

118 SPORTMANÍA  
119 DP. TRIUNFO  
120 Eurosport  
121 Formula 1

#### Digital and analogue TV and radio channels

118 SPORTMANÍA  
119 DP. TRIUNFO  
120 Eurosport  
121 Formula 1

#### TV or radio channels that are in a favourite list

582 GOURMET TV  
583 AJARA TV  
584 TAMIL Radio  
585 R.Rinascente

Transponder, satellite, provider and FAV list(s) of an actually selected channel (**Active Tr/Sat/Pr/FAV**)

12538 H 27500 3/4  
12558 V 27500 3/4  
12595 V 27500 3/4

#### Channel duplicates

574 ARIRANG TV  
575 Ch-3 Arabic IBA TV  
576 R.R FEED  
577 BK TV


## Empty transponders and providers

12303 V 27500  
11387 H 27500  
11747 H 27500

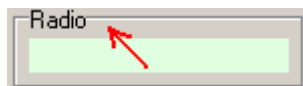
**New or not existing channels** (for the import function, see chapter 3.i)

317 MTA INTL  
318 VOX CH  
319 RTL2 AUSTRIA  
320 ZDF

The **icons** for "locked", "scrambled", "deleted" and for the reference transponders

114 JUNIOR  
115 K-TOON   
116 PREMI...Austria

With a double click on the frame of a colour field, you get the default colour again.



### Convert:

On the tab sheet "Convert" you can choose which options should be used, if you convert another settings file into the SetEditNAV format.

**Sort channel list by satellites:** The channels of the source list will be sorted by satellites, when you convert into the EchoNAV format.

**Keep gaps in channel list:** In some settings there are "empty" channels that are inserted so that a new group of channel will start on a channel number that you can remember easier (like 50, 100, 222, 1000, ...).

**Convert labels to providers:** All labels of the source list will be converted to providers.

**Convert labels to FAV lists:** The first eight labels of the source list will be converted to FAV lists.

**Convert providers to FAV lists:** The first eight providers of the source list will be converted to FAV lists.

**Convert FAV lists to satellites:** All FAV lists of the source list will be converted to satellites. All satellites that have the geographic position 0.0° east/west and that are empty are converted to a FAV satellite (the satellite configuration that you have saved before should of course contain such empty satellites).

*Note: If you want to use this function it is important that each FAV list of the source list only contains channels of one satellite.*

To make a satellite empty there is the function "clear" in the satellite menu (see chapter 5.e.)

**Convert FAV lists to providers:** All FAV lists of the source list will be converted to providers. If a channel is in more than one FAV list it is placed into the first provider.

These options may be useful for example if the source list has more FAV lists as you can have in your SetEditNAV settings and you want to keep all of them.

**Take FAV list(s) from source list:** The first eight FAV lists are taken from the source list (the EchoNAV receivers only have eight FAV lists).

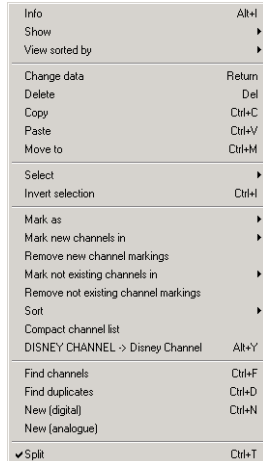
If you want to convert a SetEditNAV settings file into another format, you have to choose these options

in the configuration menu of this other format. Depending on the receiver there can be up to 10 different options.

## 5.c Channel functions

Please select the channels you like to edit/modify.

You get most functions when you click with the right mouse button on a channel list. You will get the popup menu of the channel list:



Some menu items are only visible, when you are using the import functions.

**Info:** here you get the number of TV and radio channels and transponders that are in your settings.

With **Show** you can change the viewing mode of SetEditNAV. You can select if you **only** want to see the **TV** or the **radio** channels or **both**.

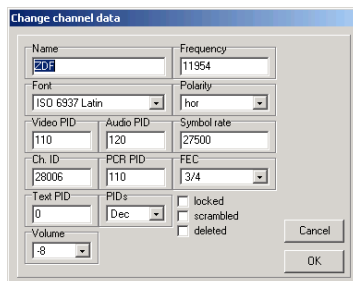
*Note: Alternatively you can double-click on the TV/Radio frame to change the viewing mode.*

Furthermore you can hide the satellites, transponders, providers, favourite lists and the data window with **Show only channels**. With **All lists** you can see all lists again.

With **View sorted by** the channel list can be shown in the **original** order, sorted **alphabetically** or sorted by **frequencies** or **polarities**.

With **Change channel data** you can change the properties of a channel.

For digital channels you get the following window where you can change the channel data:



In the field **Name** you can change the name of the channel.

You can enter the **font** that is used for a channel (for example for Greek or Russian channels).

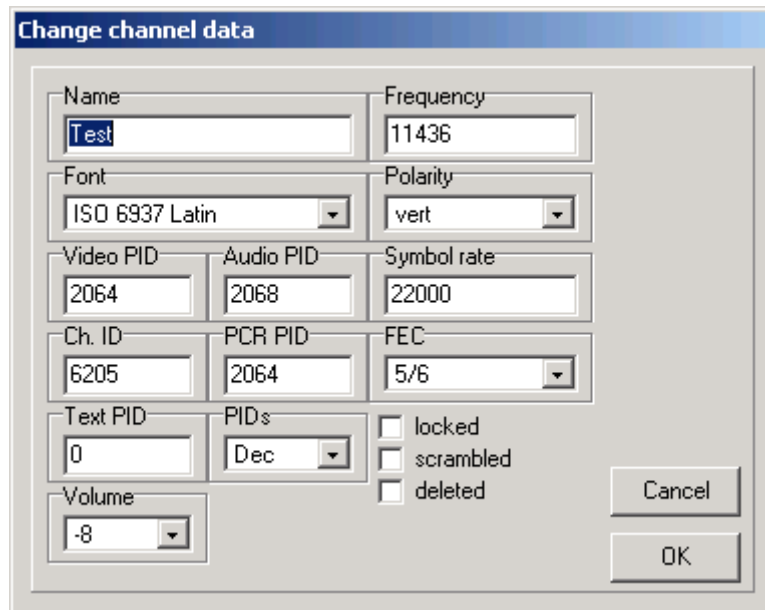
You can enter the **PIDs**, the **Channel ID**, the **Volume** and the **transponder data** of the channel and enter, if the channel is **locked** (you have to enter the parental PIN), **deleted** or **scrambled**.

With **PIDs** you can choose if the PIDs are shown decimal or hexadecimal.

With **Provider** you can change the provider of the channel.

You can find a longer description of the different PIDs, IDs and transponder data in chapter 3.h.

For analogue channels you get the following window:



Here you can change the **name**, the **frequency** and the of the channel and enter if the channel is a **stereo** channel or if the channel is **locked**. You can also mark the channel as **C-band channel** . You can enter the **audio frequency** for the **left** and **right** channel, the **video level** (brightness), the **audio deemphasis**, the **Volume**, if a **decoder** is used, the **LT-level** and the **audio** bandwidth.

With **Delete** you can delete selected channels or, when you are in a FAV list, remove them from this favourite list.

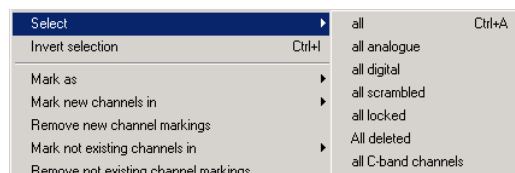
You can also delete one or more selected channels by hitting the Del key on your keyboard.

With **Copy** you can copy a channel, then you can paste the channel to another position.

With **Paste** you can paste a channel that was previously deleted or copied.

With **Move to** you can move a channel to a position that you enter with the keyboard.

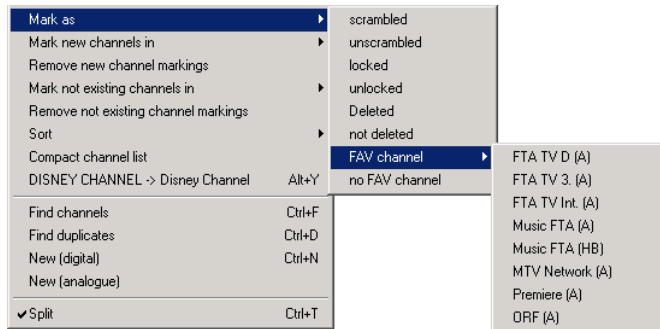
With **Select** you can select **all**, **all analogue**, **all digital**, **all scrambled**, **all locked**, **all deleted**, **all C-band channels** or (for the import) **all new** or **all not existing** channels (depending on which channels are actually marked).



With **Invert selection** you can invert the selection, the channels that are selected will become unselected and vice versa. If you like to delete all but one channel from a transponder, you can select the channel you like to keep, invert your selection and delete the now selected channels.

With **Mark as** you can change the following properties for one or more selected channels at once:

- Mark channel(s) as "(un)locked", "(not) deleted" or "(un)scrambled"
- Assign channel(s) to a FAV list or remove it/them from all FAV lists

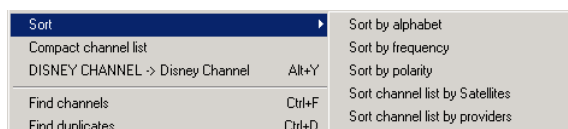


**Mark new channels in:** If you have opened more than one window of SetEdit (Import), you can mark in another channel list the channels that you don't have in your actual channel list.

**Mark not existing channels in:** If you have opened more than one window of SetEdit (Import), you can mark in your actual channel list the channels that you don't have in another channel list.

**Remove new/not existing channel markings:** With this function you can remove the markings for new or not existing channels in your actual list (Import).

With **Sort** you can sort selected channels by **alphabet**, by **frequency** or by **polarity** or sort the entire channel list by **providers** or **satellites**.



With **DISNEY CHANNEL -> Disney Channel** you can change the names of the selected channels from upper case to lower case. Uppercase letters are usually wider than lower case letters, so this allows you to see more characters of the name in the channel list of the receiver. Only words with more than 3 characters are converted. If there are both upper and lower case letters in the channel name the word is not converted (e.g. EuroSport stays as it is). In the configuration file of SetEditNAV (SetEdit.ini) there is a list of up to 10 words that are converted although they are shorter than 4 letters (CO, INT, FOX) and a list of words that are not converted although they are longer than 3 letters (CNBC, ESPN).

With **Find channels** you can find channels by name.

With **Find duplicates** you can look for channel duplicates.

With **New** you can create a new channel. With **New (digital)** you create a new digital channel, with **New (analogue)** you create a new analogue channel.

With the **Split** function you can tile the TV and radio list in two parts. It is the same list but from two points of view. Changes in one list also affect of course the second list. You can move a channel from the upper to the lower list of course.

The function **Setup column width** is only visible in this menu, when you have entered "manual" in the section "Column width" in the configuration menu (see chapter 5.b). With this function you can enter the column width by hand. Please select this function and then you can click on the position where you want to have the right border of the first column.

*Note: There is a minimum width for the columns. If the window is too small to show more than one column the column width has no effect.*

To **move** channels you simply drag them with the mouse to the position where you want them to be (if you reach the border of a list the list will scroll automatically).

To **assign** one or more channels to a **satellite**, **transponder**, **provider** or a **favourite list** drag it/them with the mouse to the name of the satellite, transponder, provider or favourite list.



To see all channels of a satellite, provider, transponder or a favourite list, please click in the respective list on the corresponding entry.

In the frame of the channel list there are several uppercase letters for the following functions:

**A:** The channels and the satellites, providers, transponders, FAV lists and the data window are shown.

**C:** Only the channels are shown.

**O:** The channels are shown in original order.

**N:** The channels are shown in alphabetical order.

**F:** The channels are shown sorted by frequencies.

**P:** The channels are shown sorted by polarities.

## 5.d Provider functions

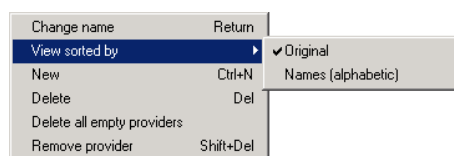
First you have to select the provider you want to modify. You will see all channels that belong to this provider.

*Note: Analogue channels have no provider. So you can't assign them to any provider.*

To assign one or more channels to this provider please select the channels and drag them with the mouse to the provider name.

You can also change the provider of a channel in the channel data menu, (see chapter 3.e).

You get most functions if you click with the right mouse button on the provider list. You will get the popup menu of the provider list.



**Change name:** Here you can change the name of a provider. You also get this by double-clicking on the provider or by hitting the Enter key.

**View sorted by:** The providers can be shown in **original** order or sorted **alphabetically**.

**New:** Here you can create a new provider. You get the same window as in the "change name" function.

**Delete:** Here you can delete a provider and all channels that belong to this provider.

**Delete all empty providers:** Here you can delete all providers that don't contain channels.

With **Remove provider** you can delete a provider from the provider list, without deleting the channels too. The channels, which used this provider, will stay in the channel list, but they don't belong to any provider anymore. They are assigned to the provider "---". This provider does not appear in the provider list of the receiver.

It is not possible to change the order of the channels within a provider list independently of the main channel list.

To change the **order** of the providers within the provider list please use the drag & drop function or hit the ctrl key, keep it pressed and use the arrow keys (or Home or End) to move the selected provider.

If a provider only contains radio channels, it is shown in the provider list with a green background. Providers with only TV channels have a blue background colour. If a provider contains both channel types, it is shown with a white background. Empty providers are marked with a red background colour.

In the frame of the provider list there are several uppercase letters for the following functions:

**F:** The provider list is fixed. That means it does not jump to the provider of the selected channel.

**S:** The provider list scrolls to the provider of a selected channel.

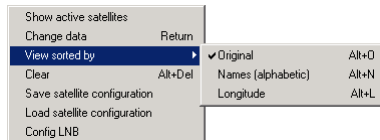
**O:** The provider list is shown in original order.

**N:** The provider list is shown in alphabetical order.

## 5.e Satellite functions

When you click on a satellite only the channels and transponders of this satellite are shown.

When you click with the right mouse button in the satellite window you will get the following popup menu:

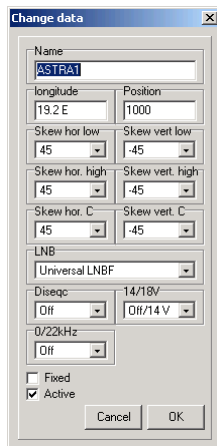


### Show active satellites/Show all satellites:

With this function you can select if you want to see all satellites in the satellite list or only the active satellites.

### Change data:

You will get the following window in which you can change the satellite-specific data:



You can also double-click on the satellite to get this.

Here you can change the **Name**, the motor **position**, the geographical position (**longitude**), the **skew**, and the parameters for the **DiSEqC**, **14/18 V** and **0/22 kHz** of this satellite.

With **LNB** you can assign the satellite to an LNB type.

With **fixed** you mark a fixed antenna.

With **Active** you activate a satellite.

*Note: You can only watch channels on activated satellites with your receiver.*

### View sorted by:

With this function you can select if the satellites are shown in **original** order, or sorted **alphabetically** or by the geographical position (**longitude**).

With **Clear** you can clear a satellite. All channels and transponders are deleted and the geographic position is set to 0.0° east. This is useful if you want to use the convert option "Convert FAV lists to satellites" (see chapter 5.b).

### Save satellite configuration:

With this function you save the satellite and LNB configuration of the actual loaded settings file (see chapter 3.j.)

### Load satellite configuration:

With this function you can overwrite the satellite and LNB configuration of the actual settings with a

configuration you saved before. In the configuration menu you can enter that this is done automatically when you load a file.

For each **LNB number** (1-8) you can enter the **LOF high/low**, the **polariser control**, the band switch (**LNB frequ. band**) and the parameters for **12 V**, **22 kHz**, **DiSEqC** and **C/Ku switch**.

In the field **Satellites** you see all satellites of this LNB.

The image shows a software dialog box titled "LNB". It contains several configuration options, each with a dropdown menu. The "LNB Nr." is set to 3. The "LOF low" is 9750 and "LOF high" is 10750. "Pol. contr." is set to "Polarotor", "LNB frequ. band" is "14/18 V", "12 V" is "0 V", "22 kHz" is "0 kHz", "DiSEqC" is "none", and "C/Ku switch" is "0/12 V". On the right side, there is a list box labeled "Satellites" which contains the text "AMOS1". At the bottom of the dialog are two buttons: "Cancel" and "OK".

In the frame of the satellite list there are several uppercase letters for the following functions:

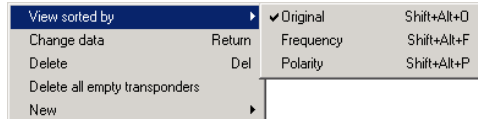
- A:** Show all satellites
- P:** Show only active (programmed) satellites
- O:** Show satellites in original order
- N:** Show satellites sorted by alphabet (names)
- L:** Show satellites sorted by their geographical position (longitude)

## 5.f Transponder functions

If you select a transponder only the channels that belong to this transponder are shown.

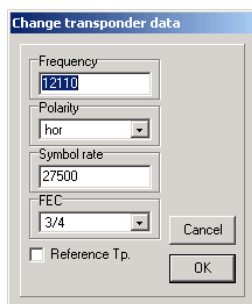
If you select "All" in the satellite list you can move the mouse over a transponder to see the satellite of this transponder.

You get most functions if you click with the right mouse button on the transponder list. You will get the popup menu of the transponder list.



With **View sorted by** you can select if the transponders are displayed in their **original** order or sorted by **frequency** or **polarity**. The transponders will remain in the original order internally.

With **Change data** you can change the parameters of a selected transponder. You get the following window:



You can also call this function with a double-click on a transponder. Here you can change the **frequency**, the **polarity**, the **symbol rate** and the **FEC** of a transponder. These changes are made for all channels that use this transponder too.

Analogue transponders don't have symbol rates and FEC.

If you mark a transponder as **Reference Tp.** this transponder will be the first one that is used when you make a satellite search in the receiver. This transponder is marked with a satellite symbol:



Each satellite can have one reference transponder.

With **Delete** you can delete a transponder and all its channels. You can also use the Del key on your keyboard. If the transponder has channels, you are asked if you really want to delete these channels. If you want to delete a transponder without checking if existing channels are deleted too, you can use the shortcut Ctrl-Del.

With **Delete all empty transponders** you can delete all transponders that don't contain channels.

With **New** you can create a new **transponder** or a new **TV** or **Radio channel on the selected transponder**.

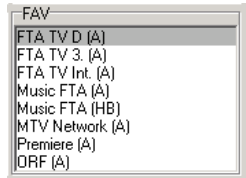
If you want to create a new transponder, and a satellite is selected in the satellite list, the transponder is assigned to this satellite. If "All" is selected in the satellite list and a transponder is selected in the transponder list, the new transponder is assigned to the satellite of this selected transponder. If "All" is selected in the satellite list and no transponder is selected, you can't create a new transponder.

In the frame of the transponder list there are several uppercase letters for the following functions:

- O:** The transponders are shown in original order.
- F:** The transponders are shown sorted by frequencies.
- P:** The transponders are shown sorted by polarities.

## 5.g Favourites

The EchoNAV receivers have eight TV favourite lists and eight radio favourite lists for your favourite channels.



Each channel can be in more than one FAV list without creating a duplicate first.

Channels that are in a FAV list are marked in the channel list with a darker background colour. (You can change these colours in the configuration.)

### **Add/remove a channel to/from a FAV list:**

To add one or more channels to a FAV list, please select the channel(s) you want to add to a FAV list. Now you can drag them to the FAV list (drop them on the name of this list). They are added at the end of this FAV list.

To remove a channel from a FAV list, please select the FAV list and then the channel that you want to remove from the favourite list and use the delete function of the channel list menu or hit the Del key on your keyboard. If you delete a channel within a FAV list, this channel is only removed from this FAV list and not from the main list.

It is also possible to assign one or more channel(s) to a FAV list or remove them from all FAV lists with the help of the "Mark as" function in the channel list menu.

### **Change channel order within a FAV list:**

To change the order of the favourite channels, please select the channel(s) you wish to move. Now you can drag them to the position within the FAV list where you want to have them (drop them on the new position).

Within the favourites you can change the order independently of the order in the main list. If you now change the order by using the drag & drop function you will only change the order within this FAV list but not the order of the main list. In the opposite way the order of the channels in a FAV list will not change, if you change the order of the channels in the main list.

To change the name of a FAV list please make a double click on the FAV name, you will get the following window:



Here you can enter the name of the FAV list.

In the case of the EchoNAV receivers you have the possibility to enter to names for each FAV list (for radio and TV).

You can easily change the order of the FAV-lists by drag & drop.

## 6 Problems

If you have problems with the serial connection please check your serial cable. It has to be a serial null-modem cable (no 1:1 cable) with the following pin connections:

2-3  
3-2  
4-6  
6-4  
5-5  
7-8  
8-7

SetEditNAV is only tested with the original version of the receiver firmware. If you have changed the receiver firmware, I can't guarantee that the program will work properly.

It is only possible to convert another settings file into the SetEditNAV format, if you have saved the satellite configuration before (see chapter 3.j).

If you have any other problems please feel free to contact me by e-mail. Please note for all problems the exact version of SetEdit you use (see Help -> About SetEditNAV).

My e-mail address is [Wolfgang.Litzinger@setedit.de](mailto:Wolfgang.Litzinger@setedit.de)

Please **don't** call me to tell me about problems. There is no phone support.

## 7 Register

You can get your registration key for 29,99 € from me. I need your full name and your e-mail address. I can't send you the registration key by post.

In the demo version you can only change 20 channels. After this you can neither save your settings nor write them into your receiver.

**Note: *Without your e-mail address and your full name I can't register you for SetEditNAV.***

To register for SetEditNAV there are 4 possibilities:

1. You send me the money in cash (by registered letter).

My address is:  
Wolfgang Litzinger  
Wasseraecker 8  
67705 Trippstadt/Germany

2. You can make a direct money transfer.

Note: If you transfer from outside Germany please make sure that you pay the fees for international money transfer.

My account is:  
Account number 44 609 52 00  
Bank name: Bank 24  
Sort code: 380 707 24  
Bank address:  
P.O. box 24  
Karl-Legien Str. 188



53244 Bonn/Germany  
SWIFT: DEUT DEDB XXX  
IBAN: DE66 3807 0724 0446 0952 00

Please use as the reason for payment your name, the editor version you wish to order and add a random number (e.g. your zip code, phone number etc.).

Example for a reason for payment: Charles Brown SetEditNAV 12:56

Please send me an e-mail when you have transferred the money. The body of the mail should contain your name, the editor version you wish to order (here SetEditNAV) and the random number you wrote in the reason for the money transfer.

Example for an e-mail text: Order for SetEditNAV, Charles Brown, 12:56

Please check if your e-mail address is valid (e.g. by sending an e-mail to your own address). Unfortunately it happens sometimes that I want to send someone an e-mail with the registration key but the e-mail comes back undeliverable because the return address is not correct. Please make sure that your name is in the e-mail (there are often e-mails like "from: superman@aol.com, I have sent you money today please send me the editor"). In this case I can't relate your mail with my bank account. Please don't try to write your e-mail address to the reason of the money transfer, special characters like "@" and "\_" are not valid for this.

**Please don't send me pictures of your transfer sheet or online banking program, you will get the key as soon as I have the money on my bank account, I check my account every day.**

If you get no e-mail from me after 7 working days, please contact me by e-mail. Either I could not assign your money transfer to someone or something is wrong with your e-mail address.

3. The easiest way to pay from outside Germany is to pay by credit card (Visa/MasterCard or American Express). Please use the order form on the next page, print it and fill out all fields and then send it to me by fax +49 (0) 6306 993453.

4. You can also use the online shop on my homepage to pay by Visa/MasterCard.

[Back to Contents.](#)

Order for SetEditNAV

(Please write in block letters, faxes are often hard to read!)

Date: \_\_\_\_\_

From:

First name: \_\_\_\_\_

Last name: \_\_\_\_\_

E-mail: \_\_\_\_\_

Note: if you don't get a reply within 3 working days I couldn't read your mail address or the address was not valid, please sent me a mail so I can see your correct mail address.

Street: \_\_\_\_\_

ZIP code: \_\_\_\_\_

City: \_\_\_\_\_

Country: \_\_\_\_\_

Fax: \_\_\_\_\_

To: Wolfgang Litzinger

Company: SetEdit

Fax number: +49 (0) 6306 993453

Visa/MasterCard

American Express

Card number: \_\_\_\_ - \_\_\_\_ - \_\_\_\_ - \_\_\_\_

3 \_\_\_\_ - \_\_\_\_ - \_\_\_\_

Expire date: \_\_/\_\_/\_\_

I have tested the demo version of SetEditNAV successfully and allow you to charge 29,99 Euro from my credit card.

Signature: \_\_\_\_\_

## 8 Glossary and abbreviations

**Baud rate:** The speed at which data is transferred via the serial port to the receiver. The number is in bits per seconds.

**Decimal/Hexadecimal:** Hexadecimal is a system for representing numbers in base 16, rather than the base 10 we normally use. The hexadecimal system requires 15 digits and a zero; conventionally the letters A-F are used to represent the digits for that the decimal system cannot provide equivalents. Hexadecimal notation is not usually important for the PC user (with the possible exception of specifying base addresses) but is still quite important for the programmer. Its importance arises because there is a very close correspondence between hexadecimal and the very important binary numbering system that computers use internally. However, hexadecimal notation is much more compact than binary.

The reason why you can select both systems in SetEdit is that many satellite operators use "even" hexadecimal PID numbers. For example the audio PIDs on Astra transponder 11720 are in decimal notation 256, 512, 768, 1024, 1280 etc., whereas in hexadecimal notation they are 100, 200, 300, 400 etc.

**DLL:** Dynamic Link Library. A Windows library file that can be shared by multiple applications.

**FEC:** Forward Error Correction. A system, in which redundancy is added to the message so that most errors can be corrected dynamically at the receiver. Usual values are 1/1, 1/2, 2/3, 3/4, 5/6 and 7/8. 3/4 means that 3 out of 4 bits are reference data and the remaining one is for error correction.

**LNB:** Low Noise Block (converter). Amplifies received signals and converts them from microwave to lower frequency signals that are then sent along a cable to the satellite receiver. An LNB can be either single or double. A double LNB is required when more than one receiver is used allowing the viewing of different satellite channels on other television sets.

**PID:** Program Identifier. A 13-bit code in the transport packet header. PID 0 indicates that the packet contains a PAT PID. PID 1 indicates a packet that contains CAT. The PID 8191 (all 1 bits) indicates null (stuffing) packets. All packets belonging to the same elementary data stream have the same PID. The most important PIDs are the Video PID (for the video information), the Audio PID for the sound and the PCR PID (Program clock reference) to get Video and audio synchronous. If you enter an existing Service ID for a channel, the receiver can get all necessary information for this channel. If you only enter the video and the audio PID, it may happen that you see the picture and hear the sound, but EPG does not work because this information is transmitted on a different PID. Usually the receiver finds the PIDs automatically, but occasionally (exotic channels) you have to know them and enter them by hand.

**Symbol rate:** The amount of digital data that is transmitted per second via a transponder. This is specified in Msymb/sec (Mega symbols per second), whereby a "Symbol" consists of 4 bits. The symbol rate together with the FEC value can be used to calculate the bandwidth of a transponder.

**Polarity:** A satellite transmission signal has either a vertical, horizontal, or circular orientation; a satellite can be all vertical or all horizontal; if a satellite is cross polarised, it can transmit both ways and therefore has twice the delivery capacity.

Besides the horizontal and vertical polarisation we also find the circular polarisation. Circular polarisation is not as easy to understand as linear polarisation, you can imagine that the waves are rotating clockwise or anticlockwise. In this case we speak about LHC and RHC (left hand circular and right hand circular).

As a rule in Europe linear polarisation (horizontal and vertical) is used. In Scandinavia and for C-band reception circular polarisation is used.

**Select:** To select a channel please click with the mouse on the channel. To select more than one channel you can use the usual windows methods.

When you press the shift key and click on a channel all channels between the currently selected and the last selected channel are selected.

If you press the Ctrl key on the keyboard you can add single channels to your selection.

**Settings** are the part of the memory of your receiver where all channel information is stored. It contains all channel information such as sequence, channel name, frequency, symbol rate, FEC, and all other parameters.