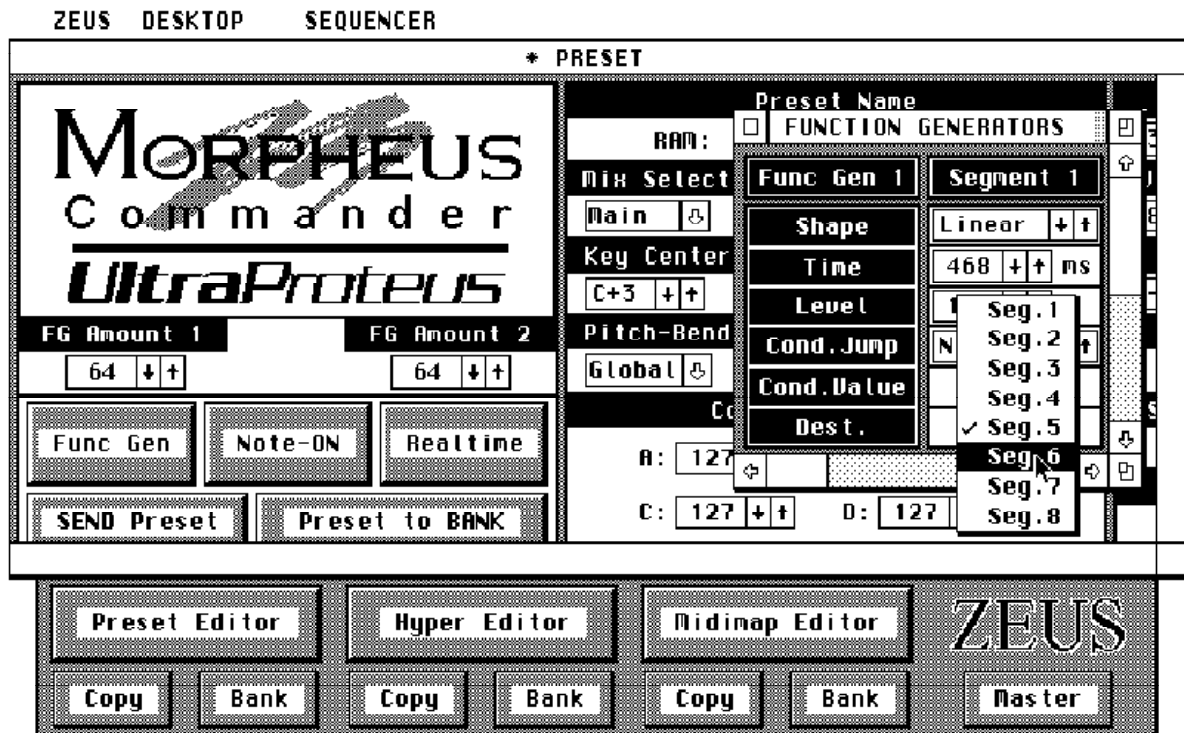


# ZEUS



E - M U  
Morpheus / Ultra Proteus  
C O M M A N D E R  
Version 1.3  
for  
ATARI ST, Mega, TT, Falcon

**DIE KLANGPIRATEN**

Copyright '95/98  
by

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# Introduction

This is **ZEUS**, the editor and bankloader for E-MU Morpheus/Ultra-Proteus for the ATARI. Yes, we all turned that KNOB some miles and hours...but the remedy is here!

**ZEUS** runs on ATARI ST; STE; MEGA ; TT; and FALCON with minimum 1MB and 640\*480 screen resolution (..REAL fun on a TT with a big screen!). It features full GEM-compatibility; size and position of open windows can be saved in the setup; "clean" code that runs under all TOS-Versions, including multitasking (tested under MAG!X and MROS-Switcher in conjunction with CUBASE).

**!! IMPORTANT !!**

**We don't take any liability for damage, loss of data or any kind of multi-dimensional reality shifting, that YOU or anyone produces with the help of the ZEUS program.**

**IT'S AT YOUR OWN RISK !!**

## Some Important Information

We tried to write this manual as short as possible, saving you from another 200-page handbook and keeping us away from rewriting the E-MU and Atari manuals. So, if you don't understand a term, please refer to these manuals first, before you call the hotline. We stucked as close as possible to the names and places of the parameters, as you know them from editing via Data-wheel, so it should be no problem to navigate through your synthesizer.

The Morpheus or Ultra Proteus will be called **machine** on the following pages.

All ATARI key-shortcuts are printed **bold** and are put in **[this]** kind of parenthesis:

**[Space]** = space-bar

**[Shift-S]** = hold shift and press S

All machine specific terms are written in CAPITAL letters:

MIDIMAP, REALTIME MODULATION CONTROL, etc.

Important informations are **printed bold** and/or *cursive*

### **BASIC CHANNEL -**

The MIDI-channel, used for the communication between machine and Atari. It can be changed in the MIDIMAP

### **SCRATCH -**

The edit-buffer in the machine, where data is changed, ***but not saved permanently.*** There is a separate SCRATCH for MIDIMAP, PRESET and HYPERPRESET.

## **CURRENT MIDIMAP -**

The MIDIMAP that is in the SCRATCH. Oftentimes it is **not** equal to a MIDIMAP that is saved under the same name. This is, because especially in a complex MIDI-setup, every data, received by the machine like: volume, pan or PRG-change writes into the SCRATCH. Analogous to this there is also a CURRENT PRESET and CURRENT HYPERPRESET, but

these can only be changed via SysEx (System Exclusive) data. There is one exception, that's when the machine receives a program-Change on the BASIC CHANNEL. In this case the HYPERPRESET- or PRESET- SCRATCH in the machine will be overwritten and must be send from the Atari (see chapter: Data Transfer).

## **Editing more than one machine**

It is not possible to edit two machines parallel, but in series. If you have more than one machine, every unit has to have a different UNIT ID-NUMBER. If both machines are connected to the Atari, ZEUS reads the data of the machine with the lower ID NUMBER (see chapter: MASTER for details). You should read these information carefully (like all the rest of this manual) to avoid any MIDI-chaos or loss of data !

## **The Cursor-Keys. . .**

. . . should be used when scrolling the windows. Because of TOS inherent window-management problems, you might have to click several times with your left mouse-button on the scroll-bars to change the screen. So its much quicker and easier to do this with the [Cursor-Keys] .

## **Getting started . . .**

First of all, connect the MIDI-IN of the ATARI with the MIDI-OUT of the Morpheus/U-Proteus and the MIDI-OUT of the Atari with the MIDI-IN of the Morpheus/U-Proteus.

This is absolutely necessary BEFORE you start the program. ZEUS needs to read data from the machine to start (i.e. what kind of machine is connected).

## **Harddisk installation**

Make a folder named ZEUS and copy the whole contents of the zip file into this folder. Open the folder and double-click on ZEUS.PRG

## **Ataris without Harddisk**

Copy the whole contents of the zip file to a floppy. Start the program by double-clicking on ZEUS.PRG. You should have a second, formatted disk ready for saving the data you're processing. If the message "Insert Program Disk" occurs, change the disk to the one, you started the program from.

# Ataris with 1 MB RAM

You should avoid ACC's and autofolder-programs (except, maybe NVDI, which speeds up the screen incredibly). Switching from one editor to the other takes a little time because the modules must be loaded from Floppy/Harddisk.

## Running under M-ROS SWITCHER

The program needs at least 1270 KB, MIDI set to STANDARD, INPUT and OUTPUT to ATARI. Now you can start a sequence in Cubase (only 1 Track at a time, please!) and edit a PRESET/MIDIMAP/HYPERPRESET for the special needs of the song.

### NOTICE:

The **BASIC-CHANNEL** in the **MIDIMAP** has to be set to the **MIDI-channel** the sequence runs on, in **CUBASE**, **BEFORE** you switch to the chosen editor (see **MIDIMAP-Editor** for Details).

## Shortcuts

As there is not always enough screen-space we shortened some of the names, i.e. the bank-names in the machine:

**CardM** = RAM-CARD MIDIMAP  
**RomP** = ROM PRESET  
**RamH** = RAM HYPERPRESET

Other shortcuts are:

**FG, Func Gen** - FUNCTION GENERATOR  
**Realtime** - REALTIME MODULATION CONTROL  
**Note ON** - NOTE ON MODULATION CONTROL  
**Cond. Jump** - CONDITIONAL JUMP  
**P/H/Ms** - PRESETS/HYPERPRESETS/MIDIMAPS

## Operation

Actually, **ZEUS** is not one editor, it's three editors with bankloaders and copy-windows:  
**MIDIMAP-, PRESET- und HYPERPRESET- editor.**

The MASTER-editor doesn't belong in this category, because there's no bankloader or copy-window.

You can switch between the editor-windows by clicking on the name-buttons:

with **[Control-N]** (next)

or **[Control-P]** (previous)

or with the first letter of the name, for example:

**[M]** = MIDIMAP Editor  
**[P]** = PRESET Editor,  
**[H]** = HYPERPRESET Editor

"Inside" the editors there are more windows,(see Hotkey-list) depending on the editor this might be:

[R] = REALTIME Controller  
[N] = NOTE ON Controller  
[B] = Bankloader,  
[C] = Copy-window  
[F] = FUNCTION GENERATOR

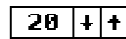
Inside the windows you can reach the part that can't be seen, by clicking on the grey part of the scroll-sliders, or better with the **[Cursor]-Keys**.

[ESC] - closes topped window.

[Control-S] -- saves the present configuration of all the windows (size, location), this constellation will automatically load at next program start.

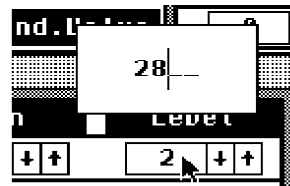
For editing the parameters there are two types of adjustment-tools:

with up- and down- arrow:



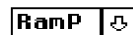
\* clicking on the down-arrow with the **left** mouse-button decreases the value by 1, with the **right** mouse-button by 10. Guess what's happening when you hit the upward arrow...

\* clicking on the value-field opens a little window for keyboard editing.



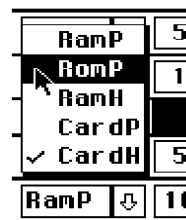
[Return/Enter] or click with **left** mouse-button into the value-field confirms the new value, a click with the right mouse-button into the value-field, terminates without changing values.

with one outlined down-arrow:



\* clicking on the arrow with the left mouse button steps through values.

\* clicking on the value-field, shows a list to choose from (checked with a little hook).



## Data-transfer in all editors

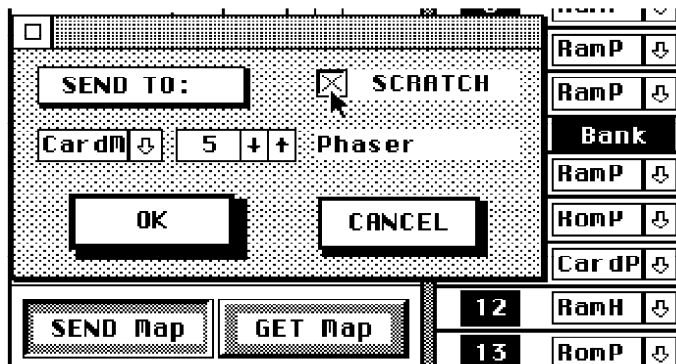
... TO BANK      **[Shift-T]** -  
sends data to the bankloader in the **Atari**

... FROM BANK    **[Shift-F]** -  
gets data from the bankloader in the **Atari**

SEND ...      **[Shift-S]** -  
stores data to RAM or CARD of the **machine**

GET ... **[Shift-G]** -  
 receives data from RAM or CARD of the machine

This window appears for data sending and receiving manoeuvres



This shows a pressed SRATCH-button

## SCRATCH -

If this option is selected, data will not be send/received - to/from RAM or CARD, instead it is written to/from the SCRATCH. This might be necessary, if you're not sure whether the data in the Atari are still the same than in the SCRATCH of the machine.

## Helpful signs

Left to the name of the edited PRESETS/HYPERS/MIDIMAP there is a reference to its origin, i.e.:

**BnkA: 101** = Bankloader, Bank A, memory-place 101 in the Atari;

**CARD: 5** = RAM-CARD in the machine, memory-place 5.

An asterisk, left to the name of the editor indicates that the data has been changed but not yet saved! If there is a P behind the name, the sequencer plays (this should also be heard ! ).



## The MIDIMAP-editor

The MIDIMAP is the MIDI-center of the machine. Here you decide what kind of data every channel receives and which PRESET/HYPER is chosen. You can also adjust volume and panorama and edit the effect-section. The BASIC-CHANNEL is shown black on white. The PRESET/ HYPERPRESET shown there will be edited if you switch to the corresponding editor.

The BASIC-CHANNEL can be changed by clicking on another channel number. You can listen to all the other sounds on other channels without changing the BASIC-CHANNEL, by clicking on the name or changing values and then starting the sequence with the **[Space]**-bar. The channel-number shows this grey on white. The PRESET/HYPERPRESET-names of a channel with MIDI-ENABLES set to ALL MESSAGES OFF are shown in grey letters. You can't listen to those sounds.

MIDIMAP				
Chan	Bank		PRESET/HYPER	
1	RomP	↓	81	↑ ↑ Atm: Ethr lAir
2	RomP	↓	0	↑ ↑ Mph: Morpheus
3	RomP	↓	70	↑ ↑ Ld: Jupr Synth
4	RomP	↓	52	↑ ↑ Bass: The Q
5	RomP	↓	81	↑ ↑ Atm: Ethr lAir
6	CardP	↓	83	↑ ↑ Quark Synth

To edit the effects, press one of the little Edit-buttons or hit the **[E]**-key. A window opens, that shows the parameters of the effect-sections.

EFFECT A	
Warm Room	EDIT
EFFECT B	
Phaser	EDIT

## The PRESET-editor

In the PRESET-editor is the place where most of the sound-design happens. Beside the parameters in the main-window you'll find others like REALTIME MODULATION CONTROL, NOTE ON MODULATION CONTROL and the FUNCTION GENERATORS in separate windows. Use the corresponding buttons or the initial letters to edit these parameters.

In the FUNCTION GENERATORS window you can switch the LEVEL between Normal-, Delta-, Random-, and Delta-Random values, by clicking into the field next to the value-editor.

Shape	Linear	↑ ↑
Time	312	↑ ↑ ms
Level	127	↑ ↑ Δ
Cond. Jump	Never	↑ ↑
Cond. Value	0	↑ ↑
Dest.	Seg. 1	↓

Please notice that modulation-connections, in the REALTIME- or NOTE ON-CONTROL-matrix won't show any effect if the AMOUNT values in the main window are set to 0 (i.e. FG 1 Amount) .

## The HYPERPRESET-editor

In the HYPERPRESET-editor you can combine PRESETs located in ROM, RAM or CARD to one sound. There is the possibility of keyboard-splits (ZONES) and velocity-controlled dynamic layers. Here you also find the FREE RUN FUNCTION GENERATOR, by pressing the named button or hitting the **[F]**-key.

## The MASTER-window

The MASTER window is divided into several sections for configuring the system:

- MASTER Tune**: A numeric field with up/down arrows, currently set to 0.
- Transpose**: A numeric field with up/down arrows, currently set to 0.
- Global Bend**: A field with a +/- sign and a down arrow, currently set to 1.
- Global Velo. Curve**: A numeric field with a down arrow, currently set to 6.
- Controller Numbers**: Four fields labeled A, B, C, and D, each with up/down arrows. A=1, B=29, C=30, D=31.
- Footswitch Controller**: Three fields labeled 1, 2, and 3, each with up/down arrows. 1=64, 2=65, 3=66.
- MIDI Mode**: A dropdown menu currently set to 'Multi'.
- Mode Change**: A dropdown menu currently set to 'Disabled'.
- Unit ID**: A numeric field with up/down arrows, currently set to 0.
- Compare**: A dropdown menu currently set to 'OFF'.
- Auto-Select**: A dropdown menu currently set to 'OFF'.
- Program Change Maps**: Four rows labeled Map1 through Map4. Each row contains two numeric fields with up/down arrows and a 'Bank' dropdown menu. Map1: 0 → 0, Bank: CardP. Map2: 0 → 1, Bank: RamP. Map3: 0 → 1, Bank: RamP. Map4: 0 → 0, Bank: CardH.
- User Key Tuning**: A 'Key' field with up/down arrows, currently set to C-2, followed by two numeric fields with up/down arrows, both set to 0.
- Action Buttons**: Five buttons labeled 'Send Map 1', 'Send Map 2', 'Send Map 3', 'Send Map 4', and 'Send User Tune Table'.

The parameters you edit in this section, are changed directly in the machine and are stored there permanently. The PROGRAM CHANGE MAPS and the USER KEY TUNING are exceptions.

***If you change these parameters you have to send them to the machine by pressing the corresponding buttons. This is very important because the data gets lost when you leave the program !***

Another topic that should be treated with care is changing the UNIT ID. If you have one machine, you should not change the ID. You need to do this only if you have more than one Morpheus/Ultra-Proteus and you want to edit both. If you change the ID you'll get a message, asking whether you want to change the ID of the machine that is being edited, or read and edit the data of another machine with a different ID.

***If ZEUS reads the data of a machine with a different ID, ALL DATA of the previously edited machine in the Atari will be overwritten !!***

## The Bankloaders

There are three bankloaders in **ZEUS**, one for PRESET, HYPERPRESET and MIDIMAP, that work in the same way. You get into the corresponding bankloader by pressing the **[B]**-key or the buttons in the desktop button-box. A window opens with two banks, **A** and **B**. The black bar at the top of the bank shows the name under which the bank is saved. Below that you find two windows with 16 names each, of the **P/H/Ms**. Then there is a row

with black and white up- and down- arrows. With these arrows you can switch to the other parts of the bank, - the **black** arrows scroll both windows, so you can see 32 following P/Hs. If you use the **white** arrows, only the window above is scrolled, so you can copy from/to distant P/H's, i.e. from Nr.2 to Nr.100 in the same bank. Clicking with the **right** mouse-button on one of the arrows, scrolls to the beginning respectively to the end of the bank. We used the same window type for the MIDIMAP-bankloader, but you **don't** have this function here, because there are only 16 maps in one MIDIMAP-bank.

PRESET BANKLOADER			
BANK A		AUTO_P.PNK	
0: Mph:Morpheus	48: Pad:StrSwell		
1: Real:PnoVibe	49: Pad:FunkShun		
2: Cmp:ElecPno	50: Bass:Noir		
3: Pad:BallHvys	51: Bass:Deep		
4: Bass:Sweep	52: Bass:The Q		
5: Gtr:Trippy	53: Bass:Expanse		
6: Ld:FluteMrph	54: Bass:Breath		
7: Atm:Atmorphs	55: Bass:Thick		
8: Voc:VocalWhl	56: Bass:Friend		
9: Drum:Dance	57: Bass:MyPulse		
10: Mph:PhatSky	58: Bass:SawBass		
11: Mph:SwellPad	59: Bass:EmuMod		
12: Mph:WindyPip	60: Gtr:Riphust		
13: Mph:Org/Bass	61: Gtr:Electric		
14: Mph:Harpeg	62: Gtr:Mouth		
15: Mph:SethySax	63: Gtr:Acoustic		
<div> <div>▼▲</div> <div>▽△</div> </div>		<div> <div>▼▲</div> <div>▽△</div> </div>	
LOAD		SAVE	
RECEIVE		SEND	
		DEL MOVE	

BANK B		WERKSRAM.PNK	
0: Mph:Z-Synth	16: Mph:MetalMlt		
1: Real:PnoVibe	17: Mph:Phazbraz		
2: Cmp:ElecPno	18: Mph:RezzSlth		
3: Pad:Strings	19: Mph:SteinChl		
4: Bass:UpRight	20: Real:Piano		
5: Gtr:Trippy	21: Real:E.Piano		
6: Ld:Grunge	22: Real:StnBass		
7: Atm:RaveGruv	23: Real:Flute		
8: Why that ?	24: Real:Mute Me		
9: Drum:Sweep	25: Real:MstyVib		
10:	26: Real:ExAcGtr		
11:	27: Real:Str<Chr		
12:	28: Real:BrasStr		
13:	29: Real:StnTine		
14:	30: Cmp:ChikWill		
15: RehAnimation	31: Cmp:2 Pianos		
<div> <div>▼▲</div> <div>▽△</div> </div>		<div> <div>▼▲</div> <div>▽△</div> </div>	
LOAD		SAVE	
RECEIVE		SEND	
		DEL MOVE	

## Copying in the bankloader

For copying P/H/Ms in one bank, or from one to the other, mark the desired P/H/Ms by clicking on them with the left mouse-button, for more than one **hold the [Shift]-button** (the marked are shown inverted). After marking everything that should be copied, "take" the marked block **by holding down the left mouse-button** (the mouse-arrow turns into a hand) and drop them at the destination-P/H/M (shown inverted). After a security-question the P/H/M are copied to the destination in a row, **without** spaces, as they might appear while marking.

**!! ATTENTION !!**  
**THIS OPERATION DELETES ALL**  
**PRESETS/HYPERS/MIDIMAPS AT THE DESTINATION**

To undo marking, click at a space with no function, with the left mouse-button.

## The DEL-button

To delete P/H/Ms, mark them as described and click on the DEL-button in the lower right

corner of the bank-window, or hit the **[Del]** key. After a security-question the P/H/M are deleted. If nothing is marked, an empty bank is generated.

## The MOVE-button

This function puts a free space into the bank to insert a P/H/M. To do this, mark a P/H/M as described above and click on the MOVE-button in the lower right corner of the bank-window, or hit the **[Insert]**-key. After a warning, the PRESETs/HYPERs/ MIDIMAPs are moved one place down.

### NOTICE !

**In a full bank you loose the last P/H/M.**  
If nothing is marked, all free places are deleted.

## The PRINT-button

Hitting the PRINT-button, prints a name-list of the P/H/M`s in the present bank.

## Listen to PRESETS/HYPERPRESETS

If P/Hs are marked, you can listen to them by hitting the **[Space]**-bar. Now the first marked P/H will be send to the SCRATCH of the machine and the sequence plays. Before the next P/H is transmitted, you are asked if you want to edit this one or listen to the next one. In case you want to edit, the corresponding editor opens.

## Switch to editor

To edit a certain P/H/M, mark it and hit the key that opens the corresponding editor (**[P]**reset, **[H]**yper, **[M]**IDImap).

## Other bankloader buttons

<b>LOAD</b>	- loads bank from disk or harddisk
<b>SAVE</b>	- saves marked or whole bank to disk or harddisk
<b>SAVE AS</b>	- saves marked or whole bank with new name
<b>SEND</b>	- sends bank to RAM or CARD of the machine
<b>RECEIVE</b>	- receives bank from ROM, RAM or CARD of the machine

## The bank names

<b>AUTO_A.MBM</b>	- Morpheus MIDIMAP-bank, loads automatically to bank A at program start
<b>NONAME00.PBU</b>	- Ultra-Proteus PRESET-bank, saved without naming it (SAVE AS).

- SUPERHIP.HBM - Morpheus HYPERPRESET-bank.
- AUTO\_B.HBU - Ultra-Proteus HYPERPRESET-bank, loads automatically to bank B at program start

The program automatically puts the right ending to your bank-names, this list is only for keeping survey over the data-masses:

**Morpheus:**

- \*.PBM - PRESET-bank
- \*.HBM - HYPERPRESET-bank
- \*.MBM - MIDIMAP-bank

**Ultra-Proteus:**

- \*.PBU - PRESET-bank
- \*.HBU - HYPERPRESET-bank
- \*.MBU - MIDIMAP-bank

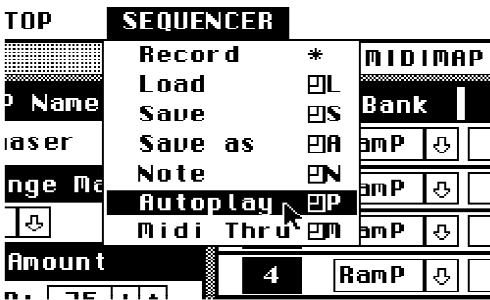
# The Sequencer

[Space]-bar starts the sequence, indicated by the letter **P**(lay) in the menu-bar of the main-window. The [\*]-key starts the recording of a sequence, a mouse-click or any key stops it. If you restart the recording, **the old sequence will be overwritten**. Notice, that you have to connect a MIDI-keyboard with the input of the Atari to record a sequence. The sequences are standard-MIDI-file format (one track), so you can use data from other sources. The sequences should not be too long (maximum 3333 Events). The sequence AUTOLOAD.MID in your ZEUS-folder will load at program start.

The other functions of the sequencer are located in the drop-down menu of the desktop. Beside the known functions like **Record**, **Load**, **Save** and **Save as**, there are: **Note** - Here you can choose a note-number that will be played instead of the sequence, when you hit the [Space]-bar.

**Autoplay** - If you choose this function, the note or sequence will be played after every value change.

**MIDI Thru** - If MIDI-Thru is active, all MIDI-data at the Atari input will be routed to the output, so you can play the edited sounds direct via a connected keyboard.It is highly recommended to have a switch or MIDI-merger in front of the Atari`s MIDI-in, to be able to switch between keyboard and Morpheus/Ultra Proteus quickly and without pulling plugs.At latest you will get a message like: **"No MIDI-Data !!"**, if ZEUS has to read data from the machine, and the E-MU`s MIDI-out is not connected to the Atari MIDI-IN . . .



If you use a MIDI-merger, it must be capable of transferring SysEx-data without problems.

**IMPORTANT !**  
**Keyboards or sequencer should not be operated in RUNNING STATUS. This disturbs the data-transfer and ZEUS can't record!**

# The COPY-Windows

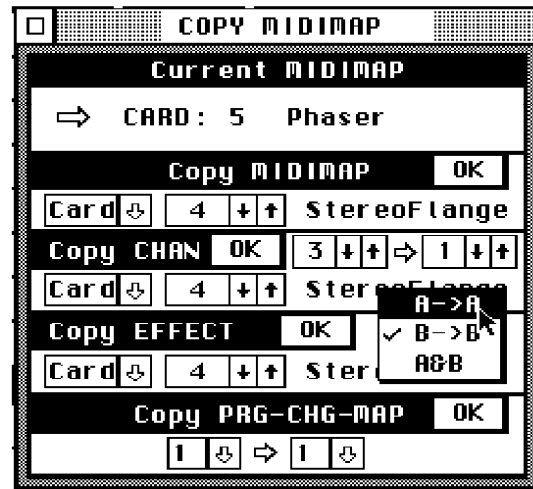
For making the editing a little more comfortable, E-MU Systems included several copy-functions. ZEUS uses them also, with the difference, that every editor has its own window with the inherent copy-functions. You get to the COPY-window, by pressing the [C] key or the COPY-button in the desktop button-window.

Lets take a look at the copy-functions in the MIDIMAP COPY -window. Clicking on the **OK**-buttons, copies the chosen parameters **without further questions**.

## exception:

If source-P/H/M Nr. and destination Nr. are the same, you are asked, if you want to copy from the machine or the Atari.

**You always copy INTO the CURRENT -MIDIMAP/-PRESET/-HYPERPRESET (marked with the outlined arrow) !**



There's only one MASTER COPY-function: **Copy PRG-Change Map**. We have put it into the MIDIMAP COPY-window, instead of having an own window for this function.

## Important !

To manage the huge amount of data, the copied data will **not** be send to the machine **before** pressing the [**Space-Bar**]. Changes can only be heard after sending the data.

**This is important in conjunction with other MIDI-sources like Cubase with M-ROS or a master-keyboard !**

. . . and now, while creating lots of  
incredible sounds the easy way . . .

HAVE FUN !!

## DIE KLANGPIRATEN

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# THE HOTKEY'S

## DESKTOP:

- Ctrl N** - next window
- Ctrl P** - previous window
- Ctrl S** - Save Setup
- Ctrl L** - change language
- Ctrl Q** - terminate program

## SEQUENCER:

- SPACE** - Play Sequence
- \*** - Record Sequence
- Alt L** - Load Sequence
- Alt S** - Save Sequence
- Alt A** - Save Sequence as
- Alt N** - Note
- Alt P** - Autoplay
- Alt M** - Midi Thru

- Cursor Keys** - scroll topped window
- ESC** - close topped window

## A - MASTER-Editor

## M - MIDIMAP-Editor:

- B** - MIDIMAP-Bankloader
- E** - Effects
- C** - MIDIMAP Copy
- Shift S** - Send MIDIMAP
- Shift G** - Get MIDIMAP
- Shift T** - to Bank
- Shift F** - from Bank

## P - PRESET-Editor:

- B** - PRESET-Bankloader
- N** - Note-on Controller
- R** - Realtime Controller
- F** - FUNCTION GENERATORS
- C** - PRESET Copy
- Shift S** - Send PRESET
- Shift G** - Get PRESET
- Shift T** - to Bank
- Shift F** - from Bank

## H - HYPERPRESET-Editor:

- B** - HYPERPRESET-Bankloader
- F** - FREE-RUN FUNCTION GENERATOR
- C** - HYPERPRESET Copy
- Shift S** - Send HYPERPRESET
- Shift G** - Get HYPERPRESET

**Shift T** - to Bank  
**Shift F** - from Bank

**Bankloader** windows:

Delete - delete marked  
Insert - insert a free field