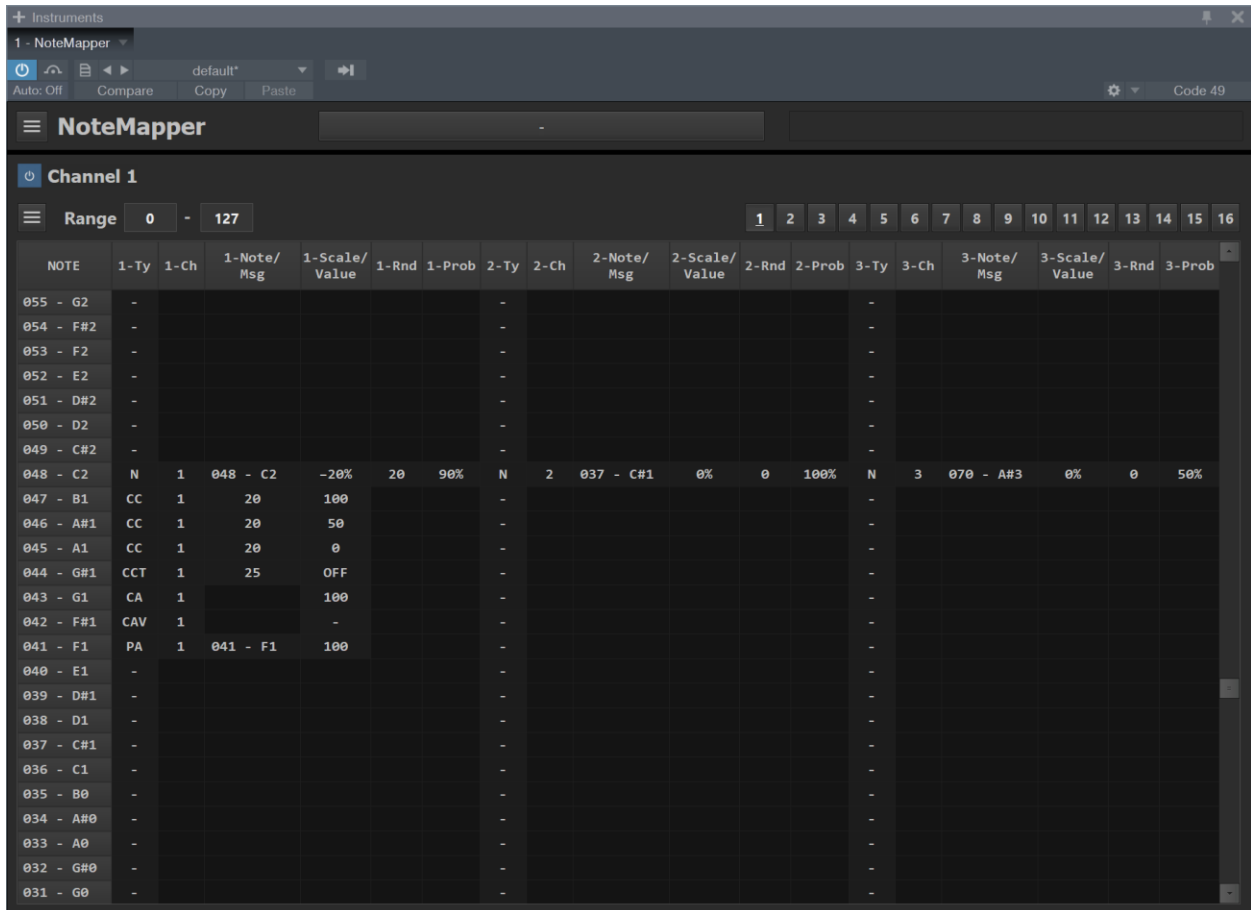


NoteMapper

User Guide



VST is a trademark of Steinberg Media Technologies GmbH

<http://www.codefn42.com>

© 2023 CodeFN42

Table of Contents

Introduction	4
System Requirements	5
Installation	5
Setting up NoteMapper in your DAW	6
Change scaling and skin	7
User Interface	8
User interface controls	9
Numeric input boxes	9
On/Off switches	9
Editing Parameters	10
Selecting MIDI channel	10
Specifying note range	11
The Range menu	12
The note mapper grid	12
Type (Ty)	13
Channel (Ch)	14
Note/Message Number (Note/Msg)	14
Velocity Scale/Message Value (Scale/Value)	16
Velocity Random (Rnd)	18
Note Probability (Prob)	19
Editing the Templates.txt file	20
Editing the Scales.txt file	21
Presets	22

NoteMapper - User Guide

To save a preset	22
To load a preset	22
To delete a preset	23
To open the presets folder	23
To copy a preset to the clipboard	24
To paste a preset from the clipboard	24

Moving the data folder	25
-------------------------------	-----------

Introduction

NoteMapper is a VST plugin that allows you to map MIDI notes to either other notes, or to Continuous Controller (CC), Channel Aftertouch or Poly Aftertouch messages.

Each incoming note can be mapped to up to three notes/messages, even on different MIDI channels. This allows you to, for example, let one specific note trigger drum sounds in up to three different drum samplers. In addition, you can scale the note velocity, apply randomization to the velocity scaling, and set a note probability for each individual note.

NoteMapper can be used for many purposes, for example for MIDI note conversions between different drumkits, or to use a MIDI keyboard to control synths with CC messages or aftertouch messages. The velocity scaling and randomization allows you to create interesting variations if your destination instrument is set to respond to velocity. Create further randomization with the note probability setting.

Key features:

- Remap MIDI notes.
- Map MIDI notes to Continuous Controller (CC), Channel Aftertouch or Poly Aftertouch messages.
- Each note can be mapped to up to three notes/messages.
- Can remap notes between all 16 MIDI channels.
- Filter out unwanted notes.
- Automatic melodic scale assignment.
- Adjust the incoming velocity by a specified percent.
- Randomize the velocity scaling.
- Set a note probability.

NoteMapper - User Guide

System Requirements

To use NoteMapper you need a VST2 compatible 64-bit DAW (Digital Audio Workstation) running on Windows Vista, Windows 7, Windows 8, Windows 10 or Windows 11.

Installation

To install NoteMapper, run the Setup program, or copy simply the dll file to your VST plugin folder.

Setting up NoteMapper in your DAW

NoteMapper is a MIDI only VST plugin. It does not produce any sound of its own. You need to set it up so it receives MIDI data, and then route the MIDI output to the desired instruments or effects. How easy (or even possible) it is to do this depends on your DAW's MIDI routing capabilities.

Generally, you should add NoteMapper to a new MIDI or instrument track. This is the same procedure you would follow adding any VST instrument in your DAW. Then you will have to route the output from NoteMapper to one or multiple VST instruments or effects. If you are not sure how to do this, please refer to your DAW's documentation.

NOTE: For detailed instructions on how to set up MIDI routing in some popular DAWs, please see the [FAQ](#).

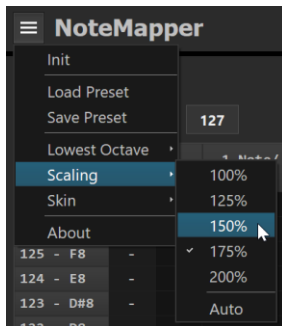
An alternative is to use a modular plugin that lets you route MIDI data between VST plugins, for example [Metaplugin](#), [PatchWork](#) or [Minihost Modular](#).

Change scaling and skin

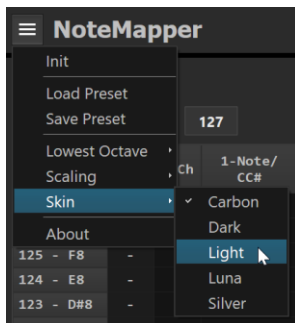
You can select between five different scalings: 100%, 125%, 150%, 175% and 200%.

In addition, you can select Auto. This will auto select scaling based on the current Windows scaling (and, if you move the plugin window between monitors with different scalings, the plugin scaling will automatically change).

To change scaling, select the desired scaling from the main menu.



You can select between five different GUI skins from the main menu.

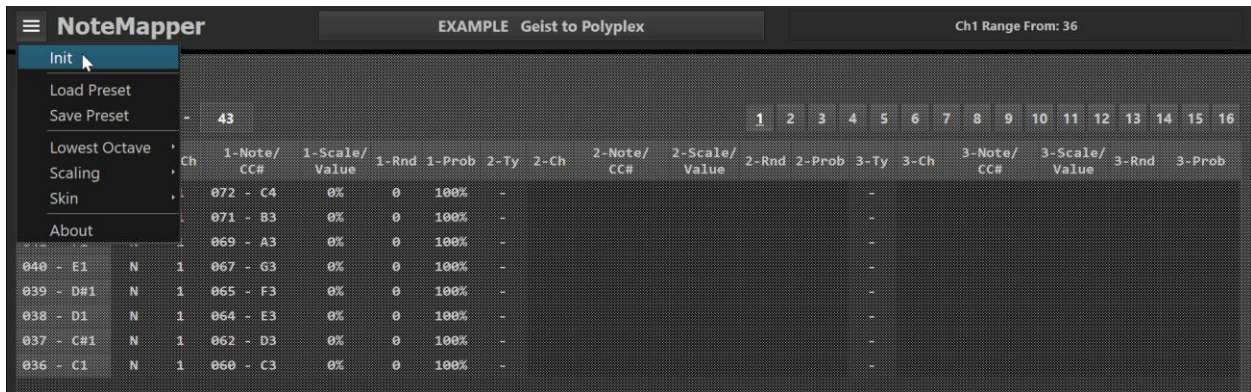


You must close and re-open the plugin window for the skin changes to take effect.

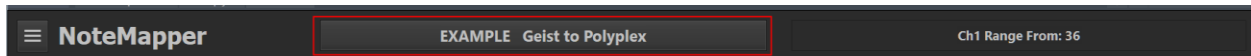
User Interface

In the upper left corner of the plugin window you find the main menu. From this menu you can initialize the plugin (reset all parameters), load and save presets, customize the octave numbering, and change GUI scaling and skin, etc.

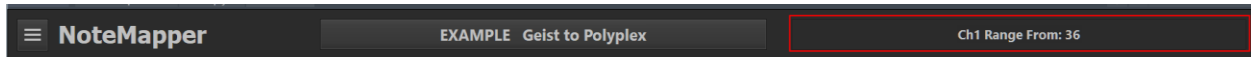
NOTE: You can select Lowest Octave to specify whether octaves are numbered from -2 to 7 (default), -1 to 8, or 0 to 9.



In the middle you see the preset button. This shows the name of the current preset if it is named. Click this button to open the 'Load Preset' panel. For more information on how to work with presets, see the Presets chapter in this user guide.



In the upper right corner you find the info panel. This shows information about the parameter you are editing.



Below you find the channel and range parameters, and the note mapper grid, where you specify the properties of the individual notes.

User interface controls

NoteMapper has two basic types of user interface controls.

Numeric input boxes

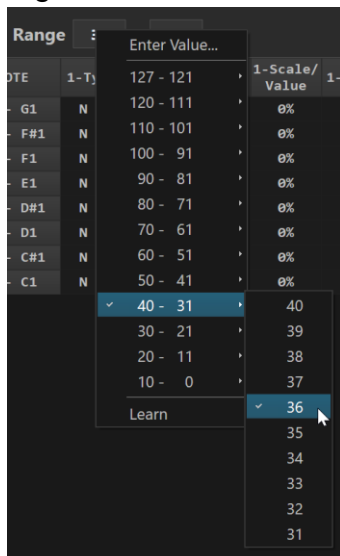
Range From and Range To.



NOTE: You edit the parameters (data cells) in the note mapper grid the same way you edit the Range input boxes.

There are several ways to change the value:

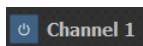
- Click with the mouse, then drag up (to increase the value) or down (to decrease the value). To slow down the selection, hold down the Shift key while you drag (fine tuning).
- Position the mouse cursor over the control, then use the mouse wheel.
- Right-click and select a value from the popup menu.



- Double click, or right-click and choose **Enter Value** from the popup menu, to manually enter a value.

Hold down the Ctrl key and click to select the default value.

On/Off switches



Simply click to turn the switch on or off.

Editing Parameters

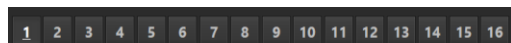
At the top of the main section of the plugin window you select the MIDI channel to edit, and specify the note range to process. Below you find the note mapper grid. Here you set the parameters of the individual notes in the specified note range.

The screenshot shows the NoteMapper plugin window. At the top, there's a toolbar with buttons for 'Auto: Off', 'Compare', 'Copy', and 'Paste'. Below the toolbar, the 'NoteMapper' title is visible. The main section is titled 'Channel 1'. Underneath, there's a 'Range' selector showing '36 - 51'. To the right of the range selector, there are 16 buttons numbered 1 to 16, representing MIDI channels. The button '1' is underlined, indicating it's the active channel. Below the channel buttons is a large grid for editing note parameters. The grid has columns for 'NOTE', '1-Ty', '1-Ch', '1-Note/CC#', '1-Scale/Value', '1-Rnd', '1-Prob', '2-Ty', '2-Ch', '2-Note/CC#', '2-Scale/Value', '2-Rnd', '2-Prob', '3-Ty', '3-Ch', '3-Note/CC#', '3-Scale/Value', '3-Rnd', and '3-Prob'. The first 16 rows of the grid correspond to the notes in the range 36-51, showing their current parameters.

NOTE	1-Ty	1-Ch	1-Note/CC#	1-Scale/Value	1-Rnd	1-Prob	2-Ty	2-Ch	2-Note/CC#	2-Scale/Value	2-Rnd	2-Prob	3-Ty	3-Ch	3-Note/CC#	3-Scale/Value	3-Rnd	3-Prob
051 - D#2	N	1	051 - D#2	0%	0	100%	-						-					
050 - D2	N	1	050 - D2	0%	0	100%	-						-					
049 - C#2	N	1	049 - C#2	0%	0	100%	-						-					
048 - C2	N	1	048 - C2	0%	0	100%	-						-					
047 - B1	N	1	047 - B1	0%	0	100%	-						-					
046 - A#1	N	1	046 - A#1	0%	0	100%	-						-					
045 - A1	N	1	045 - A1	0%	0	100%	-						-					
044 - G#1	N	1	044 - G#1	0%	0	100%	-						-					
043 - G1	N	1	043 - G1	0%	0	100%	-						-					
042 - F#1	N	1	042 - F#1	0%	0	100%	-						-					
041 - F1	N	1	041 - F1	0%	0	100%	-						-					
040 - E1	N	1	040 - E1	0%	0	100%	-						-					
039 - D#1	N	1	039 - D#1	0%	0	100%	-						-					
038 - D1	N	1	038 - D1	0%	0	100%	-						-					
037 - C#1	N	1	037 - C#1	0%	0	100%	-						-					
036 - C1	N	1	036 - C1	0%	0	100%	-						-					

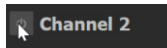
Selecting MIDI channel

NoteMapper can process data on all 16 MIDI channels. You change the active channel with the buttons numbered 1- 16. If a channel is active, the number is underlined.



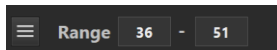
NoteMapper - User Guide

By default, only channel 1 is active. To activate or deactivate a channel, click the on/off switch to the left.



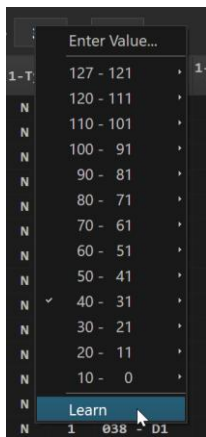
NOTE: When a channel is deactivated, all MIDI notes on this channel will pass though NoteMapper unprocessed. When a channel is activated, notes outside the specified note range will be filtered out.

Specifying note range



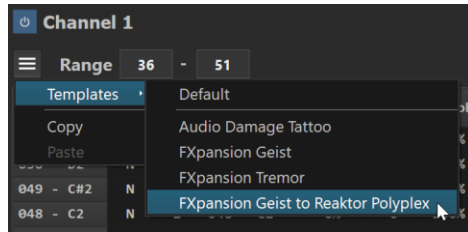
In the two Range boxes, you specify the note range you want NoteMapper to process on the selected MIDI channel (notes outside this range will be filtered out). The notes are numbered from 0 to 127.

NOTE: You can right-click a range box and choose **Learn** from the popup menu, and then press a key on your MIDI keyboard to automatically set the corresponding note number.



The Range menu

To the left of the Range boxes you find the Range menu.



Here you can select various templates, copy the channel setup to the clipboard, and paste the channel setup on the clipboard to another channel (or another instance of NoteMapper).

The note mapper grid

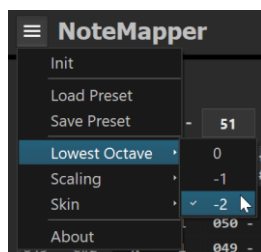
In the note mapper grid you set the parameters of the individual notes in the specified note range.

The number of rows corresponds to the note range you have specified. The highest note is at the top. The grid has 19 columns.

NOTE	1-Ty	1-Ch	1-Note/ Msg	1-Scale/ Value	1-Rnd	1-Prob	2-Ty	2-Ch	2-Note/ Msg	2-Scale/ Value	2-Rnd	2-Prob	3-Ty	3-Ch	3-Note/ Msg	3-Scale/ Value	3-Rnd	3-Prob
043 - G1	N	1	043 - G1	0%	0	100%	-						-					
042 - F#1	N	1	042 - F#1	0%	0	100%	-						-					

The first column shows the incoming note number and note name. You can click in this grid cell to preview to note setup. Where you click determines the note velocity. Click along the left edge for a low velocity, and along the right edge for a high velocity.

NOTE: To specify whether the octaves are numbered from -2 to 7 (default), -1 to 8 or 0 to 9, make you selection from the main menu (Lowest Octave).



NoteMapper - User Guide

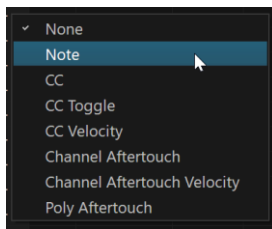
There are 6 columns for each of the 3 notes/messages you can map an incoming note to: Type (Ty), Channel (Ch), Note/Message Number (Note/Msg), Velocity Scale/Message Value (Scale/Value), Velocity Random (Rnd) and Note Probability (Prob).

The type of data in column 3 (Note/Msg) and column 4 (Scale/Value) depends on the mapping type.

To edit a cell value, either click and drag up or down, use the mouse wheel, right-click and choose from the popup menu, or double-click to open the 'Enter Value' window.

Type (Ty)

This determines the type of mapping:



None (-) - Mapping is disabled.

Note (N) - Let you map the incoming note to another note, and also modify the note velocity and set a note probability.

CC (CC) - This option lets you map a note to a continuous controller (CC) message with a fixed CC Value.

CC Toggle (CCT) - This option lets you map a note to a continuous controller message toggling between an off and on state (CC value 0 and 127). This is useful if you want to turn something on or off with a key on your MIDI keyboard.

CC Velocity (CCV) - This option lets you map a note to a continuous controller message where the note velocity is mapped to the CC value. You can also specify a default value that is applied when you release the key on your MIDI keyboard.

Channel Aftertouch (CA) - This option lets you map a note to a channel aftertouch message with a fixed aftertouch value.

Channel Aftertouch Velocity (CAV) - This option lets you map a note to a channel aftertouch message there the note velocity is mapped to the aftertouch value. You can

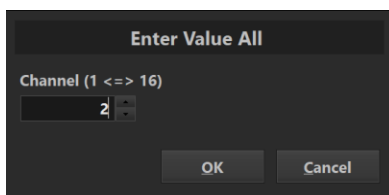
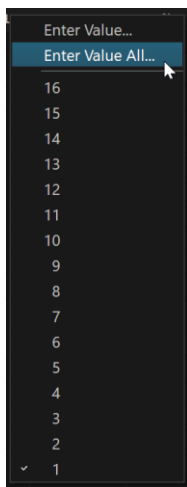
NoteMapper - User Guide

also specify a default value that is applied when you release the key on your MIDI keyboard.

Poly Aftertouch (PA) - This option lets you map a note to a poly aftertouch message with a fixed aftertouch value.

Channel (Ch)

You can remap a note to any MIDI channel (1 - 16). To set the channel to the same value for all notes, right-click the Channel column and choose **Enter Value All** from the popup menu, then specify the channel number.



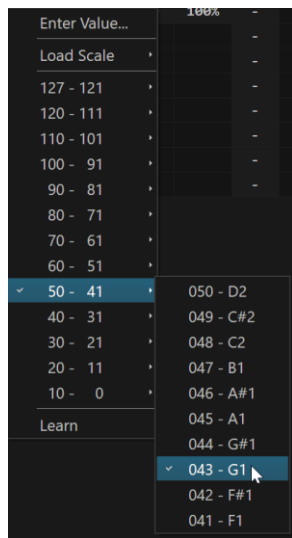
Note/Message Number (Note/Msg)

Here you either specify the note you want to remap the incoming note to when mapping type is set to "Note", or the message number when the mapping type is set to one of the continuous controller, channel aftertouch or poly aftertouch options.

Right-click to open a popup menu with various options.

NoteMapper - User Guide

When mapping type is set to "Note":



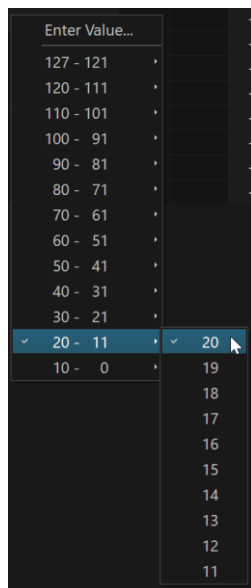
In addition to selecting the note number directly from the menu, you have these options:

Enter Value - Lets you enter the note number with your keyboard.

Load Scale - This allows you to load and assign a scale, for example the major scale. The tonic is set to the note you right-click.

Learn - Choose this option, then press a key on your MIDI keyboard to automatically set the corresponding note.

When one of the message options is selected:



NoteMapper - User Guide

You can either select the message number (0 to 127) directly from the popup menu, or choose **Enter Value** to enter the message number with your keyboard.

Velocity Scale/Message Value (Scale/Value)

Here you either specify the velocity scaling when mapping type is set to "Note", or the message number value when the mapping type is set to one of the continuous controller, channel aftertouch or poly aftertouch options.

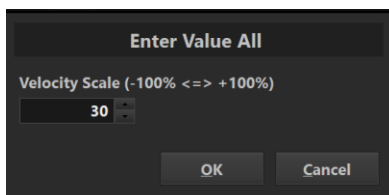
Right-click to open a popup menu with various options.

When mapping type is set to "Note":

You can scale the velocity by a specified percentage. The scaling can be set to a value between -100% and +100%.



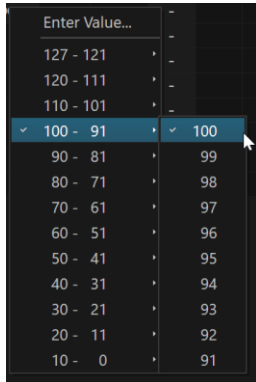
To set the same scaling for all notes, right-click and choose **Enter Value All** from the popup menu, then specify the scaling in percent.



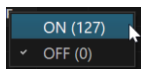
NoteMapper - User Guide

When one of the message options is selected you specify the message value.

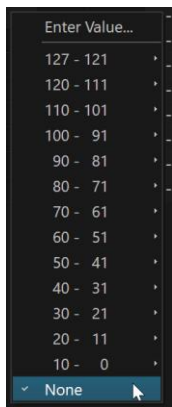
CC (CC) - The continuous controller value (0 to 127).



CC Toggle (CCT) - You specify the default value, either ON (127) or OFF (0). This is applied when the DAW's transport is started.



CC Velocity (CCV) - This is the continuous controller value that is sent when you release the trigger key on your MIDI keyboard. You can also select "None" (a new CC value is not sent when you release the trigger key).



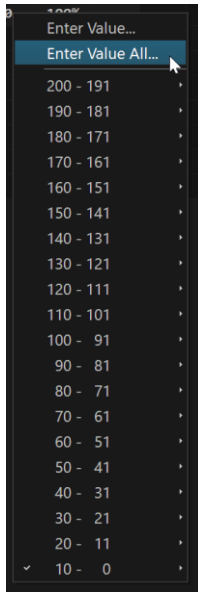
Channel Aftertouch (CA) - This is the channel aftertouch value (0 to 127).

Channel Aftertouch Velocity (CAV) - This is the channel aftertouch value that is sent when you release the trigger key on your MIDI keyboard. You can also set it to "None" (a new aftertouch value is not sent when you release the trigger key).

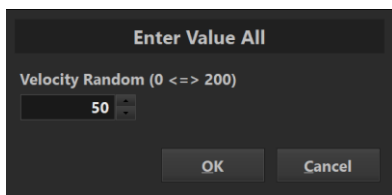
Poly Aftertouch (PA) - This is the poly aftertouch value (0 to 127).

Velocity Random (Rnd)

You can apply randomization to make the velocity scaling more unpredictable. When you use randomization, the random value is added to the scale value to create the actual scaling percentage. For example, if you set the scaling value to -20% and the random value to 40, the actual scaling value will vary between -20% and 20%.

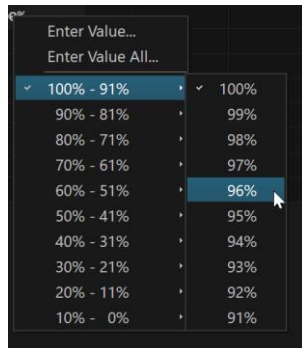


To set the same random value for all notes, choose **Enter Value All** from the popup menu.

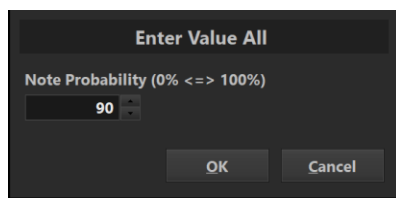


Note Probability (Prob)

This determines the probability of a note being generated, in percent. Usually, you would want to keep this fairly high (above 80%).



To set the same note probability for all notes, choose **Enter Value All** from the popup menu.



Editing the Templates.txt file

You can add your own templates available on the Range menu by editing the templates.txt file. This file is located in the NoteMapper data folder ('\\CodeFN42\\NoteMapper' in your 'Documents' folder).

Templates.txt is a standard text file you can edit in any text editor (for example Notepad).

NOTE: This file is automatically created when you open NoteMapper if it does not already exist.

Add each template on a separate line. First the template name, followed by a semicolon, then the note range separated by comma, another semicolon, then a list of the note mappings (From>To) separated by comma. For example:

FXpansion Geist to Reaktor

Polyplex;36,43;36>60,37>62,38>64,39>65,40>67,41>69,42>71,43>72

To create a separator item in the drop-down menu, add a hyphen on a separate line. For example:

Template Sequencer A;....

-

Template Sequencer B;....

To create a submenu in the drop-down menu, add a greater than symbol, followed by the submenu name. For example:

>More Templates

Editing the Scales.txt file

The scales are available from the popup menu when you right-click the Note column (Load Scale). NoteMapper ships with more than 20 scales, but you can easily add your own scales by editing the scales.txt file. This file is located in the NoteMapper data folder ('\\CodeFN42\\NoteMapper' in your 'Documents' folder).

Scales.txt is a standard text file you can edit in any text editor (for example Notepad).

NOTE: This file is automatically created when you open NoteMapper if it does not already exist.

Add each scale setup on a separate line. First the scale name, followed by a semicolon, then numbers separated by a comma to describe the scale formula in semitones. For example, the major scale:

Major;0,2,4,5,7,9,11

To create a separator item in the drop-down menu, add a hyphen on a separate line. For example:

Blues;0,3,5,6,7,10

-

Dorian;0,2,3,5,7,9,10

To create a submenu in the drop-down menu, add a greater than symbol, followed by the submenu name. For example:

>Modes

Presets

To save a preset

1. Open the main menu and choose **Save Preset**.
2. Type the name you want to give the preset, and click **OK**.
The preset button shows the name of the preset you just saved.

NOTE: If you name the preset "init", it is automatically used when you choose Init from the main menu to reset the plugin parameters, or add a new instance of the plugin.

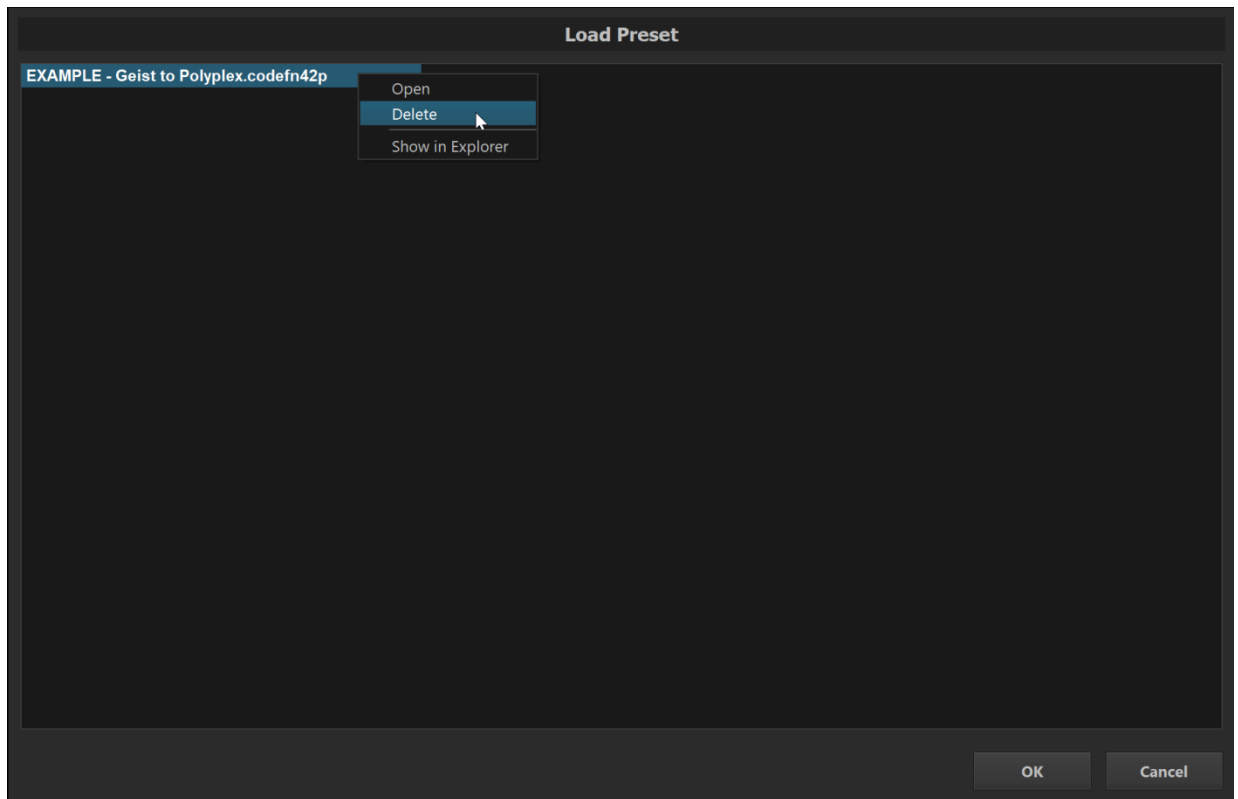
To load a preset

1. Either open the main menu and choose **Load Preset**, or click the preset button.
You see the 'Load Preset' panel.
2. Select the preset you want to load and click **OK** (or simply double-click the preset name).
The preset is loaded, and the preset button shows the name of the preset.

NoteMapper - User Guide

To delete a preset

1. Open the 'Load Preset' panel.
2. Right-click the preset you want to delete, and choose **Delete** from the popup menu.



To open the presets folder

1. Open the 'Load Preset' panel.
2. Right-click the preset list and choose **Show in Explorer** from the popup menu.

To copy a preset to the clipboard

1. Open the main menu and choose **Copy Preset**.
The preset is copied to the Windows clipboard. You can now paste it into another plugin instance.

To paste a preset from the clipboard

3. Open the main menu and choose **Paste Preset**.
The preset is pasted from the Windows clipboard.

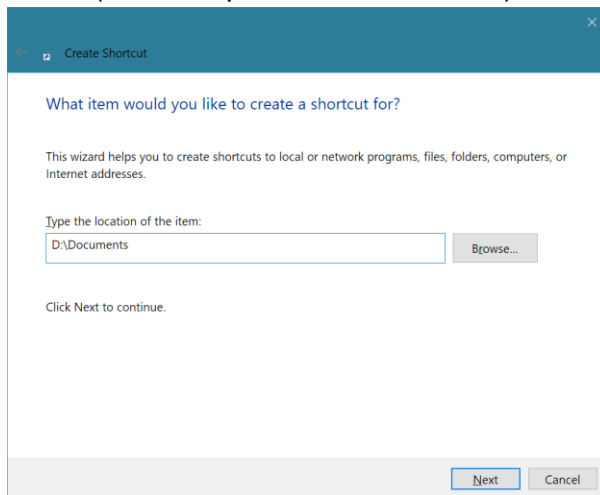
Moving the data folder

By default, the presets, and the plugin settings, are stored in your "Documents" folder in a subfolder named "\CodeFN42\NoteMapper".

The full path to the presets folder is usually
"C:\Users\[Username]\Documents\CodeFN42\NoteMapper\Preset".

If you would like to move the data folder, you can create a shortcut file that links to a new folder location:

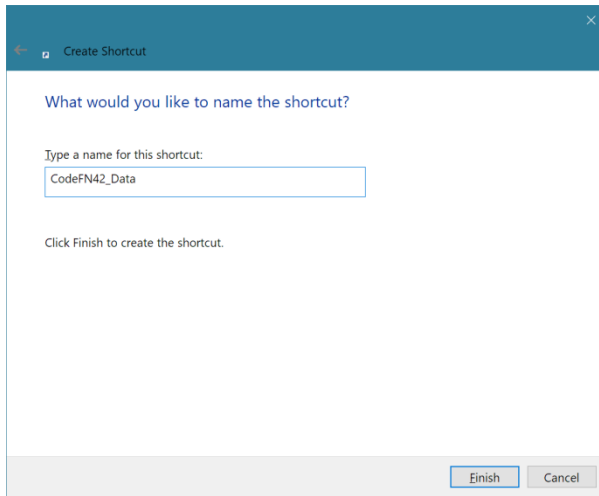
1. Right-click the Windows Desktop, and choose **Create Shortcut** from the popup menu.
2. In the 'Create Shortcut' window, click the **Browse** button and specify the new folder (for example "D:\Documents").



3. Click the **Next** button.

NoteMapper - User Guide

4. Name the shortcut "**CodeFN42_Data**", then click the **Finish** button.



The shortcut file is created on your desktop.

5. You must now move this shortcut file to either the Documents folder, or the folder the plugin is located in.

When you have done so, double-click the shortcut to make sure the correct folder is opened.

NOTE: All plugins from CodeFN42 use the same shortcut file. In the folder the shortcut links to, the NoteMapper settings will be stored in a subfolder named "`\CodeFN42\NoteMapper`" and the presets in "`\CodeFN42\NoteMapper\Preset`".

NOTE: You must manually move any existing preset files to the new preset folder.