



<MODELmaker>

How to create your own models

1 - Installation and Start

Move the distribution file to an appropriate location and unpack it. This creates the folder "NeuronMM_xxx" that contains the executable file (ModelMaker_xxx) plus everything else the application needs including a 'Models' and 'Sessions' folder.

Note: The 'xxx' in the above names will be replaced by a ModelMaker version number.

Double-click on the executable file to start ModelMaker.



File

<NEURON> **PROCESS** <MODELmaker>

Neuronal Synthesizer

Zone	Low Key	Root Key	High Key	Low Vel	High Vel	Detune	Volume	Pan
1	0 C-2	50 D2	51 D#2	12 String Gtr-D.aif	12 String Gtr-D_high.aif	0	0dB	0
2	52 E2	52 E2	53 F2	12 String Gtr-E.aif	12 String Gtr-E_high.aif	0	0dB	0
3	54 F#2	57 A2	64 E3	12 String Gtr-A.aif	12 String Gtr-A_high.aif	0	0dB	0
4	65 F3	67 G3	68 G#3	12 String Gtr-G.aif	12 String Gtr-G_high.aif	0	0dB	0
5	69 A3	71 B3	73 C#4	12 String Gtr-B.aif	12 String Gtr-B_high.aif	0	0dB	0
6	74 D4	76 E4	78 F#4	12 String Gtr-E2.aif	12 String Gtr-E2_high.aif	0	0dB	0
7	79 G4	81 A4	83 B4	12 String Gtr-A2.aif	12 String Gtr-A2_high.aif	0	0dB	0
8	84 C5	86 D5	88 E5	12 String Gtr-D2.aif	12 String Gtr-D2_high.aif	0	0dB	0
9	89 F5	91 G5	127 G8	12 String Gtr-G2.aif	12 String Gtr-G2_high.aif	0	0dB	0

New Zone • Remove Zone •

Low Velocity : String Gtr/12 String Gtr-A.aif

High Velocity : Kopie/12 String Gtr-A_high.aif

Low Key • 54 F#2

High Key • 84 E3

Zone No. 003

Root Key • 57 A2

Detune

Volume

Pan

hartmann

2 - Structure

Session: Contains key zones plus information about the <Neuron> model to be generated. A session can be saved and re-opened (see below). Please note that the sample files are referenced by location and name rather than contained in the session. If the samples are subsequently moved, you'll need to select the sample files again.

Key zones: Each key zone contains: low key, root key, high key, low velocity sample, high velocity sample, detune, volume and pan. The application ensures that zones cannot overlap and all keys (midi notes 0 to 127) are always covered, ie there are no gaps.

Model info: Model number as shown in <Neuron> (possible values from 0 to 511). Model name as shown in <Neuron> (max. 11 characters). Complexity of the model (1 to 10). Parameter set to determine the model parameters accessible via stick or menu within <Neuron>.

3 - Sample Format

Currently AIFF, mono, 44.1kHz, 16 bit.

4 - File Menu

Open Session: Open a previously saved session, ie load the zones, samples and model information for one model.

Save Session: Save the current zones, samples and model information for one model.

Import Samples: Import all samples in a folder collectively. Low key and root key information must be contained in each AIFF file. The zones will then be configured automatically. Optional information regarding velocity, detune and volume will also be extracted from each sample if available. Please note that you must select the folder rather than the samples contained within it. If there are two samples for the same zone, the sample with velocity < 64 will be designated as the low velocity sample and the sample with velocity ≥ 64 as the high velocity sample.



4 - File Menu (cont.)

Import by Name: Import all samples in a folder collectively. Low key and root key information must be contained in the name of each AIFF file. The zones will then be configured automatically. Optionally, a sample can be designated as a low or high velocity sample. Please note that you must select the folder rather than the samples contained within it. The naming convention is as follows: name_rootkey_lowkey or name_rootkey_lowkey_v. Example without velocity: Flute_72_68.aif. To distinguish a low and high velocity sample, we might have Flute_72_68_v1.aif and Flute_72_68_v2.aif.

The name part (eg Flute) must not contain any underscore ('_') characters.

Any information within the AIFF files themselves is not used to configure the zones but will be used during the conversion process.

Process: Brings up a dialog box to enter the model information and invoke the conversion process.

Transfer Model: Brings up a dialog where you can choose a model folder to be transferred to the <Neuron> directly from ModelMaker. If you need to transfer more than one folder at a time you may prefer to use a 3rd party ftp client.

Once transferred, the models must be loaded into the <Neuron> database via the 'load models' command in its load/dump menu. For a more detailed description on network settings and how to load models, please refer to the <Neuron> manual.

IMPORTANT NOTE: The total size of a model, ie the combined contents of the resulting model folder, must not exceed 12 MB.

Quit: Use this if you haven't eaten or slept for a while.



5 - Main Screen

"Process" button: Brings up a dialog box to enter the model information and invoke the conversion process.

Table of zones: Shows the details for all zones and allows the selection of one zone which is then displayed and edited below.

New Zone button: Press this to add a new zone by selecting a sample. The system puts the new zone in the most appropriate place by reading the information inside the sample (but not the file name). If it cannot decide where to place the zone, the user is prompted to click on the piano to select the low key which will be used to split the zone that the selected low key is in.

Remove Zone button: Press this to remove the currently selected zone (unless it's the only one).

Piano (zones): Graphical representation of the zones and their root keys. Click on a zone to highlight it in the table above and edit it in the zone detail section below.

Piano (keys): Use this to select a key when prompted to do so. The text below the piano indicates what the key is for (low, high, root or low key for a new zone) or is blank when the piano is "inactive".



Details for selected zone:

Hit either of the "Browse" buttons to select a low or high velocity sample. Each zone has to have a low velocity sample. If there is no (optional) high velocity sample, the low velocity sample will cover all velocity values. If a separate high velocity sample is specified, this will be used on <Neuron> whenever the velocity value goes above the velocity threshold as defined in the Resynator Menu (default = 63).

Hit the low, high or root key buttons (below the 3 note displays, not the displays themselves) to edit the corresponding value by hitting a key on the piano. Note that a root key can be outside its zone and thus any changes to it will not affect the zone boundaries. When moving the low or high key, the previous or next zone is adjusted accordingly, but will never be removed altogether (an appropriate error message is displayed if the user attempts to go too far).

Adjust the detune (-99 to +99 cent), volume (-32dB to +12dB) and pan (-50 to +50) values by using the sliders or enter values directly into the fields next to the sliders followed by Enter. Note that pan can also be set per Sound on <Neuron>. The pan setting here is for the model in a resynator.



6 - Process Dialog

Model number: Enter a number between 0 and 511 as used on <Neuron>. For example, model 310 will be stored in the folder NeuronMM_XXX/Models/310.model.

Model name: Maximum 11 characters. Shown on <Neuron> once transferred.

Complexity: Choose a value between 1 and 10 (default = 8). The higher the complexity the more "accurately" the sample is modelled, but a lower complexity can be very effective, too, and helps keep the size of the model down (see below).

Parameter Set: Choose a value between 0 and 9. For a description of the parameter sets, see the separate documentation on parameter sets.

Progress text and bar: Shows which file out of how many is being converted and how far the conversion for this file has progressed.

Go button: Hit this to start the process of converting your samples into <Neuron> models.

Cancel button: Hit this to cancel the conversion process. If you hit cancel while the conversion is in progress, it may take up to a few seconds to stop the process.

The screenshot shows a dialog box titled "Generate Model". It has a table-like structure with four columns: "No.", "Name", "Complexity", and "Parameter Set". The "No." field contains "307", "Name" contains "12string", "Complexity" is a dropdown menu set to "8", and "Parameter Set" is a dropdown menu set to "3 - Plucked & Picked". Below the table, there is a section labeled "Hit Go to start" with a progress bar showing "0%". At the bottom, there are two buttons: "Go" and "Cancel".