Miniak-editor User Manual

www.HyperSynth.com

Rev 6.0

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● **Installation**

1) Right Click on the zip file **"Miniak-editor_vX.X.zip"** and select "Extract All" or "Extract here". (Note: you will receive instructions about how to download this file after ordering)

2) Move **Miniak-editor_vX.X** folder to your VST folder. (You must move the entire folder containing all its files, if you only copy *.dll file the editor will not work properly)

How to run VST plug-in?

You need a VST host program to run a VST plug-in. After the installation the plug-in must appear in the "instruments" menu of your host. If you need further information about adding plug-ins in your host please take a look at the handbook of your host program.

How to run Standalone version?

Simply click on **Miniak_editor_vX.X.exe**. For quick access to *.exe file you can create a shortcut and move it on your desktop.

If you want to run only the standalone version there is no need for step 2, you can place the extracted folder everywhere you like and click on **Miniak_editor_vX.X.exe**.

● **Registration**

You can register VST or Standalone version, once one of them get registered another one will work too. At first startup the "about window" will be displayed. Perform the following steps for registration:

1) Enter or paste your "Full Name" and "Serial number" in the text boxes (Use Ctrl + V or Shift + Insert to paste characters/numbers easily).

2) Click on **Activate** button.

If the information is correct, **"Successfully registered"** message will be displayed and the editor will automatically jump to front panel. (Activate button will be hidden after a successful registration)

If you face to **"Invalid Serial Number"** message you must recheck your name and serial or contact to customer support.

● Setting Up MIDI Connection

Hardware Connections: You need two MIDI cables for setting up a two-way connection between your synth and MIDI interface. However if you don't need **Request Patch/Save Sysex** function one way connection will be enough from your interface output to the synth MIDI Input.
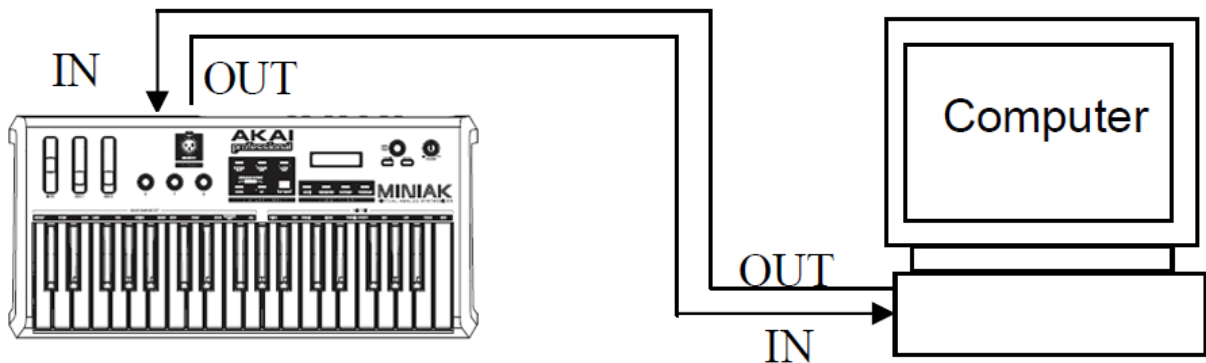
Configuring Editor:

1) Select **MIDI IN** device which is connected to your synth MIDI Output.
2) Select **MIDI OUT** device which is connected to your synth MIDI Input.
3) Make sure that **Channel number** is set to CH:01.
4) Make sure that the **cc32** is selected as **bank select message**.

Configuring Miniak:

- Press **[config]** to set the Miniak's global configuration options.

- Using Control knob to select **MIDI: channels** option and set it to **start at 1.** (By default editor sends/receives data on channel 1. You can change this later but the channel number must be the same in Miniak and editor)

- Using Control knob to select **MIDI: Pgm change** option and set it to **on (send+recv).**

- Press **[program]** to select program mode.

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Testing MIDI Connections:

After doing above steps it is recommended to test your MIDI connections before using editor:

Testing MIDI IN:

1) Move M1/M2 slider or pitch wheel on your synth while checking editor, editor's wheels must follow the movement.

2) Select different presets on your synth, the bank/program knobs must be changed on editor too.

If the above steps are done successfully so the MIDI IN connection is ok.

Testing MIDI OUT:

Select a program on your synth, play some notes while tweaking editor's wheels or changing program level knob on editor (top right corner). If you hear the sound variation the MIDI out connection is ok.

If your MIDI interface has indicator LED, It will be a useful tool for monitoring the connection.

● **Quick Start**

One of the basic features of the editor is the ability to create and send **NRPN** messages that are recognized by Miniak. Every time you tweak editor's knobs or switches some specific MIDI messages are generated and sent through MIDI out port. This MIDI messages are used to change the values in **edit buffer** of the sound engine.

What is edit buffer? When you select a patch on your synth and start to change the sound's parameters, A copy of the patch is created in the memory that is called edit buffer. Your changes are not stored directly in patch but in edit buffer and the original patch is still there unchanged unless you store that patch manually. **NRPN** messages can only change the edit buffer so you must not worry about losing your patch or mistakes in editing.

> **NRPN vs CC:** NRPN has 14 bit resolution (16,384 steps) while CC has 7 bit (127 steps). NRPN can change parameters more precisely if the device supports it. NRPNs occupy more MIDI bandwidth than CCs.

Which parameters can I change remotely via NRPNs?

As you see in the front panel of editor nearly all the parameters of sound-engine can be controlled, **MOD Matrix** and **Tracking Generator** are located in the rear panel. For switching between the panels use **panel selector** at the bottom right corner of the screen. Dual modes bring **MOD Matrix** in front panel for easy access. A randomizer panel shows **Randomizer module** that can randomize some parameters of editor. Every parameter of editor can be automated by your DAW. When the DAW plays your track the recorded automations are reflected in editor and then through your synth:

Front Panel


Rear Panel

Dual 2

Randomizer

● Request Patch

Request patch loads a patch from specific Miniak Memory location into the editor. Program **name** and **Category** are stored in the patch. But a patch cannot be requested by its name, you must address it by **program number** and **bank number** (fig.1-1). When you change your synth presets, the synth automatically transmits the program and bank number out of its MIDI port. Editor receives this information and sets the bank/program number, Only thing you must do is to click on the request patch button. You can find request patch button in the tool bar under MIDI IN device selector (fig.1-1).

If you don't want to touch your synth and want to select the patches remotely, you must know the program and bank number of the patches for setting it in the editor:

How to find out the program and bank number in Miniak? Hold down the **[programs]** button for a second, and these numbers will appear on the display. Note that Miniak lists its presets in alphabetical order, bank and program numbers may not follow ascending order in a category!

> **Tip:** Request patch is done by using system exclusive messages "**Sysex**". Sysex messages are usually used to transfer large amount of data between MIDI compatible audio gears. Patch name, category and all sound related parameters can be sent out from your synth in sysex format and editor will convert them to a *.**syx** file and save them in your HDD. The size of a standard Miniak sysex file that contains one program is **434 bytes**. Larger files may contain multiple programs, bank or operating system firmware. Alesis ion and Micron programs are compatible with Miniak.
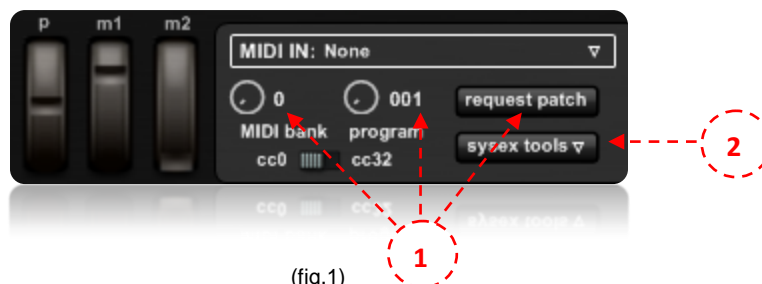
(fig.1)

● Sysex Tools Menu

Using this menu you get access to all Sysex operations that editor is capable of including **load, send, save and renaming** of a sysex file (fig.1-2).

How to load a sysex patch from your HDD into the editor?

1) Open **Sysex tools** menu.
2) Select **Load *.syx**.
3) A window will be displayed and asked you for file location on your HDD. Select the file and click on **open** button.

Here the patch is loaded into the editor, if you want the patch to be sent to your synth too you must do the following steps:
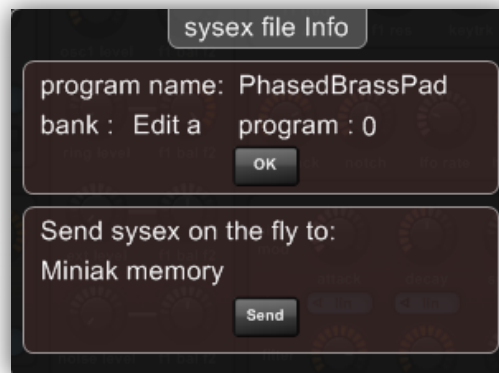
1) Open **Sysex tools** menu.
2) Select **Load and Send**.
3) A window will be displayed and asked you for the file location on your HDD. Select the file and click on **open** button.

4) After step 3 **sysex file info** pop up window will be displayed while showing some information about the selected patch, if you click on **send** button it will be sent to your synth memory. **OK** button will just close the window (fig.2).

Sysex files that have been created by Alesis ion synthesizer contain program/bank number but Miniak ignores program/bank number and the received patch will go to comp category or a random category in Memory. If a patch with the same name was already there, Miniak replaces the new patch with the old one.

(fig.2)

How to change the program name and category of a sysex file?

1) Open **Sysex tools** menu.
2) Select **Change Program Name/Category.**
3) A window will be displayed and asked you for the file location on your HDD. Select the file and click on **open** button.
4) After step 3 **"Rename *.SYX"** pop up window will be displayed while showing program name and category. Enter new program name in the text box and select new category using the category selector then click on **save** button (fig.3).
5) A window will be displayed and asked you for choosing the file path on your HDD. Select your desired path, enter a name for the file then click on **save** button. (if you select the original file it will be overwritten with new information)
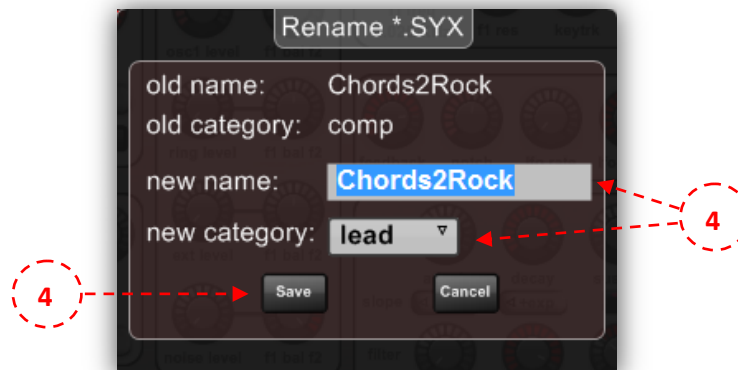
(fig.3)

How to save a Miniak program from Memory as a sysex file?

1) Select the patch using program and bank knob on editor, or manually on your synth.
2) Open **Sysex tools** menu.
3) Select **Save (Selected Program).**
4) A window will be displayed and asked you for choosing the file path on your HDD. Select your desired location and click on **save** button.

How to save editor program as sysex file?

1) Open **Sysex tools** menu.
2) Select **Save (Editor Program).**
3) A window will be displayed and asked you for choosing the file path on your HDD. Select your desired location and click on **save** button.

It is recommended not to use this feature, unless you make sure about the amounts of available mod slots in the current program (For more info please read "**About Miniak OS**" part of this manual). These notes must be considered while using **save (editor program)**:

✓ It uses Miniak hardware for decoding the patch so your synth must be turned on.
✓ It overwrites the edit buffer.
✓ Editor's preset name is stored in sysex file as program name.

- **Tool Bar**
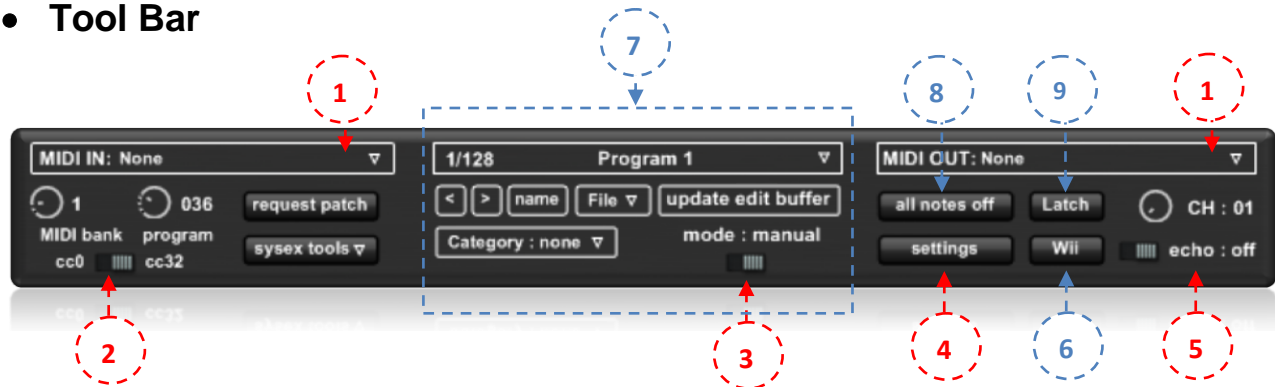
1) **MIDI IN** and **MIDI out** device selector
2) **Bank Select message** switch: allows you to designate which MIDI controller number the Miniak-editor transmits as a Bank Select message. (must be set to cc32 for proper operation)
3) **Update mode** switch: (explained in preset manager part)
4) **Settings** button: opens up settings window (explained in settings part)
5) **Echo** switch: **"Echo: off"** prevents Note-on/Note-off message transmission from editor's MIDI IN to the editor's MIDI out. If it set to **on** and you play notes with your synth keyboard, all notes will be triggered twice and you will hear overlapped attack stages.
6) **Wii**: (explained in Wii Remote part)
7) **Preset manager**: (explained in preset manager part)
8) **All notes off**: shuts off all eight voices like double-press of program button on Miniak.
9) **Latch**: enables/disables latch function of Miniak. (latch acts like sustain switch in Miniak but it has a specific controller number)

Note: all Items that are pointed with **red numbers** are saved by editor every time you change them and will be loaded at the next start up. These items are not stored by your DAW in the track. They are global settings and the same between VST and standalone version.

● **Preset Manager**
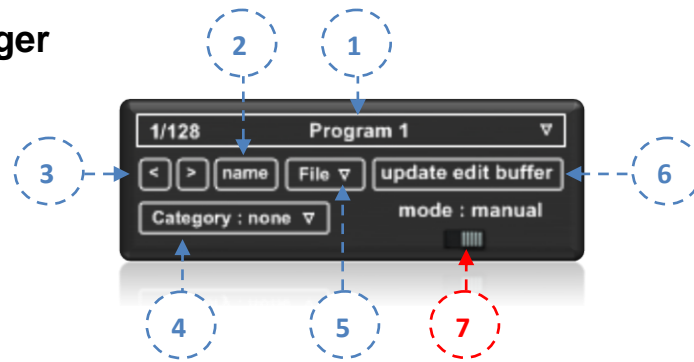
Editor's presets are stored and loaded by preset manager. Preset manager can store/load a bank containing 128 presets. It is also connected to your VST host and updated when you open your project in DAW.

Note that an editor's preset is different from a Miniak program or a sysex file. Editor saves the presets and banks in TXT format:

1) **Program name:** Name of the current program that will be updated after request patch. If you rename it manually, it won't reflect in Miniak.
2) **Name button**: This button renames the current preset.
3) **Left & Right Arrow keys:** increments/decrements the preset number in the bank.
4) **Category:** Sets the sound category in Miniak.
5) **File Menu:** User can save and load editor's presets and banks using this menu.
6) **Update edit buffer:** Transfers all NRPNs values to the edit buffer in regard to CH setting. If you select a preset from the preset list it will be triggered automatically by the software (auto update).
7) **Auto update/manual:** enables/disable the auto update function of preset manager. Auto update triggers "update edit buffer"' at these situations:
    - ✓ After selecting a new preset.
    - ✓ After loading *.txt preset file.
    - ✓ After plugin startup.

    If you want to block sending all NRPNs to synth in these situations set it to manual.

Which parameters are stored in the editor's preset?

- ✓ All the parameters of Miniak sound-engine in front and rear panel of editor excluding **randomizer module**.
- ✓ M1 and M2
- ✓ Program and Bank numbers
- ✓ Category
- ✓ MIDI Channel
- ✓ Panel selector
- ✓ Program name

Which parameters can be automated by the VST host?

Pitch wheel + all parameters of the editor's preset excluding **panel selector**.

How can I disable loading program/bank number and panel mode from presets?

If you want these items to be fixed all the time and not jump from one setting to another every time you select a different preset in the bank or every time you load a different project in DAW with different settings, Click on **Settings** button in tool bar, there are specific options for disabling each one.

● **Settings**

1) If set to **Off,** panel mode (front, rear, dual …) will not be loaded from preset at the startup or when you change the preset number.
2) If set to **Off,** Program/Bank numbers will not be loaded from preset at the startup or when you change the preset number.
3) Enables/Disables graphical readout (can be turned off for saving CPU while playing back automations)
4) Skin Selector
5) Standalone Zoom level (note that if you right click on the GUI and change Zoom Level it does not keep the zoom level at the next start up. The best place for changing zoom level is here in settings window)
6) **MIDI Controller Input**: Sets the MIDI device which your secondary keyboard or MIDI controller is connected to. "**VST Input (Host)**" forces the plug-in to receive CCs from your host.
7) Sets the MIDI channel of the Controller Input.
8) Resets all the CC# assignments to their default mapping.

● **Shortcut keys and Tips**

- If you press **shift** key while tweaking a knob, the value will change more precisely. "**Double Click**" and **"Ctrl + Click"** set the knob's position to its default value.
- **Full Screen and Zoom** functions are only available in standalone version (fig.4-1).
- **About window:** By clicking over the editor's logo about window will be displayed and show you brief information about the software, current version and credits. (fig.4-2)

(fig.4)

- ## MIDI LEARN

MIDI Learn function lets you remotely control most parameters of editor using Midi Continuous Controller Data (Midi CC). In addition to the messages specified in the MIDI Implementation Chart, the following MIDI CC messages in "MIDI CC Tables" are recognized and affect their associated parameters. By sending MIDI CC messages, you can change these parameters. You can override the default mapping as listed in "MIDI CC Tables" on demand by learning the controls to different CCs. MIDI learn can be accessed by right clicking over the knobs or buttons. Before using MIDI learn you must select the MIDI device that your hardware MIDI controller is connected to. MIDI learn device selector is located in **settings menu**.

Learn a control on editor to an external controller:

1. Right Click on a knob, button or switch and select MIDI Learn.
2. Move the controller on your controller device which you want to learn to it.

If you want to disable the current or default mapping you should right click on the knob and select midi forget.

- ## Wii Remote

Miniak-editor allows you to receive input data from the Nintendo Wiimote + Nunchuck(optional) and convert them to MIDI messages that are recognizable by Miniak. At first Wiimote must be paired with your PC via Bluetooth.

How to pair a Wiimote in Windows 7?

1) Make sure that the Bluetooth dongle is connected to your USB port.
2) Hold **1** and **2 buttons** on the Wiimote (do not release the buttons).
3) Go to Devices and Printers under the Control Panel and click Add a Device.
4) Select **Nintendo RVL-CNT-01** and click Next.
5) Select **Pair Without Using Code.**
6) Wait for driver installation to be completed.
7) Run editor.
8) Click on **Wii button** in the toolbar of the editor.
9) Release **1** and **2 buttons** on the Wiimote.

The process may be different for other operating systems. Once the Wiimote is paired the Wii button in the toolbar gets blue and shows that the connection is live. By default Wiimote's **A** button generates note on/off message, **+** and **-** buttons transpose the octave of the current note.

Learn a control on editor to Wiimote or Nunchuck controller:

1. Right Click on a knob, button or switch and select Wii remote or Wii Nunchuck.
2. Select your desired controller from the sub menus.

Accel X, Y are raw acceleration data in the X-axis and Y-axis. You get the best result out of the Wiimote movement and turn by linking to Accel X and Y. The infra red camera at the front of the Wiimote can detect and track up to 4 IR dots. The X and Y positions of these dots are returned by BlobX X/Y. Note that at least one Infrared source (an Infrared LED, Pen, Glove or a Candle) must be visible by IR camera for a blob to be detected and tracked.

- ## **Appendix A**

MIDI Implementation Chart

Function		Txd	Rxd	Remarks
Basic Channel	Default	1-16	1-16	Messages are always received on all
	Changed	1-16	1-16	channels
Mode	Default	x	Mode 1	OMNI Mode is always on
	Changed	x	x	
Note number	Sound range	0-127	0-127	
Velocity	Note On	o	o	
	Note Off	o	o	
Aftertouch	Keys	x	x	
	Channels	o	o	
Pitchbend		o	o	
Control Change		o	o	
Program Change	Actual No.	o	o	
System Exclusive		o	o	
NRPNs		o	x	
RPNs		x	x	
System Common	Song Position	x	x	
	Song Select	x	x	
	Tune Request	x	x	
System Real Time	Clock	x	x	
	Commands	x	x	
Aux Messages	Local On/Off	x	x	
	All Notes Off	o	x	
	Act. Sensing	x	x	
	Reset	x	x	

Txd = Transmits MIDI message
Rxd = Receives MIDI message
o = implemented
x = not supported

- ## Appendix B   **MIDI CC Tables**

Parameter	CC#
m1 wheel	1
m2 wheel	2
osc3 waveform	3
osc3 shape	4
osc3 octave	9
osc3 semitone	10
osc3 fine tune	11
osc3 p wheel range	12
osc2 waveform	13
osc2 shape	14
osc2 octave	15
osc2 semitone	16
osc2 fine tune	17
osc2 p wheel range	18
osc1 waveform	19
osc1 shape	20
osc1 octave	21
osc1 semitone	22
osc1 fine tune	23
osc1 p wheel range	24
osc sync(Micron/Miniak)	25
FM level	26
FM type(Micron/Miniak)	117
noise type	27
osc3 level	28
osc2 level	29
osc1 level	30
ring level	31
ext level	33
noise level	34
osc3 balance	35
osc2 balance	36
osc1 balance	37
ring balance	39
ext balance	40

Parameter	CC#
noise balance	41
filter2 type	42
filter2 freq hz	43
filter2 freq octave	43
filter2 res	44
filter2 keytrk	45
filter2 env	46
filter 2 offset	47
filter1 type	48
filter1 freq	74
filter1 res	71
filter1 keytrk	49
filter1 env	50
f1 >> f2	51
filter2 level	52
filter1 level	53
pre f level	54
filter2 pan	55
filter1 pan	56
pre f pan	57
pre filter signal	58
drive type	59
drive level	60
FX mix	8
FX balance	61
program level	7
lfo1 rate	62
lfo1 sync	63
m1 to lfo1	64
lfo2 rate	66
lfo2 sync	67
m1 to lfo2	68
s&h rate	70
s&h sync	75
s&h smoothing	76
unison(Micron/Miniak)	79

Parameter	
unison detune	82
analog drift	83
porta time	5
porta(Micron/Miniak)	84
porta type	86
mono/poly	87
P wheel mode	88
pitch env A	89
pitch env D	90
pitch env S	91
pitch env ST	92
pitch env R	93
pitch env A slope	94
pitch env D slope	95
pitch env R slope	102
filter env A	103
filter env D	104
filter env S	105
filter env ST	106
filter env R	107
filter env A slope	108
filter env D slope	109
filter env R slope	110
amp env A	73
amp env D	111
amp env S	112
amp env ST	113
amp env R	72
amp env A slope	114
amp env D slope	115
amp env R slope	116
mod 1 level	65
mod 2 level	69
mod 3 level	77
mod 4 level	78

● **About Miniak OS**

Miniak OS bugs/limitations:

- It is not possible to add modulation path in mod matrix via NRPN, User must add mods manually or send a pre-added empty sysex file to memory before programming a new sound (the file is located in plugin folder). This flaw also affects "update edit buffer" function and causes sound difference when sending a preset to synth with number of mod paths more than available.

- It is not possible to change tempo remotely.

- It is not possible to change sequences, multis and rhythms via NRPN however you can save/load them via sysex.

- It is not possible to rename a program via NRPN. (only sysex)

- Miniak draws "OSC Waveshapes" wrongly or inverted, editor draws the correct waves.

Support info: If you encounter any problems, or you have suggestions for future revisions, don't hesitate to contact our technical support at: Support@hypersynth.com