

# Miniak Patch Editor

The image shows the Miniak Patch Editor application interface, which is divided into several sections for editing synthesiser patches:

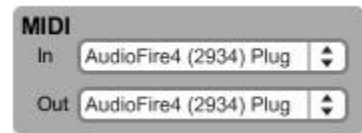
- MIDI:** Controls for MIDI input and output, including a dropdown for 'In' (set to 'to MaxMSP 2') and 'Out' (set to 'from MaxMSP 2').
- Voice:** Controls for voice settings, including 'Polyphony' (set to 'polyphonic'), 'Union' (set to 'one voice/note'), 'Union Detune' (set to '0 cents max'), 'Portamento' (set to 'off'), 'Porta Type' (set to 'fixed'), 'Porta Time' (set to '10.00 ms'), 'Pitch Wheel' (set to 'bend held note'), 'Analog Drift' (set to '0 %'), 'OSC Sync' (set to 'off'), 'FM Amount' (set to '0.00 %'), and 'FM Type' (set to 'lin 2 > 1').
- Ext In:** A section with a 'Level' knob (set to '0 %') and a 'Balance' knob (set to '0'), with a label 'L > f1, R > f2'.
- Randomisation:** A section with buttons for 'Randomise', 'Voice', 'Osc 1', 'Osc 2', 'Osc 3', 'RingNoise', 'Filters', 'FX', 'Amp Env', 'Filter Env', 'Pitch Env', 'LFO 1', 'LFO 2', 'S/H', 'Tracking', and 'Mod Matrix'.
- Oscillators:** Controls for three oscillators (OSC 1, OSC 2, OSC 3), including 'Waveform', 'Waveshape', 'Octave', 'Transpose', 'Pitch', 'PWhiRange', 'Level', and 'Balance'.
- Realtime Controllers:** Controls for 'X' (FM Amount), 'Y' (Osc1 Waveform), 'Z' (Osc1 Waveshape), 'Ring Mod', and 'Pink Noise'.
- Filters:** Controls for two filters (1 and 2), including 'bypass', 'positive', 'Freq', 'Res', 'Keytrack', 'Envelope', 'Level', and 'Pan'.
- Envelopes:** Controls for three envelopes (1 - Amp, 2 - Filter, 3 - Pitch), including 'Attack', 'Decay', 'Sustain', 'Release', 'Vel > Env', 'reset every note', 'loop off', 'freerun off', and 'sustain pedal off'.
- LFO:** Controls for two LFOs (1 and 2), including 'fixed rate', '4.120 Hz', 'mono (per pgm)', and 'Wheel > LFO'.
- S/H:** Controls for 'S/H' (fixed rate, 0.100 Hz, mono (per pgm)).
- Output:** Controls for 'bypass', 'Drive', 'Level', 'Fx Mix', 'Fx 1 Balance', and 'Fx 2 Balance'.
- FX:** Controls for 'FX1 Type' (bypass), 'FX2 Type' (bypass), and 'FX1 Type' (bypass).
- Modulation Matrix:** A table for modulation matrix settings, including 'Source', 'Level', 'Offset', and 'Destination'.
- Tracking:** A section with a 'Tracking' knob (set to '0 %') and a 'Balance' knob (set to '0'), with a label 'L > f1, R > f2'.
- Patch Management:** Controls for patch management, including 'Patch Name' (Default), 'Patches List' (Default.json), 'Patch State' (Revert, Recall, Bank, Patch), 'GET PATCH', 'Patches Folder' (WACDRIVE:/Dropbox/Max-Patches/wac5/MiniakPatchEditor/patches/), and 'Select'.

This manual explains how to use the Miniak Patch Editor application for editing and managing synthesiser patches on the Akai Miniak synthesiser. The following areas are covered:

- **MIDI**
- **Editing Patches**
- **Modulation Matrix**
- **Randomisation**
- **Patch Management**

## **MIDI**

You can communicate with the Miniak using a USB or Firewire MIDI interface.



- Connect MIDI Out of your interface to MIDI In of the Miniak
- Connect MIDI In on your interface to MIDI Out of the Miniak
- For sending MIDI to the Miniak. select the MIDI Out port of your interface in Miniak Patch Editor
- For receiving MIDI from the Miniak, select the MIDI In port of your interface in Miniak Patch Editor

Once you have selected MIDI ports, they will be remembered and reused next time Miniak Patch Editor is loaded

### **Real-time (NRPN) And SYSEX MIDI Messages**

All of the parameters that define a patch (or program) in the Miniak can be controlled in real time by sending MIDI NRPN messages to the Miniak.

Miniak Patch Editor provides a graphical interface to control every parameter of the Miniak - this is achieved by sending NRPN messages when any element in the interface is edited.

The Miniak is also capable of sending and receiving an entire patch in one go via a 'SYSEX dump'. Miniak Patch Editor is capable of receiving a SYSEX dump from the Miniak and updating the interface to reflect the patch currently loaded on the Miniak. This feature is described in more detail in the Patch Management section.

## **Editing Patches**

The Miniak Patch Editor interface breaks down all of the available patch parameters into related groups of functionality. The value of each control element can be edited as follows.

With the mouse:

- Click a numeric element, and drag the mouse up/down while holding the button down
- Click drop down lists, and perform a second click to select a value

With the keyboard:

- Select a numeric element by clicking, then type the desired value
- Use the up/down keys to change the value of the most recently edited parameter. Tap to adjust the value by one, or hold down for rapid changes.

With your MIDI In/Out properly set up, any changes you make to elements in the Miniak Patch Editor interface will immediately cause that parameter on the Miniak to be changed.

*Nb. The numeric parameters can only have 'discrete' values. Sometimes the value you type into a numeric parameter will automatically 'correct itself' to the nearest possible discrete value allowed by the Miniak.*

*For example, trying to enter an envelope attack time of 50ms will cause the interface to automatically correct the value to 48.44ms*

Refer to the Miniak manual for reference on how the various parameters affect the synthesiser's sound.

## **Modulation Matrix**

Miniak Patch Editor allows you to edit the source, level, offset and destination for all 12 of the 'modulators' available on the Miniak. Unfortunately, you must manually 'add' each modulator to current patch on the Miniak itself before the corresponding elements in Miniak Patch Editor actually take affect.

It is worth saving a patch on the Miniak with all 12 modulators pre-enabled for using with Miniak Patch Editor.

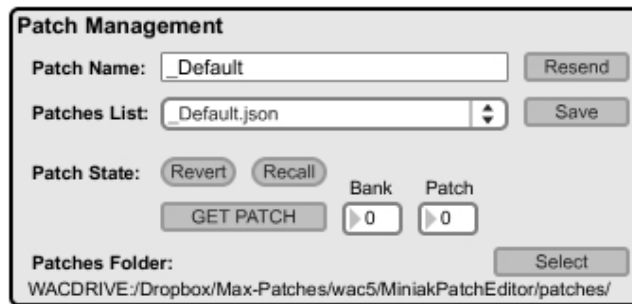
## **Randomisation**

Random synthesis parameters can be generated using the Randomisation section of Miniak Patch Editor. The grid of buttons represent the various sections of the patch. These can be turned off (red) and on (green) for randomisation by clicking them.

When the Randomise button is clicked, only sections of the patch corresponding to a green grid buttons will be randomised.



## **Patch Management**



## **Loading Patches**

When you first load Miniak Patch Editor you will need to select a Patches Folder by clicking the 'Select' button

- The Patches Folder selected is remembered next time you load Miniak Patch Editor.

Once a Patches Folder has been selected, the Patches List will be populated with all the patch files in that folder.

- To load a patch select it in the Patches List

The Miniak Patch Editor download includes a folder with a few example patches. To use:

- Copy/paste the folder of patches to a convenient location on your hard drive
- Press the Select button in Miniak Patch Editor
- Locate and select the folder you just created

You can change the Patches Folder at any time. This allows different folders on your computer to be used to store different collections of Miniak patches

## **Saving Patches**

Each patch you create in Miniak Patch Editor is stored as .json file on your computer. Patches saved in the current Patches Folder immediately appear in the Patches list

To save a patch:

- Click the Save button
- Choose a location and file name in the dialogue box that appears

## **Comparing Patch Edits**

Miniak Patch Editor allows you to switch between saved and edited versions of the current patch. Use this function to evaluate how your edited patch sounds (compared to the original) before committing your patch with a save

- Click the Revert button to return the patch to its saved state
- Click the Recall button to return the patch to its edited state

## **Saving A Patch To Miniak**

Miniak Patch Editor does not have the ability to copy a patch to the Miniak directly via MIDI SYSEX. If you want to transfer a patch made in Miniak Patch Editor to the Miniak, the steps to take are:

- Load the patch in Miniak Patch Editor
- Confirm the Miniak's parameters have been updated via NRPN by playing some notes
- On the Miniak, start editing the currently loaded patch
- Select 'store as copy'
- Manually enter the desired patch name

## **Retrieving Patch Via SYSEX From Miniak**

You can retrieve a patch from the Miniak using MIDI SYSEX in one of two ways.

Directly from Miniak Patch Editor:

- Load the patch you want to retrieve on the Miniak
- Hold down the program button until the 'bank' and 'patch' values for the loaded patch are shown
- Enter these values in the bank/patch elements in the Patch Management section of Miniak Patch Editor
- Press the 'GET PATCH' button

Using the Miniak:

- Load the desired patch
- Enter edit mode for the current patch
- Scroll to the far right, locate the 'send Sysex' option and click the data knob

After performing either action, all elements in Miniak Patch Editor will all be updated to reflect their value in the patch retrieved from the Miniak.

## **Patch Names**

When you retrieve a patch from the Miniak, the Patch Name is also retrieved and displayed within Miniak Patch Editor.

Editing the Patch Name in Miniak Patch Editor has no affect on the name of the currently loaded patch on the Miniak. This name, however, is stored and recalled within the .json patch files.

## **Miniak Patch Editor**

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