

KORG

Pa5X

NEW FEATURES

1.0 > 1.4

Introduction

Installing the new operating system

If new, your instrument might already include the new operating system. You can see which version of the operating system is installed in your Pa5X by going to the **File** pages, and choosing the **System Info** command from the **page menu** (☰).

To install the new operating system, please read the “Pa5X – OS Update” instructions supplied with the installation package in our web site (www.korg.com).

NOTE: By loading the new operating system, you also load all the features added by the previous updates.

■ Be sure to save all your User data

This operating system update will overwrite all the Factory and User data. Please save all your User data by using a **File > Save All** operation. See the chapter dedicated to the file management in the User Manual for more information.

■ Reload your User data

After the operating system update operation, during which you were asked to touch the **Format & Reset** button in the update dialog, please reload your User data by using a **File > Load All** operation. See the chapter dedicated to the file management in the User Manual for more information.

Overview

New features of OS Version 1.4

Where	New features	Page
File	New file format for the User data, enhancing speed and reliability.	10
Select windows	User elements can be rearranged freely, as an alternative to the default alphabetical order.	11
	The User elements icon can be replaced with a different icon.	12
Styles, SongBook Entries	Keyboard Sets can be copied between Styles or SongBook Entries.	13
	Keyboard Sets can be swapped within a Style or SongBook Entry.	17
Preferences	For convenience, Song and File preferences are now consolidated into a single page.	21
	The Size and Date information are now always shown in the file lists. Their preferences have been removed.	21
	Synchro Start can be automatically disabled.	22
	Synchro Start/Stop on Songs can be optionally disabled.	23
Microphone	Added a De-Esser to the chain of microphone effects.	24
Style Record/Edit	The Style Creator Bot can create a Style from a MIDI file.	26
	Piano sound assigned to the right hand while editing	28
	Copy Track Settings can be reverted with the Undo command.	28
	Added Swing Quantize	28
Recording Studio	The Recording Studio can create a MIDI Song from a live performance, and let it be edited visually.	29
Song Record/Edit	The Song Record/Edit mode has been redesigned, to be easier, faster and more powerful.	29
	Added the Quantize, Transpose, Edit Velocity, Delete, Cut/Insert Measures, Copy, and Move editing pages.	83
	Added the Chords track to the MIDI Songs, accessible from the Event Edit page.	81
Shortcuts	Added new shortcuts.	118
Musical Resources	New Styles have been added.	119
Various	Improvements and bug fixes.	120

New features of OS Version 1.3

Where	New features	Page
Home page	Modified to include the KAOSS tab.	131
User Sounds and Drum Kits	Increased number of User Sound and Drum Kit locations.	130
Matrix	Different Matrix Presets can be selected over the basic four.	132
	Different Matrix Presets can be assigned to the Matrix Preset buttons.	133
	Chord Sequences can be triggered by the Matrix Pads.	134
	SongBook Songs can be selected from the Matrix Pads.	137
KAOSS	The KAOSS effects have been added.	140
SongBook	Set List order can be rearranged.	151
Lyrics	CDG / MP3+Lyrics file format now supported.	152
Scale	Keyboard Set Scale and Global Scale programming are now synchronized.	154
Tracks and Sounds	Program Change messages can now be manually sent from any part/track set to External mode.	155
User Interface	Notes can now be show in the International/English A-G system, the German A-G system, or the Solfège Do-Re-Mi system.	157
	Empty User data locations can be shown/hidden.	158
MIDI OUT	Both Players can send data to the same MIDI channels.	159
Audio Out	MP3 Songs can be routed to the Finalizer.	160
Style/Pad Edit	To make rehearsing before recording easier, Style/Pad tracks have to be armed before recording.	161
	Delete Note command added to the Style/Pad Edit Main page.	164
	Chord Variation length can be changed after recording.	165
	The same Chord Variations number can be assigned to all the tracks of the Style Element.	168
	Empty Chord Variations can be selected to mute a track.	169
	The Expression levels can be changed with the physical sliders.	170
	Tempo is now shown as an absolute value, instead of percentage.	171
	Undo command added (including Undo History).	171
	Settings can now be copied between Style tracks.	172
Chord Sequence	Chord Sequences can now be edited.	173
Sound Edit	Drum Layers have been increased to sixteen.	177
	Drum Sample levels (including round-robins) can be checked in a dedicated page, to make adjusting the Velocity Switch easier.	178

Where	New features	Page
Sample Edit	Sample playback position shown in Sample Edit.	180
	Sample names increased to 34 characters.	180
	Stereo samples can now be imported.	180
	The maximum number of Samples in memory has been increased.	180
	The Sample Preload Buffer size has been increased.	180
	Multiple samples can be deleted at once.	181
Importing Sounds, Multisamples, Samples	New import and export pages have been added.	182
	The TX file formats have been added.	183
	You can now batch-import a folder of samples.	185
Exporting Multisamples, Samples	Samples from a multisample can now be exported as KSF, WAV or TX files.	187
Support for TX16Wx data	Sounds and Drum Kits can be edited with the third-party TX16Wx sample editor.	190
Effects for the Sounds	Detailed images have been added to more effect editing pages.	191
Musical Resources	New Styles have been added.	192
Various	Improvements and bug fixes.	193

New features of OS Version 1.2

Where	New features	Page
Add-Ons	Add-On musical resources are now supported.	198
Pa4X Data	More extensive support for Pa4X data has been added.	204
SongBook	Assigning Pads to SongBook Entries is now faster and easier.	214
Songs	Songs can now be saved everywhere from the Home page. As in Song Edit mode, you are no longer limited to overwriting them.	215
Styles	Styles can now be saved everywhere from the Home page. As in Style Edit mode, you are no longer limited to overwriting them.	216
Pads	Saving Pads into a Style is now faster and easier.	217
Chord Sequences	Saving Chord Sequences into a Style is now faster and easier.	220
Style/Pad Edit > Main	Multiple meters are now supported.	222
	Ending 3 now supports different cue modes.	223
Style > Chords	A new Chords track contains Key Signature and Chord data.	224
	Eighty-six new chord types have been added to the Chords track (formerly, only available for the Guitar Mode).	224
	Chord progressions for the Intros and Endings can now be entered as intuitive chord abbreviations in the Pa5X's Event Edit page.	228
	Chord progressions for the Intros and Endings can be programmed on an external sequencer, and can be listened on a connected Pa5X.	229
	The Chords track is now imported and exported, and the chord progressions for the Intros and Endings are automatically converted when importing or exporting a Styles from an external sequencer.	236
Style/Pad Edit > Edit	Full editing has been added to the Style/Pad Edit mode, including Quantize, Transpose, Edit Velocity, Delete Events, Cut/Insert Measures.	237
Sample Edit	The Time Slice procedure has been revised.	246
	MIDI Grooves can now be imported into Styles or Pads, with Drum Kits or Sounds generated by Time Slicing automatically assigned.	249
	Sliced Audio Groove can be assigned to other Sounds or Drum Kits.	250
Effects	The 'Use IFX/MFX' parameters are now automatically saved.	252
Controllers	Settings > Menu > Controllers > Hand page.	252
Musical Resources	New Keyboard Sets, Sounds, Styles and Pads have been added.	253
Various	Improvements and bug fixes.	258

New features of OS Version 1.1

Where	New features	Page
User Interface	List View mode added to the Tile View.	262
Controls	You can now choose between the Catch and Jump behavior for the sliders or pedals.	264
	Changed some Control > Main functions.	265
	Separate controls for the Mic Processor's Delay and Reverb Level parameters.	265
	Added MP3 Volume control.	265
Main page	Pads can be selected from the Home > Main page.	266
	Added Mixer pane in the Home page.	266
Players	Second Player starting in sync with the first one.	268
Drum Edit	Drum Edit moved to a separate section.	269
Effects	Insert and Master FX automatically selected by the Upper 1 Sound.	270
Style Edit	Scale Tuning page added to the Style Edit mode.	271
File Management	microSD cards up to 1TB of capacity can now be formatted and used.	272
Musical Resources	New Pads have been added.	273
Various	Improvements and bug fixes.	274

Pa5X Operating System Version 1.4

New file format

To enhance speed and reliability, the file format of some of the musical resources has been updated in version 1.4.0. As a consequence, User data created with the new operating system version may not be compatible with instruments running on older operating systems.

To ensure compatibility on data exchange with other users, please always keep your instrument up-to-date.

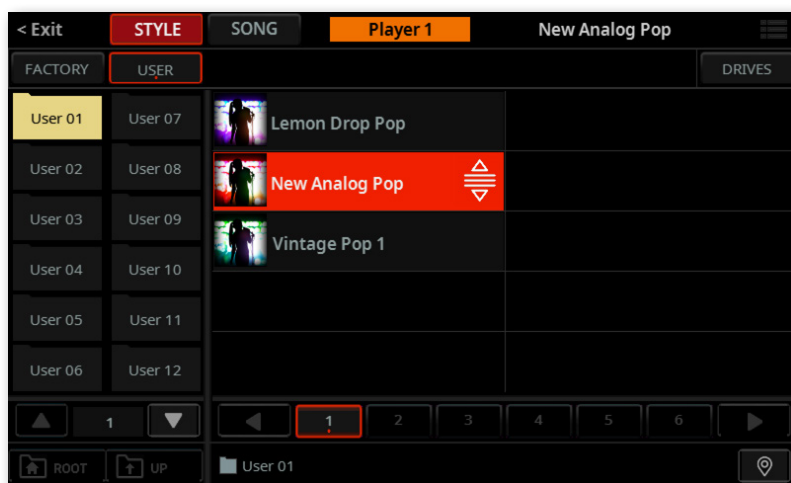
To be sure you preserve a copy of your User data, please make a backup before updating the operating system, by using a **File > Save All** operation. See the chapter dedicated to the file management in the User Manual for more information.

Select windows

Rearranging the User elements

As an alternative to the default alphabetical order, you can rearrange freely some of the User elements in a bank (folder). You can rearrange User Styles, Pads, Keyboard Sets and Chord Sequences. Factory and Drive elements can't be rearranged.

- 1 Open the **Select** window, and browse through the User banks (folders) to find the list of elements you want to rearrange.
- 2 When you see the element you want to move, touch it and keep it until it become highlighted, and the **Move** (≡) icon appears.

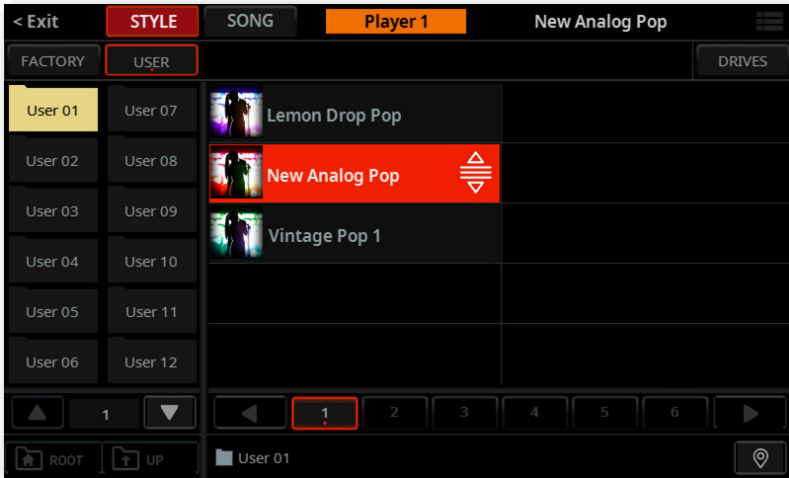


- 3 Move the selected element to a different location in one of these ways:
 - > Touch the **target location**.
 - > Use the **DIAL** or **UP/DOWN** buttons to move the element up or down in the list.
- 4 When done, press the **EXIT** button to confirm and deselect the element.

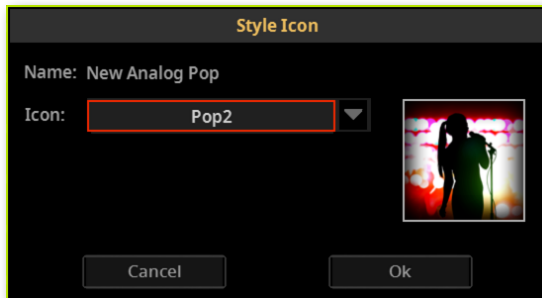
Changing the User element's icon

You can replace the icon of a User element with a different icon.

- 1 Open the **Select** window, and browse through the User banks (folders) to find the element whose icon you want to change.
- 2 When you see the element, touch it and keep it until it become highlighted, and the **Move** (≡) icon appears.



- 3 Touch it again, and keep it until the **Element Icon** dialog appears.



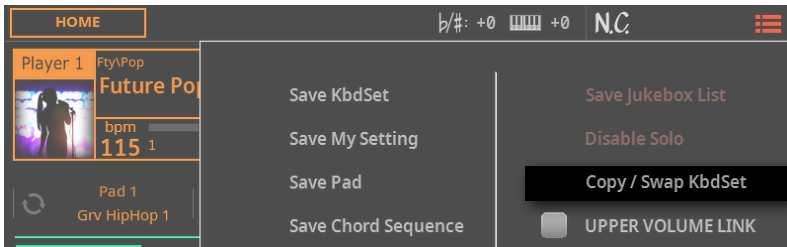
- 4 Use the **Icon** pop-up menu to choose one of the available icons.
- 5 When done, touch the **OK** button to confirm.
- 6 When back to the **Select** window, press the **EXIT** button to deselect the element.

Copying Keyboard Sets between Styles or SongBook Entries

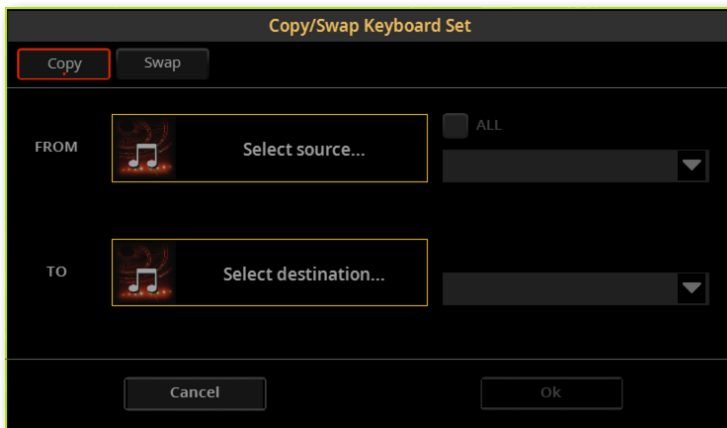
You can copy the Keyboard Sets between User Styles or SongBook Entries.

■ Choose the source and target Styles

- 1 While in the **Home** page, choose the **Copy/Swap KbdSet** command from the page menu (☰).



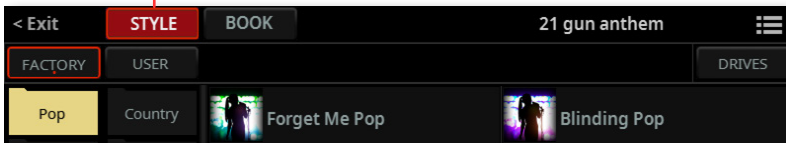
- 2 In the dialog, be sure the **Copy Keyboard Set** pane is shown.



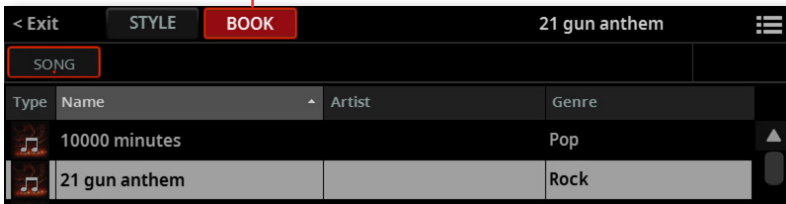
- 3 Touch the **From > Select resource...** button to open the **file selector**.

4 Select **Style** or **(Song)Book** as the source type.

Select from a Style



Select from a SongBook Entry



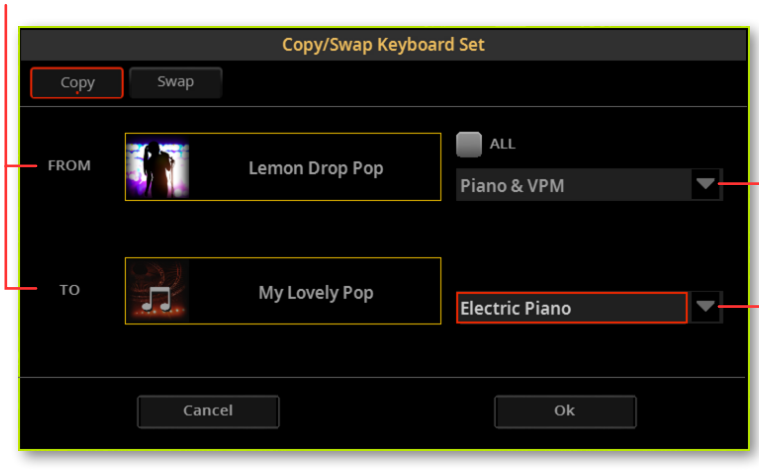
- 5 Browse through the drives and folders, or scroll the Book list, until you find the source Style or Entry. Touch the item to select it.
- 6 Press the **EXIT** button to return to the **Copy Keyboard Set** dialog.
- 7 Touch the **To > Select resource...** button to open the **file selector**.
- 8 Select **Style** or **(Song)Book** as the source target.
- 9 Browse through the drives and folders, or scroll the Book list, until you find the target Style or Entry. Touch the item to select it.
- 10 Press the **EXIT** button to return to the **Copy Keyboard Set** dialog.

■ Copy individual Keyboard Sets

You can copy a single Keyboard Set from the source Style or Entry and paste it into a single location within the target Style or Entry.

1 Use the **pop-up menus** to choose the source and target Keyboard Set locations.

a. Select the source and target Styles or SongBook Entries



b. Select the source and target Keyboard Sets

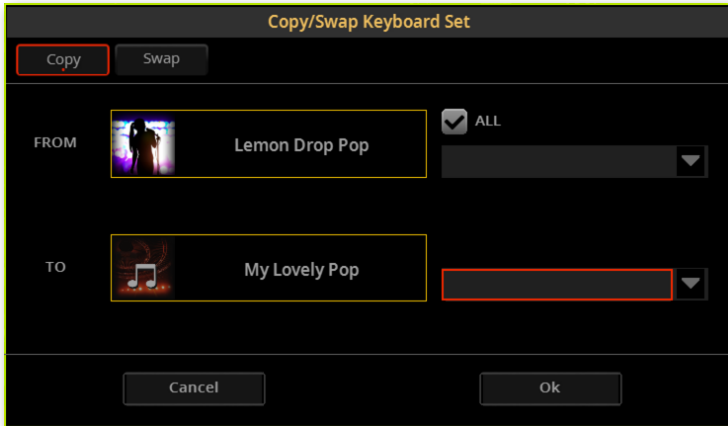
2 Touch the **OK** button to confirm copying.

WARNING: The Keyboard Set at the target position will be deleted.

■ Copy all the Keyboard Sets

You can copy all the Keyboard Sets contained in the source Style or Entry, and paste them into the target Style or Entry.

- 1 While in the **Copy Keyboard Set** dialog, select the **All** checkbox.



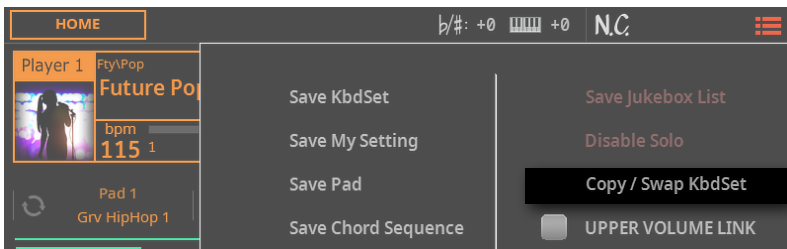
- 2 Touch the **OK** button to confirm copying.

Swapping the Keyboard Set position in a Style or SongBook Entry

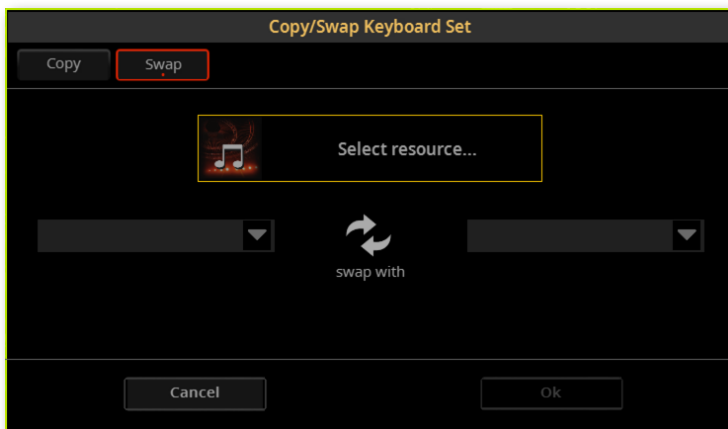
You can swap the position of two Keyboard Sets within a User Style or SongBook Entry.

■ Choose the Style to edit

1 While in the **Home** page, choose the **Copy/Swap KbdSet** command from the page menu (☰).



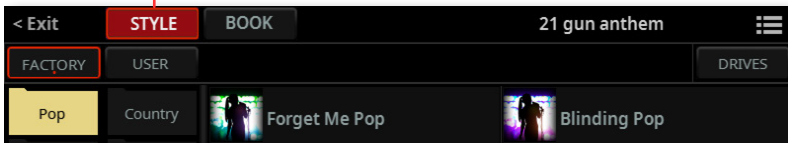
2 In the dialog, touch the **Swap** button to show the **Swap Keyboard Set** pane.



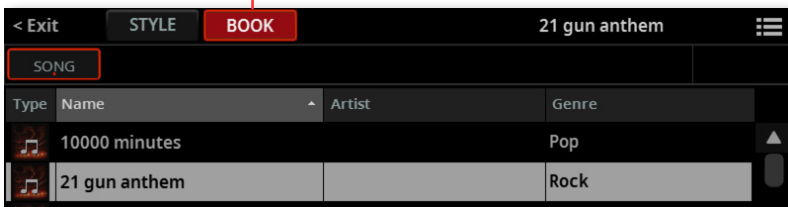
3 Touch the **Select resource...** button to open the **file selector**.

4 Select **Style** or **(Song)Book** as the source type.

Select from a Style



Select from a SongBook Entry



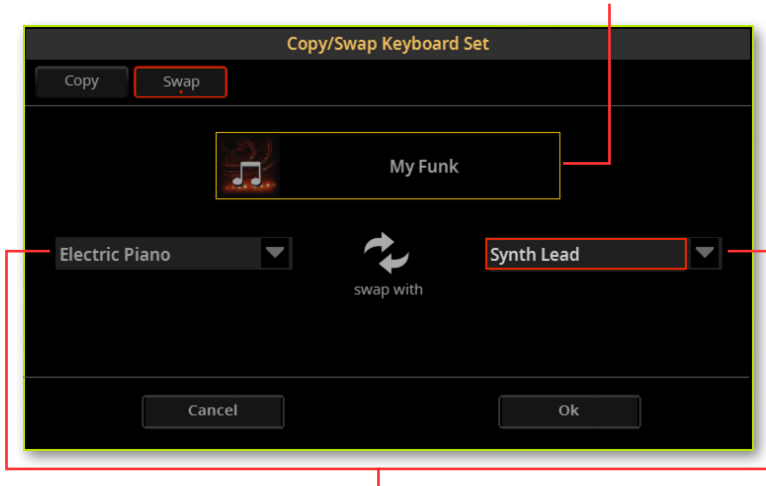
5 Browse through the drives and folders, or scroll the Book list, until you find the Style or Entry to edit. Touch the item to select it.

6 Press the **EXIT** button to return to the **Swap Keyboard Set** dialog.

■ Swap the Keyboard Sets

1 Use the **pop-up menus** to choose the two Keyboard Sets to be swapped.

a. Select the Style or SongBook Entry containing the Keyboard Sets



b. Choose the Keyboard Sets to be swapped

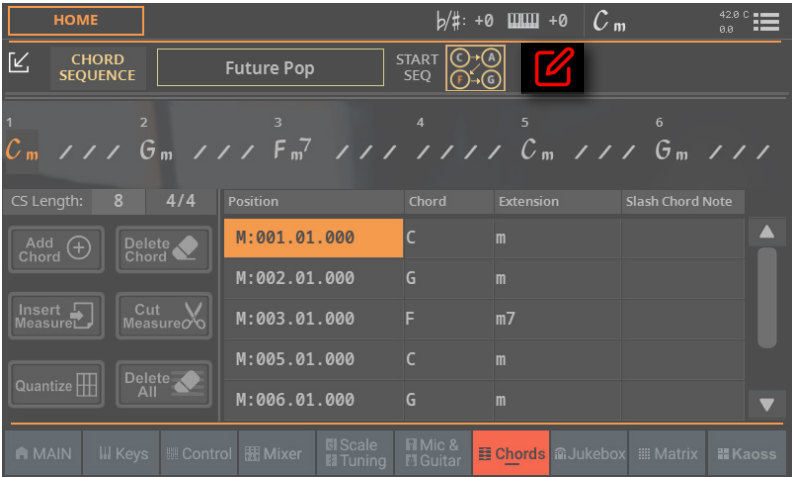
2 Touch the **OK** button to confirm swapping.

NOTE: The name of the Keyboard Sets will not be immediately updated in the Main page. Please select the Style or SongBook Entry again to update them.

The Chord Sequencer

Edit button statuses

When the **Home > Chords** pane is expanded, you can edit the Chord Sequence by pressing the **Edit** () button.



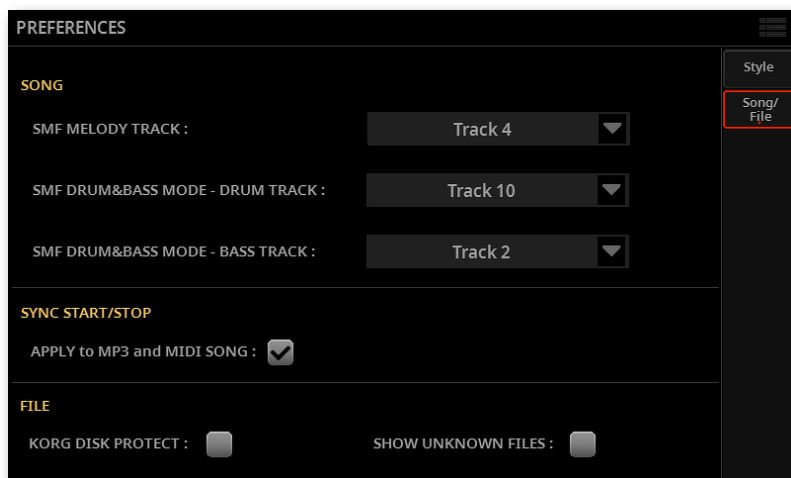
There are now three possible statuses of this button.

Edit button status	Meaning
Dark gray	Chord Sequence empty.
White	Chord Sequence loaded, but not enabled.
Red	Chord Sequence enabled.

Preferences

Song and File preferences now consolidated into a single page

For your convenience, the **Settings > Menu > Preferences > Song and Files** pages have been consolidated into a single one.



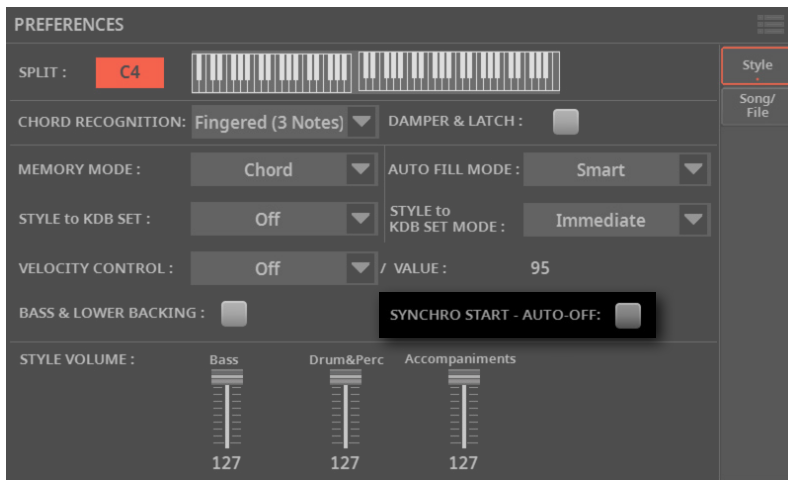
Size and Date information always shown

The **Size** and **Date** information are now always shown in the file lists. As a consequence, the **Show > Size column** and **Date column** options have been removed from the preferences.

Automatically disabling Synchro Start

If you prefer, you can automatically disable the Synchro Start command after using it. This is useful to prevent the Player from starting unexpectedly.

- 1 Go to the **Settings > Menu> Preferences > Style** page.



- 2 Use the **Synchro Start - Auto Off** parameter to enable or disable this function.

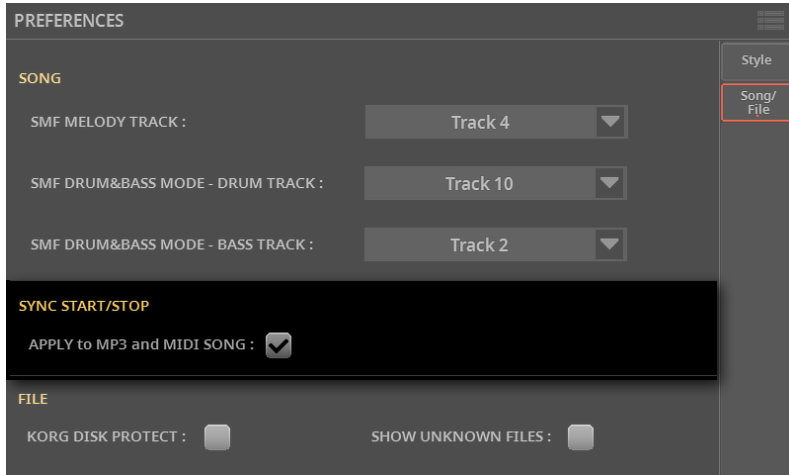
Synchro Start - Auto Off	Meaning
Off	After the Player starts, the Synchro Start function will remain active.
On	After the Player starts, the Synchro Start function will be disabled. If you want to use it again, turn it back on.

NOTE: When this parameter is enabled, pressing the **SYNCHRO > STOP** button activates the Synchro Stop command, and also enables the Synchro Start function. The **SYNCHRO > START** indicator is automatically turned on.

Disabling Synchro Start/Stop on Songs

The **SYNCHRO > START** and **STOP** buttons can be deactivated for the Songs (either MIDI- or MP3-based).

- 1 Go to the **Settings > Preferences > Song/File** page.



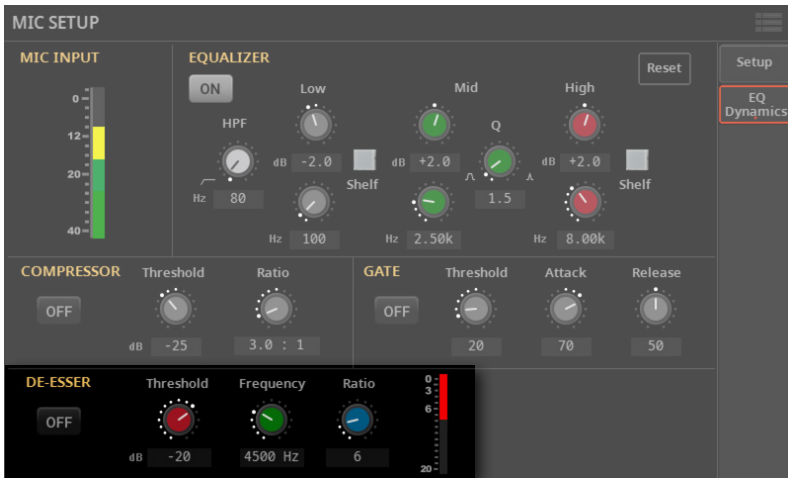
- 2 Use the **Apply to MP3 and MIDI Song** checkbox to enable or disable the **Synchro Start and Stop** function.

Microphone

De-Esser

A De-Esser has been added to the Mic input.

- Go to the **Settings > Menu > Mic Setup > EQ/Dynamics** page.



Programming the De-Esser

Pa5X features a split-band **De-Esser**, that you can use to remove sibilance from voices or harshness from acoustic instruments.



The **Threshold** control sets the singing level at and above which the amount of sibilance reduction specified by the Ratio control will occur. The range is 0 dB to -60 dB: 0 dB being the loudest input signal the Mic Processor can accept without distortion and -60 dB being a very quiet signal. If you sing consistently more quietly than the Threshold, you will not hear any de-essing. A good setting to avoid making a voice sound artificial is of a few dBs, without exceeding -10 dB.

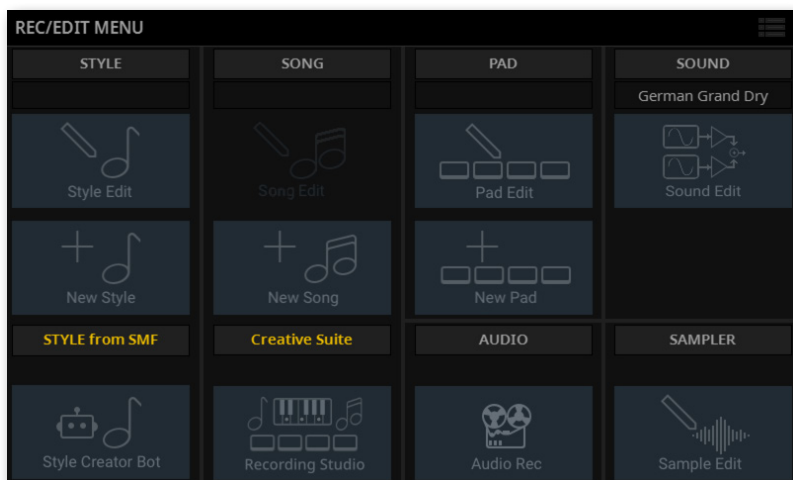
The **Frequency** control sets the point above which the De-Esser will work. The range is 2,000 Hz to 10,000 Hz. The ideal setting depends on the voice or instrument being processed. Voice sibilance usually happens between 4,000 and 8,000 Hz. Cymbals 'fizz' is usually between 7,000 and 7,500 Hz.

The **Ratio** control sets how much gain reduction you prefer when the selected frequency band goes above the threshold. The range is from 1 : 1 (no gain reduction) to 60 : 1 (maximum gain reduction). Experiment starting with the lower ratios, keeping in mind that higher values will change the original signal more.

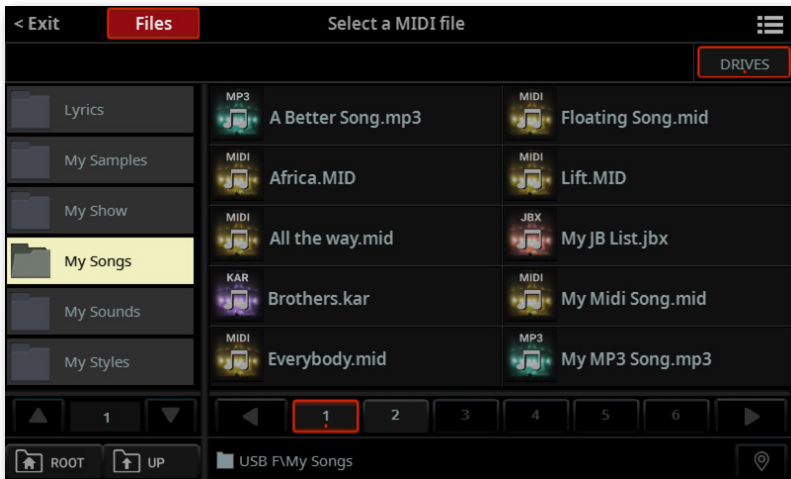
The Style Creator Bot

You can convert any commercially or freely available MIDI Song (in Standard MIDI File format) into a complete Pa5X Style. While Pa5X includes a state-of-the-art converter of this type that usually results in a careful recreation of the original song, the quality of results may vary depending on the source song.

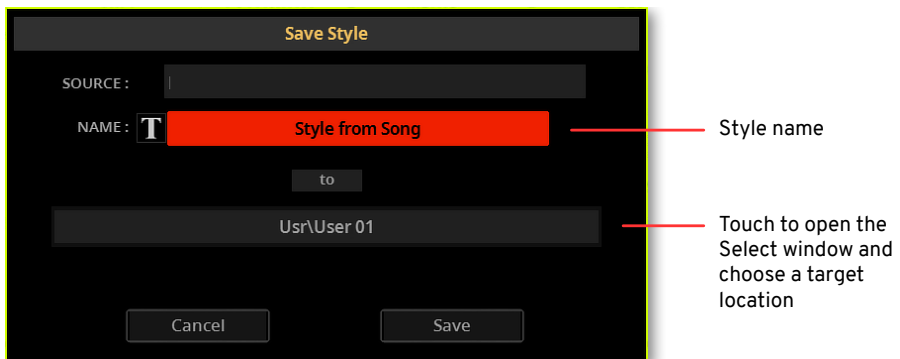
1 From the Home page, press the **REC/EDIT** button to open the **Record/Edit Menu** dialog.



- 2 Choose the **Style Creator Bot** option to open the file selector.



- 3 Select the source MIDI Song (.mid file), and confirm by pressing the **EXIT** button.
- 4 When the conversion is complete, you are asked to write the new Style into a Style folder.



- 5 After writing, you are asked if you want to load the new Style into Player 1.
- 6 Fine-tune the new Style with the functions of the **Style Record/Edit** section.

In the end, you will get a Style including all the Style Elements, the four Pads, and the four Keyboard Sets. Additionally, It will include a Chord Sequence that contains the chord progression recognized in the source MIDI Song (only choosing the significant chords).

Editing the Styles

Piano sound to the right hand while editing

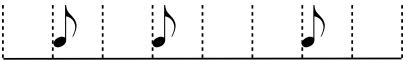
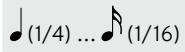
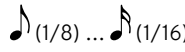
While in Style Record/Edit mode, you can now play a Piano sound with your right hand, while testing the chords with your left hand.

Undo command

The scope of the **Undo** command in **Style/Pad Edit** mode has been expanded. You can now also undo the **Copy** command, which is used to copy track settings.

Swing Quantize

Swing values have been added to the **Style Edit > Quantize** page.

Resolution	Meaning
	Grid resolution, in musical values. For example, when you select 1/16, all notes are moved to the nearest 1/16 division. When you select 1/8, all notes are moved to the nearest 1/8 division.
	No quantization 
	1/16 
	1/8 
 Triplet	The same as above, but with triplet note values.
 Swing (B-F)	The same as above, but with a swing rhythm. The letters are different swing degrees.

The Recording Studio

What is the Recording Studio?

MIDI Songs are composed of up to sixteen separate tracks, each representing a distinct part with its own unique Sound. In a conventional sequencer, such as Pa5X's own Song Record/Edit mode, MIDI Songs are recorded one track at a time, for example starting with the drums, followed by the bass, accompaniment guitar, and finally, the strings.

The Recording Studio simplifies the process of creating Songs by allowing you to record your live performance on the keyboard, accompanied by the Styles. You can then enhance the resulting Arrangement by adding Pads and one or more Chord Sequences.

While recording, you can continue singing into the microphone connected to the dedicated input, to be sure the song is following your melody. (Note that the audio will not be recorded in the song).

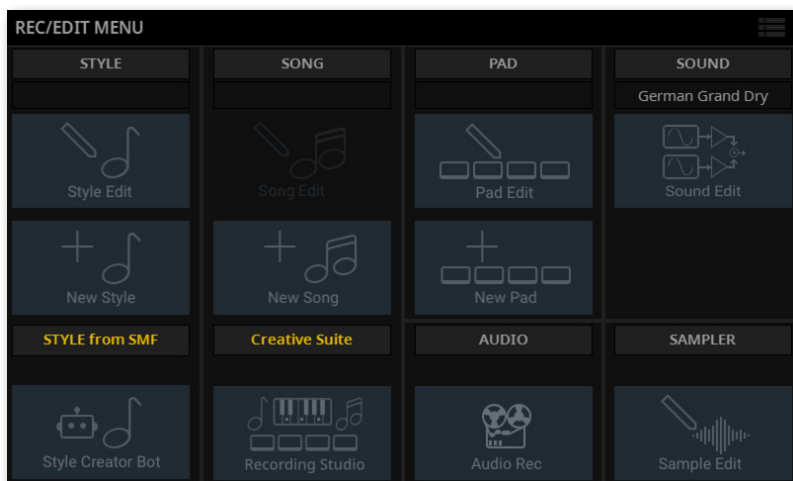
Editing is also streamlined. You can add and edit Chords, Style Elements, Keyboard Sets, and Pads as separate tracks in an easy-to-understand graphic timeline. Creating a Song step-by-step becomes like building blocks.

After recording and editing the resulting Arrangement, you can save it in its own editable format. Alternatively, you can convert it into a standard sixteen-tracks MIDI Song, which can then be played with the Players and edited in Song Record/Edit mode, or with an external sequencer.

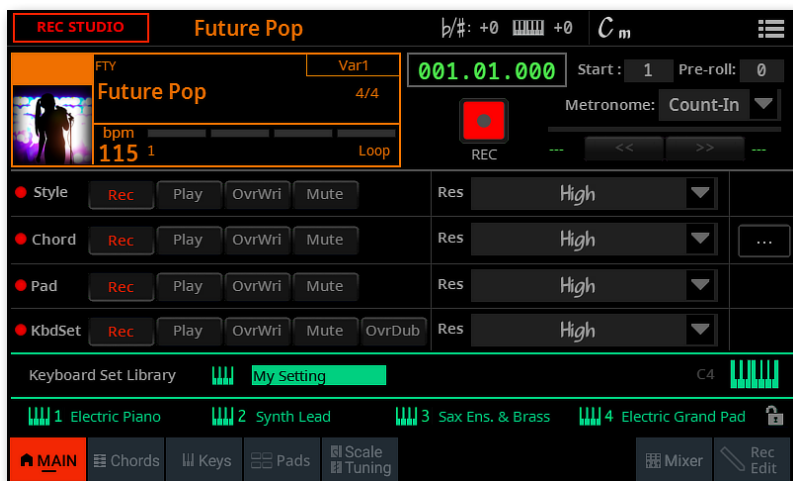
Accessing the Recording Studio mode

You can access **Recording Studio mode** to quickly record your performance into an Arrangement, with or without the accompaniment of a Style.

- 1 While you are in one of the **Home** pages, be sure a Style is assigned to **Player 1**.
- 2 Choose a Style, a Keyboard Set from the Library, the Pads, a Chord Sequence, and any other element that you will want to use for recording.
- 3 Press the **REC/EDIT** button, to make the **Rec/Edit Menu** appear.



- 4 From the **edit menu**, choose the **Recording Studio** option. The **Recording Studio > Main** page will appear.



Loading an Arrangement

If you want to continue editing an existing Arrangement, choose the **Load ARG (Arrangement)** command from the **page menu** (☰) to load it.

CAUTION: Loading an Arrangement will delete the one you are currently editing.

Saving the Arrangement

When finished recording, choose the **Save ARG (Arrangement)** command from the **page menu** (☰) to save it. More details on saving Arrangements are at the end of this section.

Exporting the Arrangement as a MIDI Song

The Arrangement can be converted into a Standard MIDI File, that can then be loaded into the Pa5X Players as any ordinary MIDI Song. They can also be read by any sequencer/DAW on your computer.

- 1 While in **Recording Studio mode**, load or record an Arrangement.
- 2 Choose the **Export Arrangement as MIDI Song** command from the **page menu** (☰) to export it. For more details on exporting MIDI Songs, see [Exporting the Arrangements as MIDI Files](#) on page 83.

Exiting the Recording Studio mode

To exit from the **Recording Studio mode**, press the **EXIT** or the **REC/EDIT** button again. A message will warn you that any unsaved data will be lost.

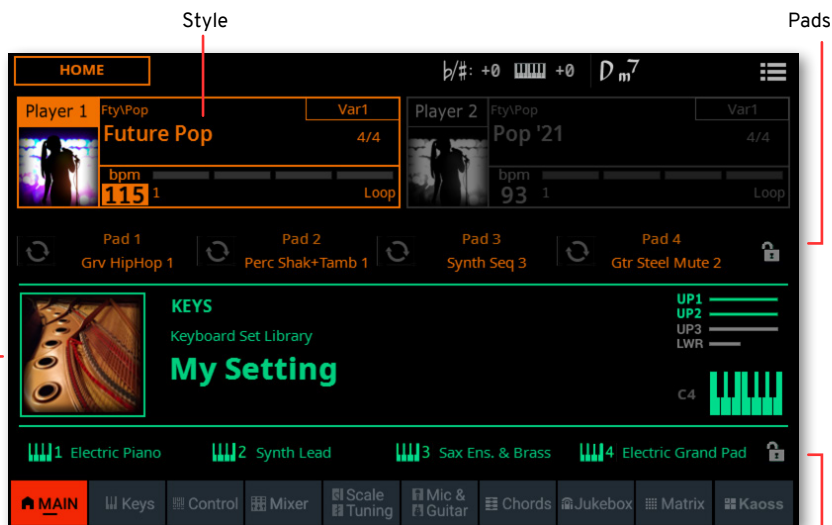
Recording an Arrangement

When entering the **Recording Studio** mode, you may simply start recording. If you want to set some more parameters, please see the instructions in the next pages.

■ Choose the elements of your performance

While still in the **Home** pages, choose the elements that you want to use to record your performance. You can choose:

- > The **Style**. With the Style will be loaded its **four Keyboard Sets**.
- > A **Keyboard Set from the Library**. This will be the fifth Keyboard Set among the ones you will be able to select during the performance.
- > The **Pads**, **Chord Sequence**, and everything else you want to use during the performance.



Keyboard Set from the Library

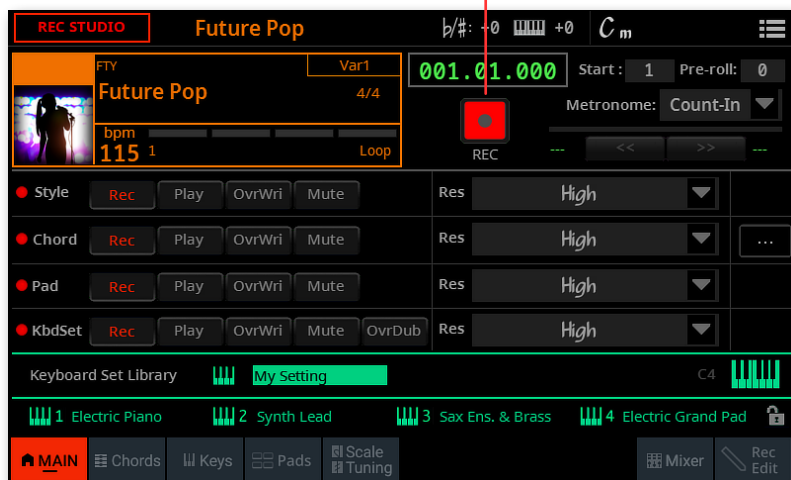
Keyboard Sets from the Style

■ Access the Recording Studio

- 1 Press the **REC/EDIT** button, and choose the **Recording Studio** option from the **Rec/Edit Menu**. The **Recording Studio > Main** page will appear.
- 2 The **REC** () button is already set for recording (red, flashing), and the Arrangement tracks are enabled for recording (red status indicator on the left).

Arrangement tracks enabled for recording (red)

Record button ready for recording (red, flashing)



■ Check the status of the Arrangement tracks and the Recording status

The **REC** button's color changes depending on its status.

REC button's color	Status
	Red, flashing One or more Arrangement tracks armed and ready to start recording
	Red, steady Recording
	Dark gray Not armed or recording

■ The Style and Arrangement commands

While in the **Studio Recording** mode, you will use the **PLAYER 1** controls to start and stop the Style, and the **PLAYER 2** controls to start and stop the Arrangement.



NOTE: You can't use the **PLAYER 2 > PLAY/STOP** (▷◻) button on the control panel to start recording after the first take.

The indicator over the **PLAYER 2** buttons on the control panel changes color depending on the play/record status.

PLAYER 2 buttons color	Status
Red, flashing	One or more Arrangement tracks in Rec mode and ready to start recording
Red, steady	Recording
Orange, flashing	Something already recorded, and one or more Arrangement tracks in Overwrite or Overdub mode and ready to start recording
Green	Playing or ready to start playing

■ Start recording

1 You are ready to start recording. Do one of the following:

➤ If you want to start without the accompaniment of a Style, touch the **REC** (■) button in the display, or press the **PLAYER 2 > PLAY/STOP** (▷◻) button on the control panel.

➤ If you want to immediately record with a Style, start the Style (with the **PLAYER 1 > PLAY/STOP** (▷◻) button), and recording will begin immediately.

2 Play normally, while your Arrangement is being recorded.

3 During your performance, you can start and stop the Style, choose any other Style Element, Keyboard Set, play the Pads, start and stop the Chord Sequence.

■ End recording

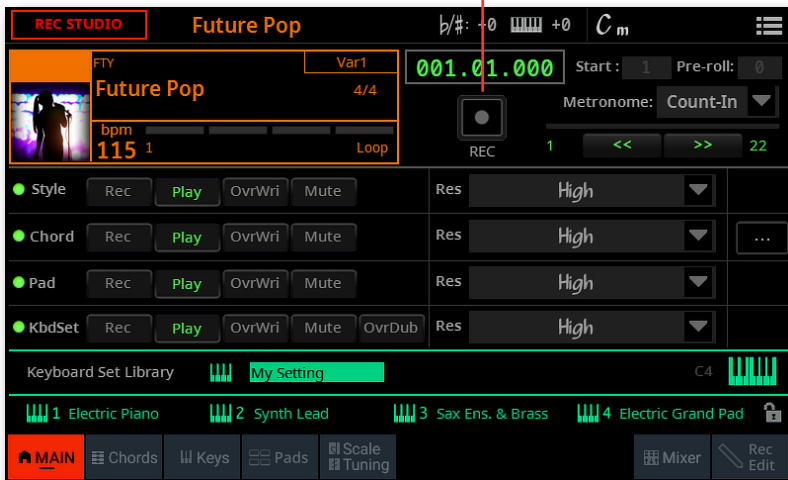
When finished recording your performance, do one of the following:

- > Touch the **REC** (■) button in the display. The button becomes dark gray.
- > Press the **PLAYER 2 > PLAY/STOP** (▶◻) button on the control panel to stop recording. The position pointer will remain at the current position.
- > Press the **PLAYER 2 > GO TO START** (⏮) button on the control panel to stop recording. The position pointer will move to the beginning of the Arrangement.

After having stopped recording, the Arrangement track's status indicators on the left become green.

Arrangement tracks in playback status (green)

Record button turned off (dark gray)



■ Save the Arrangement

- > Choose the **Save ARG (Arrangement)** command from the **page menu** (≡). Choose a location where to save it. (For more details, see [Saving the Arrangements](#) on page 81).

Listening to the Arrangement

Playing the Arrangement from the control panel

While in the **Studio Recording** mode, you can use the **Player 2** controls to listen to the Arrangement.



■ Starting and stopping the Arrangement

- > Press the **PLAYER 2 > PLAY/STOP** ($\triangleright\square$) button to start or stop the Arrangement's playback. The Arrangement will start from the current position.
- > Press the **PLAYER 2 > STOP/GO TO START** ($\ll$) button to stop the Arrangement's playback, and rewind to the beginning.

■ Fast Rewind and Fast Forward

- > Use the **<<FRW (Fast Rewind)** and **FFW>> (Fast Forward)** buttons in the **CONTROL** section of the control panel to move one measure back or forward.

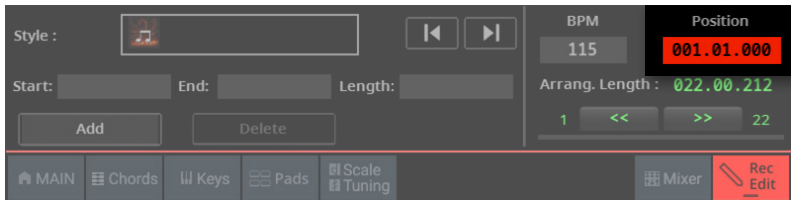
(Please note that these commands are not available when the selected mode is **EASY EDIT/DWB**).

- > Keep pressing these buttons to scroll the Arrangement continuously. Release them when you have reached the desired position.



■ Moving back and forward with the DIAL and UP/DOWN buttons

While you are in the **Rec Edit** page, and the **Position** parameter is selected (it is by default), you can use the **DIAL** or **UP/DOWN** buttons to move through the Arrangement.



- > Use the **DIAL** or **UP/DOWN** buttons to move back and forward by steps of a quarter note.
- > Keep the **SHIFT** button pressed, and use the **DIAL** or **UP/DOWN** buttons to move back and forward by finer steps of a tick.

Playing the Arrangement from the display

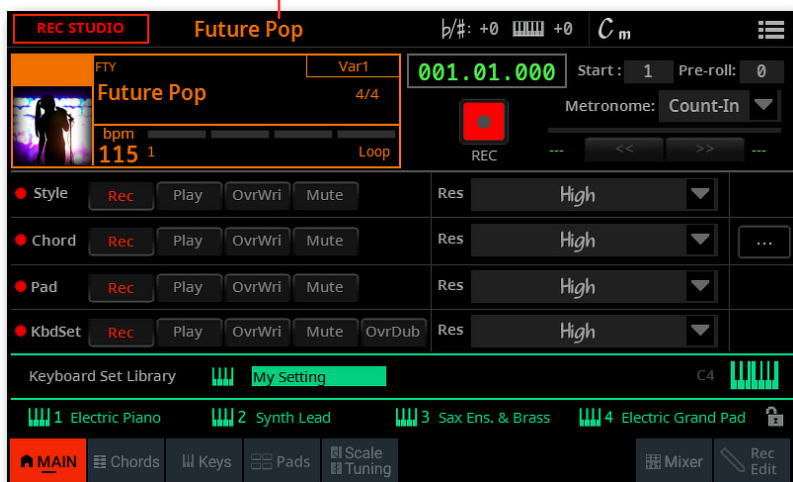
The Recording Studio > Main page

The **Main page** of the **Recording Studio** mode allows you to listen to an Arrangement. From here, you can access the individual tracks of the Arrangement and choose their status (play, mute, record).

Style information

Style or Arrangement name

Transport controls

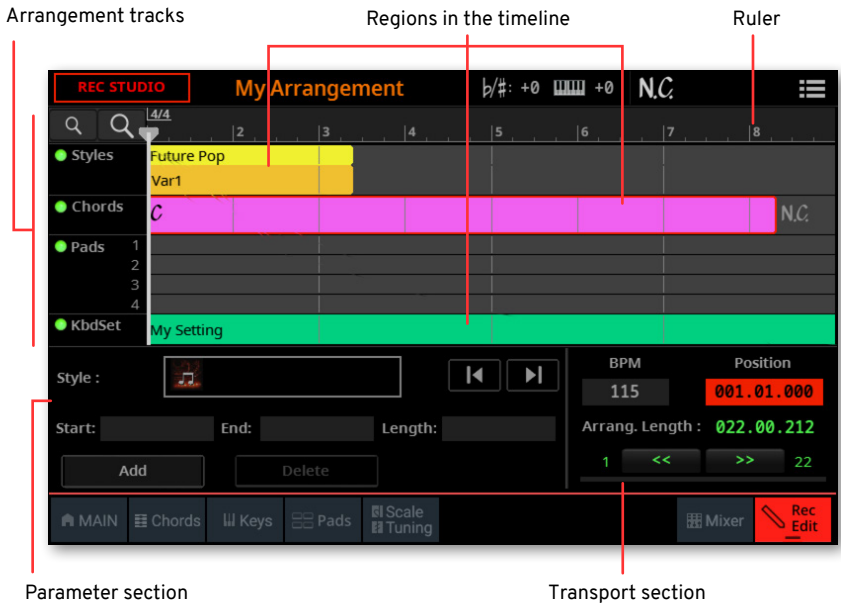


Arrangement tracks

Keyboard Sets

The Recording Studio > Rec Edit page

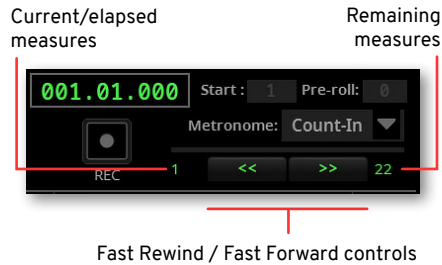
A more detailed view on the Arrangement can be found in the **Rec Edit** page of the **Recording Studio** mode. Here, you can scroll through the regions in each track of the Arrangement in the timeline. By touching one of the sections, you can also access to detailed information on their content.



Moving through the Arrangement

■ Fast Rewind and Fast Forward

- > Use the **Fast Rewind (<<)** and **Fast Forward (>>)** commands in the display to move to the previous or following measure.
- > Keep touching these buttons to continuously scroll through the Arrangement. Release them when you have reached the desired position.



■ Choose the exact Position

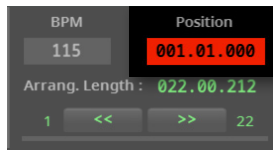
- > You can move to a precise position by using the **Position** parameter.

Current position (measure, beat, tick)



■ Use the Position parameter and the DIAL or UP/DOWN buttons

- 1 While in the **Rec/Edit** page, be sure the **Position** parameter is selected.



- 2 Use the **DIAL** or **UP/DOWN** buttons to move back and forward by steps of a quarter note.
- 3 Keep the **SHIFT** button pressed, and use the **DIAL** or **UP/DOWN** buttons to move back and forward by finer steps of a tick.

■ Touch the desired position in the ruler

- > While in the **Rec/Edit** page, touch the desired position in the **ruler** to move the position pointer to that point. The **Position** parameter will change accordingly.

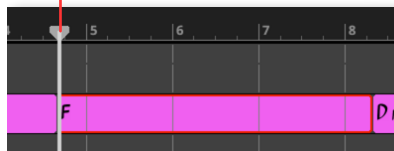
Position pointer moves where you touch the ruler



■ Move to the beginning of a region

- > While in the **Rec/Edit** page, keep the **SHIFT** button pressed, and touch the region where you want to move the position pointer.

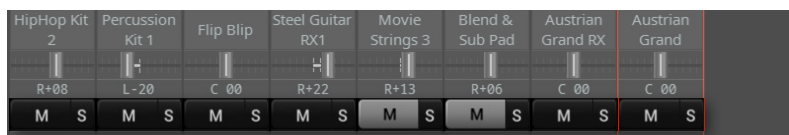
Position pointer at the beginning of the selected region



Soloing and muting

Soloing and muting the individual tracks

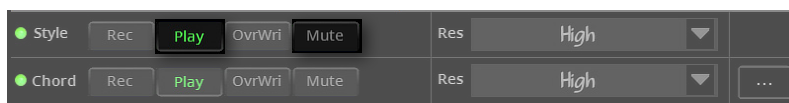
You can mute and solo each individual track, by using the dedicated **Mute** (**M**) and **Solo** (**S**) buttons in the **Recording Studio > Mixer** page. You can also find these commands in the **Keys** and **Pads** pages.



Please note that the Solo is only effective within the same group of Sounds. For example, if you solo a Style Sound, the Keyboard Sounds will continue to play. Conversely, if you solo a Keyboard Sound, the Style Sounds will remain playing.

Muting the Arrangement tracks

The Arrangement tracks can be muted (or put back in play) in the **Recording Studio > Main** page. This will mute all the corresponding Keyboard, Style or Pad Sounds.



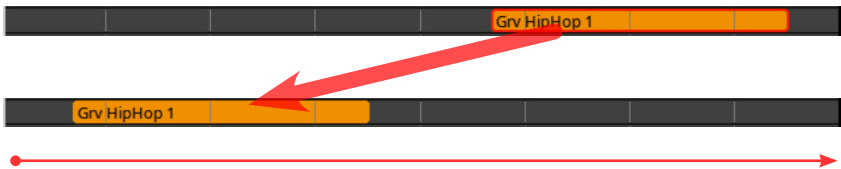
Zooming and scrolling

While in the **Recording Studio > Rec Edit** page you can use some controls from the control panel or the display to adjust what you view in the display.

Scrolling the timeline

While in the **Recording Studio > Rec Edit** page, you can scroll the timeline, without changing the playback position. This is useful to visualize the Arrangement's structure, without moving the playhead.

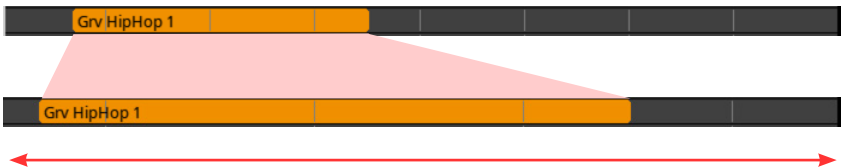
- > Keep the **MENU** button pressed, while using the **DIAL** or **UP/DOWN** buttons to scroll the timeline.



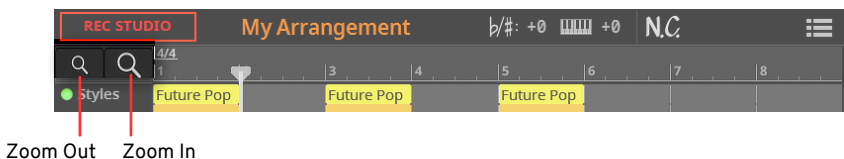
Zooming the timeline

While in the **Recording Studio > Rec Edit** page, you can increase or decrease the size of the elements in the timeline, to see a larger portion of it or go more into the details.

- > Keep the **SETTING** button pressed, while using the **DIAL** or **UP/DOWN** buttons to zoom the timeline in or out.

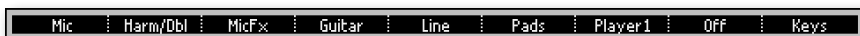
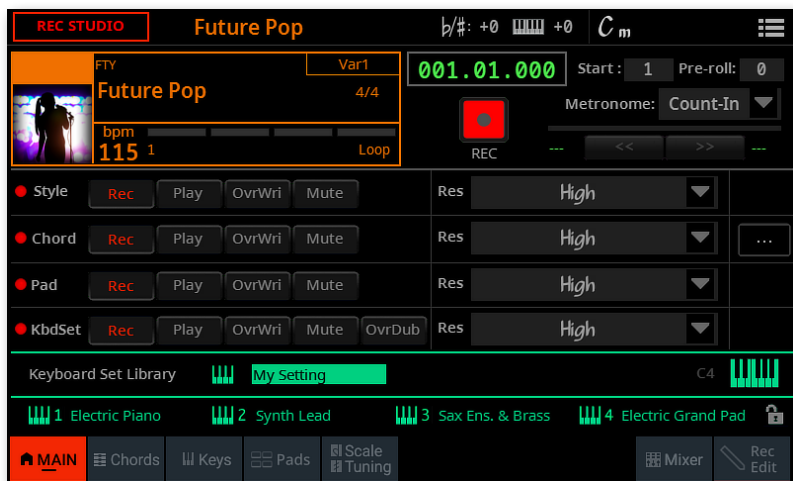


- > As an alternative, you can zoom by using the two dedicated buttons in the top left corner of the **Rec Edit** page.



The Control section in Record Studio mode

When entering the **Recording Studio** mode, dedicated parameters are automatically assigned to the **CONTROL** section.



#	Slider	controls the level of...	Button	turns on/off...
1	Mic	Microphone input	Mic On	Microphone input
2	Harmony/DbI	Harmony and Double voices	Harmony	Harmony voices
3	MicFx	Delay and Reverb effects on the Mic input	Double	Double voices
4	Guitar	Guitar input	Bass Inv	Bass Inversion
5	Line	Audio from the Line input	Acceler.	Accelerando
6	Pads	The Pads (proportionally)	Ritard.	Ritardando
7	Player 1	Style or Song from Player 1	Trk.Sel	Track Select
8	Off	–	<< FRW	
9	Keys	The Keyboard Sounds as a whole	FFW >>	Manual Bass

Setting the recording parameters

Preparing the performance elements

When accessing the **Recording Studio**, you could simply start recording, as seen in the preceding pages.

However, there are some settings that you might want to do. For example, you may want to change the Style, Keyboard Set, Pads, Chord Sequence, Sounds, Effects, Scale, Scale Tuning.

Choosing a Style and a Style Element

The Style selected when entering the **Recording Studio** will be already selected. However, you can choose a different one before starting to record.

NOTE: Once you have recorded something, the Style can no longer be changed. Always select a Style before starting to record.

- **Choosing a Style before starting to record**
- > Touch the **name of the Style** and choose the desired one.

Touch to choose a Style



■ Choosing a Style Element before starting to record

> From the control panel, choose the **Style Element** you want to play when starting to record.

■ Choosing a Style during recording

This is not permitted with the current operating system. Only a single Style is allowed in an Arrangement.

■ Choosing a Style Element during recording

> During recording, select any Style Element from the control panel. The Arrangement will record the selection into a new region.

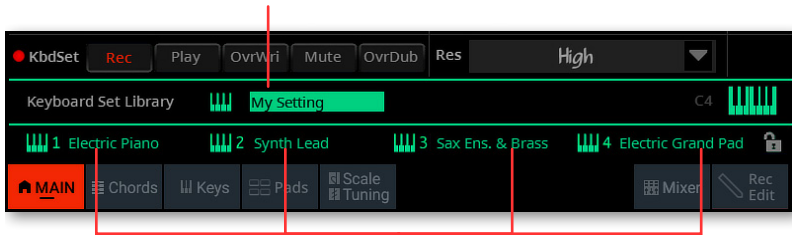
Choosing the Keyboard Sets

When entering the **Recording Studio** five Keyboard Sets are already ready to use: the four included with the Style, and the one you selected from the Keyboard Set Library.

■ Choosing the Keyboard Sets before starting to record

- > Before starting to record, touch the **name of the Style** to choose a different one. The four Keyboard Sets included with the Style will be automatically selected.
- > Also before starting to record, touch the **name of the Keyboard Set from the Library** to change it.

Touch to choose a Keyboard Set from the library

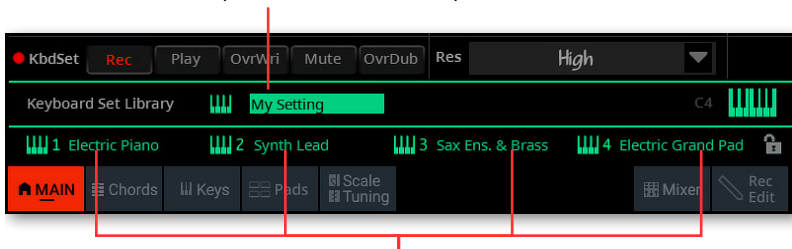


Four Keyboard Sets included with the Style

■ Choosing the Keyboard Sets during recording

- > The latest selected one is the Keyboard Set that is selected when starting to record.
- > During recording, you can select any of the five available Keyboard Sets. The Arrangement will record the selection into a new region.
- > To select the Keyboard Sets from the Style, you can either touch **their name in the display**, or use the **KEYBOARD SET** buttons under the **X-FADER**.

Touch to select the Keyboard Set from the library



Touch to select one of the four Keyboard Sets included with the Style

Editing the Keyboard Sets

You can edit and save any of the five Keyboard Sets of the Arrangement. You can do it before starting to record, or after having already recorded something and used the Keyboard Sets.

■ Choose the Keyboard Set to be edited before starting to edit

➤ If the Arrangement is new and not yet recorded, select the **Keyboard Set** to be edited. It can be any of the five Keyboard Sets of the Arrangement.

■ Choose one of the Keyboard Sets already used in the Arrangement

If the Arrangement has been already partially recorded, you can edit the Keyboard Set you have used.

➤ Move the **Position** where the Keyboard Set to be edited is in use. In the **Rec Edit** page you can see the position pointer crossing the corresponding region.

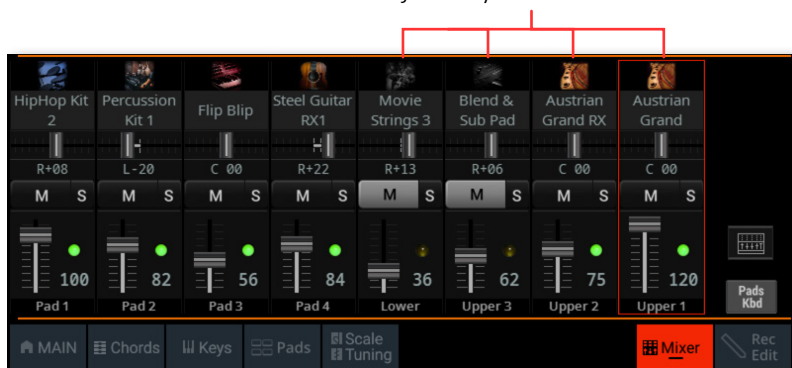
■ Choose the Keyboard Sounds

When the Keyboard Set you want to edit is selected, you can edit it.

1 Touch the **Mixer** tab to open the corresponding pane.

2 Touch the **area of a Keyboard Sound (Upper or Lower)** to select the corresponding part, and touch the **name of the Sound** to be replaced.

Touch to change the Keyboard Sounds



■ Balance the Keyboard Sounds before starting to record

> Use the **Volume** sliders next to the Sound names to mix them. While doing it, you can use the **Mute** (**M**) and **Solo** (**S**) buttons to isolate them.

■ Change the Scale or Quarter Tone

You can save a custom Scale or Quarter Tone choice in the Keyboard Set.

1 Touch the **Scale Tuning** tab to open the corresponding pane.

2 Choose a Scale or edit the Quarter Tone scale.

■ Save the changes into the current Keyboard Set

> After having completed the editing, save the Arrangement. The current situation will be saved into the currently selected Keyboard Set.

Do not change the **Position** before saving, or a different Keyboard Set may reset your changes.

■ Select the Keyboard Set to be used at the beginning of the song

If the Arrangement is new, and you have selected a Keyboard Set to be edited, the Keyboard Set at the beginning of the Arrangement might not be the one you want at the beginning of the song.

> Before starting to record, choose the **Keyboard Set** you want to use at the beginning of the song.

Choosing a Chord Sequence

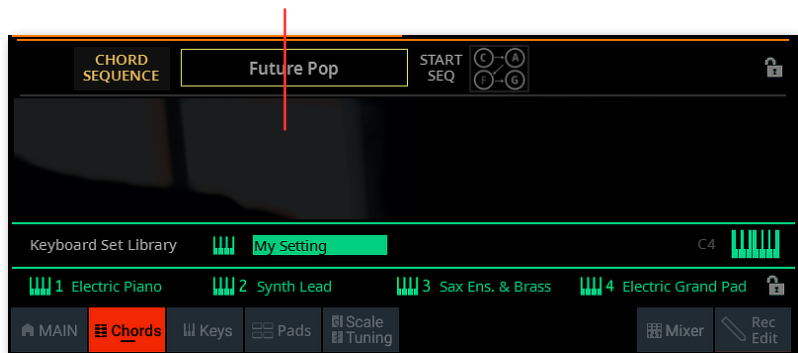
Instead of playing the chords yourself, you can use a Chord Sequence to free up your hands. A Chord Sequence may be already selected when entering Recording Studio mode, but you can choose a different one. You can choose as many Chord Sequences as you like during recording.

During recording, the chords you play on the keyboard (in the chord recognition area) are mixed with the ones from the Chord Sequence. They will appear together in the **Chords** pane.

■ Choosing the Chord Sequence before starting to record

- 1 Touch the **Chords** tab to open the corresponding pane.

Chord Sequence (only shown if the **CHORD > SEQUENCE** button is orange)



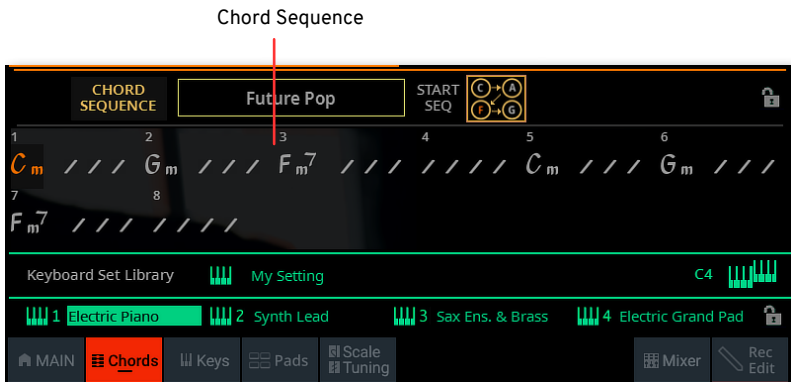
- > If the **CHORD > SEQUENCE** indicator on the control panel is **off**, it means there is no Chord Sequence loaded.
- > If the **CHORD > SEQUENCE** indicator on the control panel is **white**, it means there is a Chord Sequence loaded, but not ready to play. In this situation you can not yet see the chords.

The **CHORD > SEQUENCE** indicator shows the status of the Chord Sequences.

SEQUENCE	Meaning
Off	Chord Sequence not available.
White	Chord Sequence available, but not activate for playing. No chord is shown in the Chord pane.
Orange flashing	Chord Sequence available and ready to play. Chords are shown in the Chord pane.
Orange steady	Chord Sequence playing. Chords are shown in the Chord pane, and are progressively highlighted to show the current position.

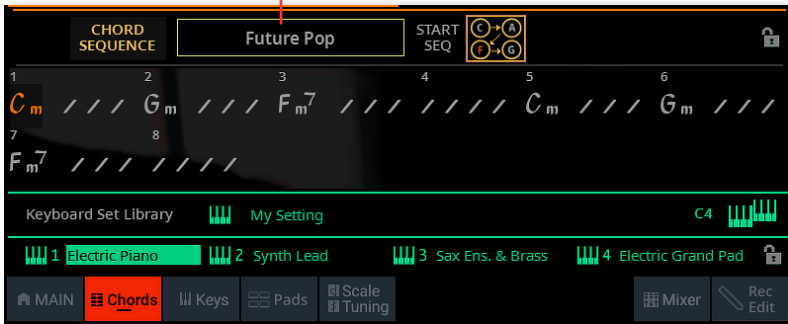
2 If a Chord Sequence is loaded, and the **CHORD > SEQUENCE** indicator is **white**, make it ready to play, and let the chord be shown:

- > Press the **CHORD > SEQUENCE** button on the control panel (it becomes **orange** and starts **flashing**), or
- > Touch the **Start Seq** button in the display (it starts flashing).



3 To load or choose a different Chord Sequence, touch the **name of the Chord Sequence**, and choose a different **Chord Sequence**.

Touch to choose a Chord Sequence



4 As an alternative, a Chord Sequence can be chosen by touching the **Select (...)** button in the **Recording Studio > Main** page.



Touch to choose a Chord Sequence

5 While recording, use the same Chord Sequence controls that you would use while in **Home** mode.

■ Choosing a Chord Sequence during recording

- While recording, you can choose a different Chord Sequence, by following the same procedure seen above.
- By choosing the **Overwrite** record mode, you can replace the chords that may already be in the **Chords** track at the same position.

■ Recording the chords

- While recording, play the chords you want to improvise.
- Start the Chord Sequence when you want.

■ Recording the chords on a second take

On a second take, you can add chords either with a Chord Sequence, or by playing them on the keyboard.

- > If you want to play the chords on the keyboard, be sure the **CHORD > SEQUENCE** indicator is **white** (therefore the Chord Sequence is not playing).
- > If you want to combine the chords already recorded with the new ones, be sure to be recording in **Overwrite** mode.

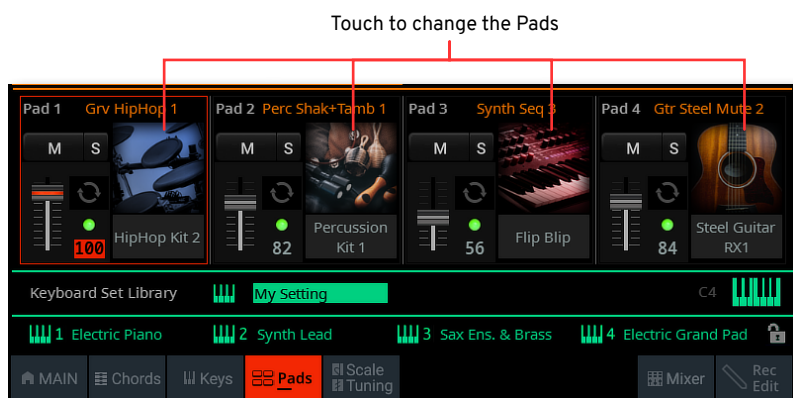
Choosing the Pads

The Pads selected when entering **Recording Studio** will be already selected. However, you can choose different ones before starting to record.

A single set of Pads is allowed in an Arrangement. You can't change them during the song.

■ Choosing the Pads before starting to record

- 1 Touch the **Pad** tab to open the corresponding pane.
- 2 Touch the **name of a Pad** and choose the replacement one.



■ Balancing the Pads before starting to record

- > Use the **Volume** sliders next to the Pad names to mix them. While doing it, you can use the **Mute** (**M**) and **Solo** (**S**) buttons to isolate them.

■ Playing and stopping the Pads while recording

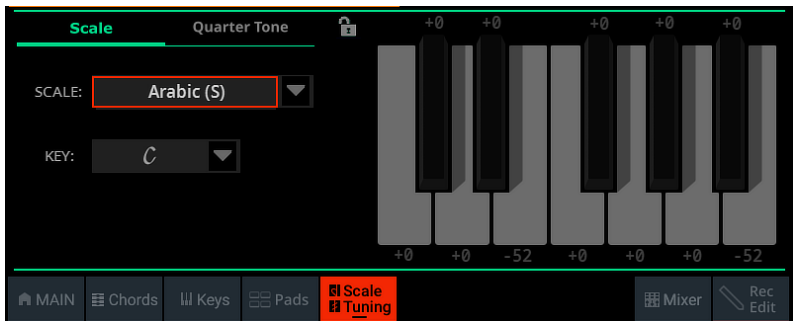
- > While recording, use the **PAD** buttons to select, start and stop them.

Choosing a Scale or editing the Quarter Tone scale

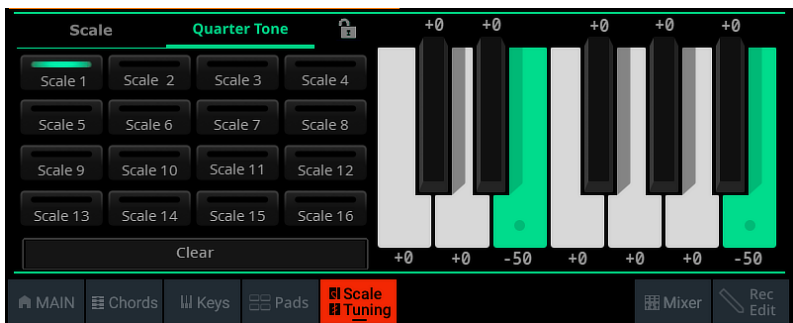
Each Keyboard Set can save a different Scale or Quarter Tone setting. You can therefore edit and save it.

■ Setting the Scale Tuning before starting to record

- 1 Select the Keyboard Set where you want to save the custom Scale Tuning.
- 2 Touch the **Scale Tuning** tab to open the corresponding pane.
- 3 While in the **Scale** pane, use the **Scale** pop-up menu to choose a different scale.



- 4 If you want to program the Scale Tuning, go to the **Quarter Tone** pane, and start by choosing one of the **Scale Presets**.



5 Use the **keyboard diagram** to change the key tuning.

- > Selecting a **key** will lower the note tuning by a quarter tone (-50 cents of a semitone).
- > You can fine-tune the note by using the dedicated **numeric parameter** over or under the selected key.
- > If you deselect a **key**, the standard Equal tuning is restored for that note.

■ **Save the changes into the current Keyboard Set**

- > After having completed the editing, save the Arrangement. The current situation will be saved into the currently selected Keyboard Set.

Do not change the **Position** before saving, or a different Keyboard Set may reset your changes.

■ **Changing the Scale Tuning during recording**

Choose a different Keyboard Set to also recall the Scale Tuning settings saved into it.

Choosing the tracks and the quantize value

Choosing the Arrangement tracks to be recorded

While recording, you can record all the Arrangement tracks, or just some of them. You can therefore record certain tracks while simultaneously listening to the ones you’ve already recorded in a previous session.

Set the status of the tracks to be recorded to either **Rec**, **Overdub** or **Overwrite**.



Track status	Meaning
Play	The track will be played back, with no recording happening on it.
Mute	The track will not play.
Rec	The track will be erased and recorded. Note: When selected, no other track can be set to the Overdub or Overwrite mode.
Overdub	The newly recorded events will be mixed to any existing events. Note: When selected, no other track can be set to the Rec mode.
Overwrite	The newly recorded events will replace any existing events. Note: When selected, no other track can be set to the Rec mode.

The dot on the left of each track gives a quick overview on the track status.

Indicator color	Status
Red	Rec, Overdub, Overwrite
Green	Play
Dimmed blue	Mute

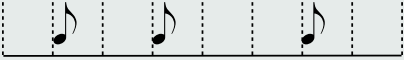
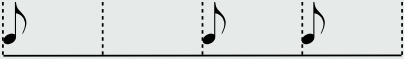
Setting the recording resolution (quantize)

You can use automatic rhythm correction while recording. This correction is applied to the incoming notes, and can not be changed after recording.

Recording resolution (a.k.a. Quantize)



> Set the recording **Resolution**.

Resolution	Meaning
High	No quantization applied
 (1/4) ...  (1/32)	Grid resolution, in musical values. For example, when you select 1/16, all notes are moved to the nearest 1/16 division. When you select 1/8, all notes are moved to the nearest 1/8 division. No quantization  1/16  1/8 
 (1/4) ...  (1/16) Triplet	The same as above, but with triplet note values.

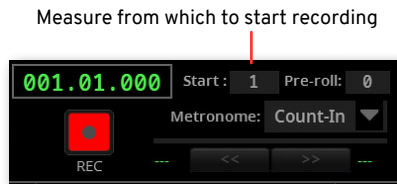
Setting the recording parameters

When accessing the **Recording Studio**, Tempo and Meter are already set by the selected Style, and the tracks are all ready for recording. However, you may want to do some changes in the **Recording Studio > Main** page.

Choosing the starting position

> You can choose the measure from which recording will start by using the **Start** parameter. Anything before this measure is left untouched.

This is useful to add music to the end of an existing recording, or either replace or integrate the music already recorded from the selected measure.



NOTE: The **Start** parameters can only be enabled if one of the Arrangement tracks is in **Rec** mode. With the **Overwrite** and **Overdub** recording modes you can start recording when you better prefer. When not recording, no existing data is touched.

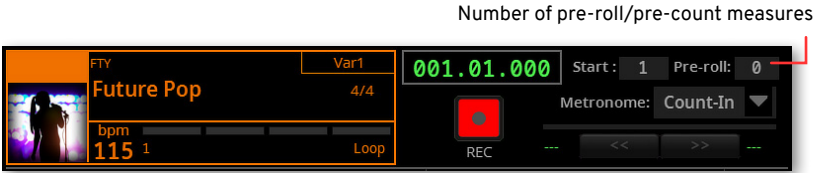
Setting the number of pre-roll measures

When recording, you can enable the **Pre-roll** parameter. If it is enabled, you can listen to the already recorded measures, before automatically entering recording. If you are starting from the beginning, you'll hear some silence of the same length, or the metronome click.

This is useful to 'punch-in' to an existing recording, and either replace or integrate an existing recording starting from the selected measure.

NOTE: The **Pre-roll** parameters can only be enabled if one of the Arrangement tracks is in **Rec** mode. With the **Overwrite** and **Overdub** recording modes you can start recording when you better prefer, and can listen to the existing data before starting to record.

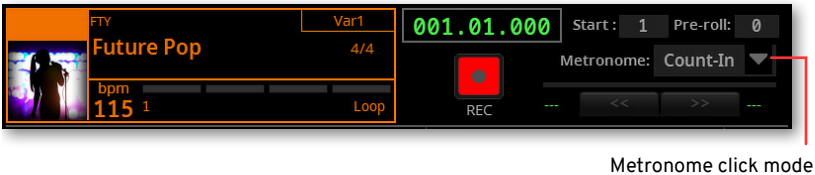
- > Use the **Pre-roll** parameter to set the desired number of pre-roll measures that can be heard before starting to record.



Setting the metronome click mode

You can enable or disable the metronome click.

- > Use the **Metronome** pop-up menu to set the metronome click mode.



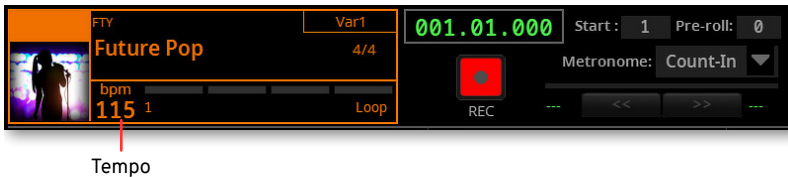
Metronome	Meaning
Off	Disabled.
Count-in	Only enabled during the count-in before starting recording.
Always	Enabled during the count-in and during recording.

Recording Tempo

Setting initial Tempo value

You can change the initial Tempo value.

- 1 Move to the '001.01.000' position.
- 2 Use the **BPM** parameter to change the initial Tempo.



Changing Tempo during recording

You can change the Tempo value during recording (for example, for accelerando or ritardando).

- 1 Set the **Style** track to the **Rec** mode.
- 2 Start recording, and change the **Tempo** value where needed.

Second pass recording

After recording your first take, you can continue recording by adding other tracks over the existing ones, or add measures at the end of the Arrangement. Alternatively, you can load an already recorded Arrangement and start recording over it.

You might want to add elements or replace certain passages you've already recorded. For instance, you could add the Pads after recording your keyboard performance with the accompaniment of the Style, perform a solo, or replace a Style Element.

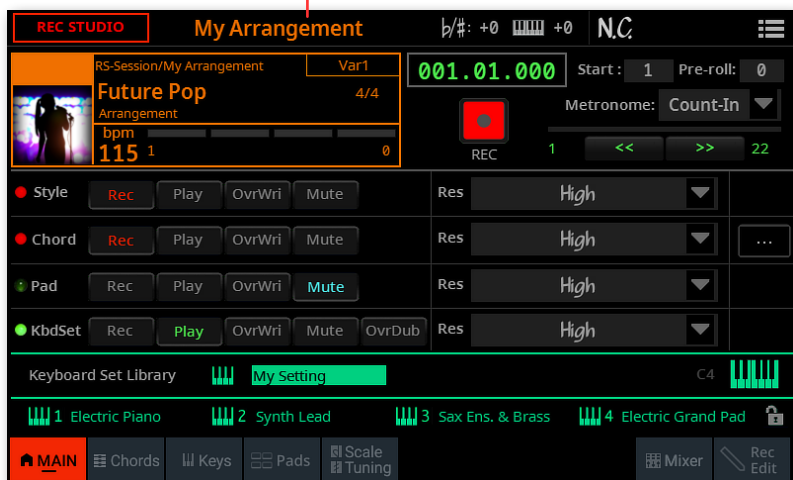
■ Access recording

➤ Go to the **Recording Studio > Main** page.

Style information

Arrangement name

Transport controls



Arrangement tracks

Keyboard Sets

■ Set the recording parameters

1 Set the status of the Arrangement tracks. Set the tracks you would like to record again in one of the **Rec**, **Overdub** or **Overwrite** modes.

Track status	Meaning
Play	The track will be played back, with no recording happening on it.
Mute	The track will not play.
Rec	The track will be erased (from the Start point onward) and recorded again. Choose this mode if you want to add music at the end of the Arrangement, or if you want to start recording again from the middle overwriting all the existing data from that point. Note: When selected, no other track can be set in the Overdub or Overwrite mode.
Overdub	The newly recorded events will be mixed to any existing events. Note: When selected, no other track can be set to the Rec mode.
Overwrite	The newly recorded events will replace any existing events. Note: When selected, no other track can be set to the Rec mode.

2 If in the **Rec** recording mode, use the **Start** parameter to choose the measure from which to start recording again. Everything existing after this point will be erased.

3 If in the **Rec** recording mode, use the **Pre-roll** parameter to choose the number of measures that will be played before recording starts.

NOTE: The **Start** and **Pre-roll** parameters can only be enabled if one of the Arrangement tracks is in **Rec** mode. With the **Overwrite** and **Overdub** recording modes you can start recording when you better prefer. When not recording, no existing data will be touched.

■ Start and stop recording

- 1 Touch the **REC** () button in the display to start recording again, and wait for the pre-roll to end before starting to play.
- 2 If you are overwriting or overdubbing, start playing when you prefer.
- 3 Touch the **REC** () button in the display, or press the **STOP/GO TO START** () button on the control panel to stop recording.

■ Save the Arrangement

- > Choose the **Save ARG (Arrangement)** command from the **page menu** (). Choose a location where to save it. (For more details, see [Saving the Arrangements](#) on page 81).

Punch In/Out recording

If you want to fix some errors in a short passage, leaving everything else unaffected, use the Punch In/Out function.

■ Be sure the Punch In/Out function is assigned to the CONTROL section

When in **Recording Studio** mode, the **Punch In/Out** function is already assigned to a button of the **CONTROL** section.



Punch In/Out status	Meaning
Off	Not assigned.
Red, blinking	Punch In/Out available.
Red, steady	Recording.

■ Assign the Punch In/Out function to a footswitch or assignable switch

As an alternative, you can assign the **Punch In/Out** function to a footswitch (in the **Settings > Menu > Controllers > Foot** page) or assignable switch (in the **Home > Menu > Switches** page).

■ Record by using the Punch In/Out function

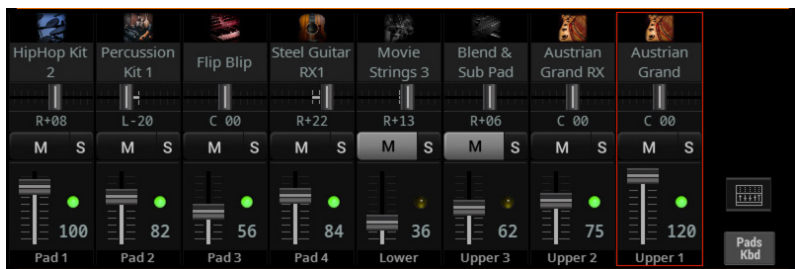
- 1 Set the track(s) to be recorded again in the **Overwrite** or **Overdub** recording mode.
- 2 Press the **PLAYER 2 > PLAY/STOP** (▷□) button on the control panel to start playing the Arrangement.
- 3 When ready to record, press the **Punch In/Out** button in the **CONTROL** section to start recording. As an alternative, press the footswitch programmed with the **Punch In/Out** function.
- 4 Play the passage to be replaced.
- 5 When done, press the **Punch In/Out** button in the **CONTROL** section again to stop recording. As an alternative, press again the footswitch programmed with the **Punch In/Out** function. The Arrangement will continue to play.
- 6 Use the **Punch In/Out** button if you want to overwrite or overdub other passages.
- 7 Press the **STOP/GO TO START** (⏏) button on the control panel to stop recording.

Editing the Arrangement

Mixing the Sounds

You can adjust the Volume, Pan and Play/Mute status of the Style tracks before starting to record. [You can also set the Effects.]

- 1 Touch the **Mixer** tab to go to the corresponding pane.



Tracks

Track Select button

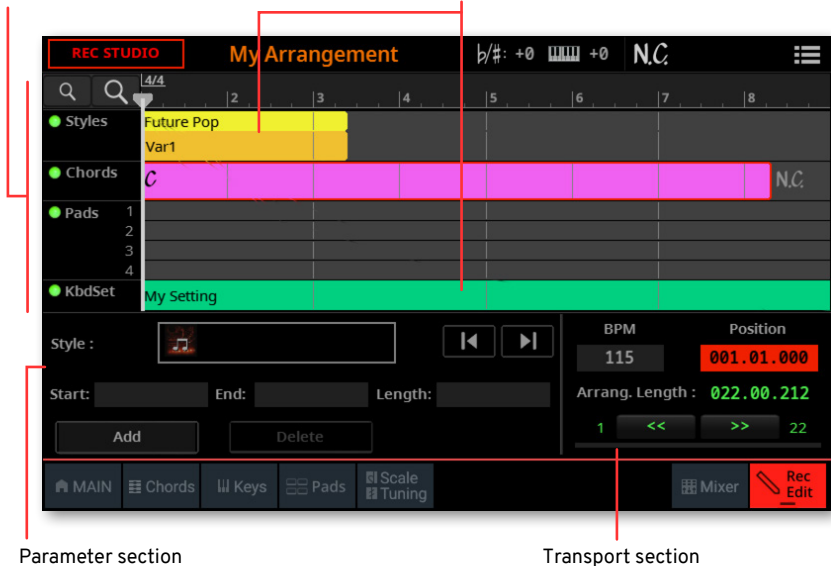
- 2 Adjust the volume and pan of the tracks as desired. Choose different Sounds. change the Mute status. The settings will be saved with the Arrangement.

Editing the Arrangement tracks

While in the **Recording Studio > Rec Edit** page, you can edit the regions in the Arrangement tracks. You can also add or delete them.

Arrangement tracks

Regions in the timeline



Parameter section

Transport section

NOTE: To edit the MIDI events contained in the regions you will have to export the Arrangement to a Standard MIDI File, and then edit it in the **Song Edit > Event Edit** page.

What is a region in the timeline?

A region is represented by a rectangle in the timeline. It is a container of MIDI events – that is, the notes and controls that you recorded. Each region corresponds to something happening in the Arrangement, like the sequence where a Style or a Pad is playing, or the change of a Style Element.

You can select a region by touching it, and you can edit its parameters under the timeline. To edit its content (the MIDI events), export the Arrangement as a MIDI Song (see how to do at the end of this chapter), and edit it in Song Edit mode.

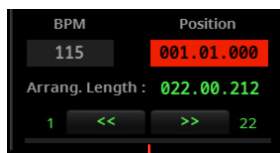
The editing procedure

- 1 Move to the position in the timeline where you want to add, edit or delete a region.
- 2 Touch the rectangle corresponding to the region in the timeline you want to edit. You can see its parameters in the left section under the timeline.
- 3 Use the **Previous Region** (◀) and **Next Region** (▶) buttons to select the previous or next region in the timeline.
- 4 If you want to deselect the region, touch any empty area of the timeline, or select another region.
- 5 Add, edit or delete the selected region. Please note that not all the regions can be deleted.

Region Type	Can be added	Can be deleted
Style	–	–
Style Element	✓	✓
Chords	✓	✓
Pads	✓	✓
Keyboard Set	✓	✓

Adding a new region

- 1 Move the position pointer to the position where you want to add a new region.



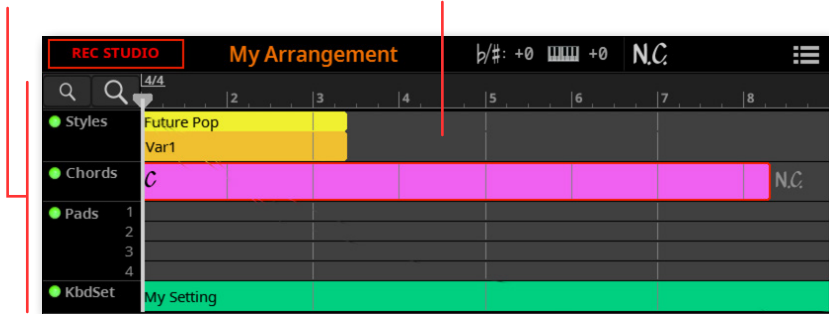
Transport section

- 2 Select the track where you want to add the region, by touching its name or anywhere in its lane. The details of the new region will appear in the parameter

area under the timeline. If you have not touched an existing region, you'll see default values.

Arrangement tracks

Timeline



- 3 Touch the **Add** button to add the new region in the selected track.
- 4 Touch the new region to select it, then edit its parameters, as explained in the following sections.

Deleting a region

- 1 Touch a region to select it.
- 2 Touch the **Delete** button to delete the selected region.

Changing the position and length of a region

- 1 Touch a region to select it.
- 2 Use the **Start** and **End** parameters in the parameter section to change its starting and ending positions. The **Length** will change accordingly.
- 3 Use the **Length** parameter to change the length of the region. The **End** parameter will change accordingly.

NOTE: Since the regions can't overlap, you can't extend a region over another region. The editing could therefore be canceled, to avoid damaging the other region.

Editing a Style Element region

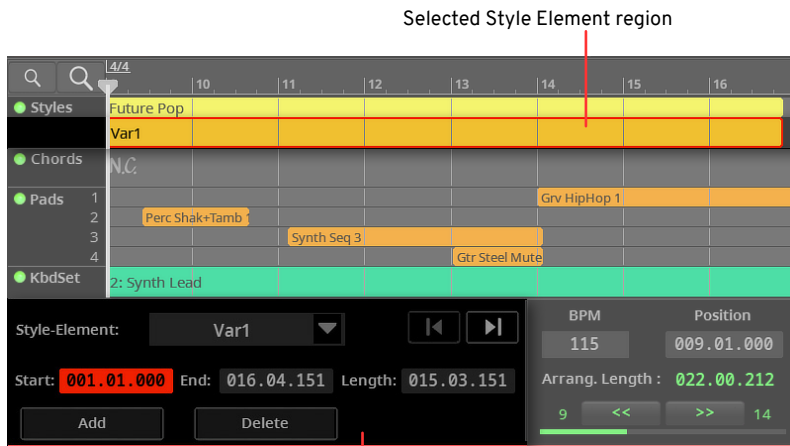
You can replace a Style Element with a different one from the same Style. For example, you may want to replace a Fill 1 with Fill 2, if it is better fitting that musical passage.

When the replacement Style Element is shorter than the original one, the new one will be repeated for the whole duration the older one was playing (the full length of the region in the timeline).

When it is longer than the original one, the new one will be shortened, and will only play the measures covering the duration of the older one.

You can also add a new one or delete an existing one (see the instructions in the earlier pages).

- 1 Touch the region in the lower lane of the **Styles** track to edit the Style Element region. The region's parameters will appear under the timeline.



- 2 Touch the **Style Element name** in the parameter section, and choose a different Style Element.

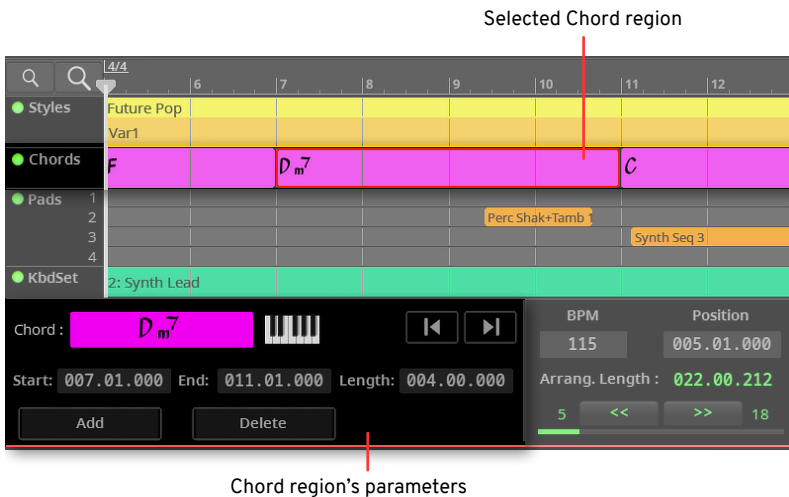
- 3 If you want, use the **Start**, **End** and **Length** parameters to change the regions position and length.

Editing a Chord region

You can replace the chords. You can also add a new one or delete an existing one (see the instructions in the earlier pages).

■ Select a Chord region

> Touch the Chords region you want to edit. The region's parameters will appear under the timeline.

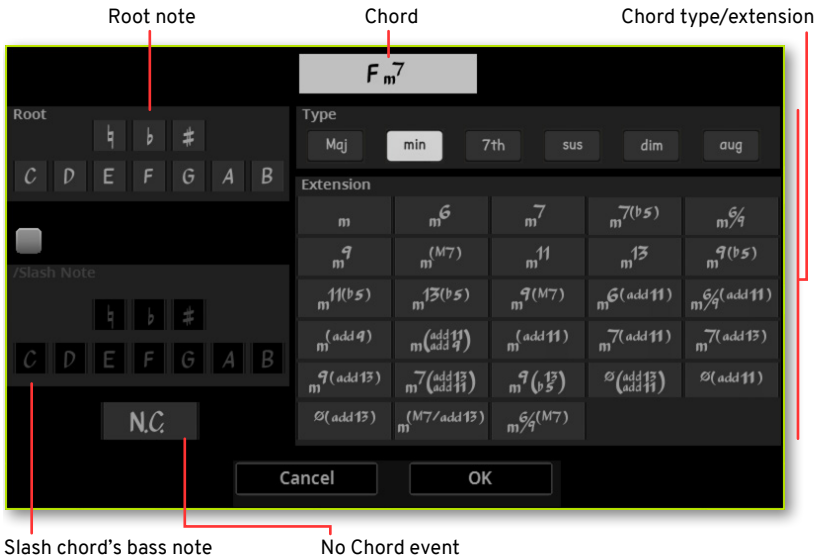


■ Change the selected chord by playing it

> When the Chord region to be edited is selected, play the replacement chord on the keyboard.

■ Change the selected chord by editing the parameters

1 Touch the name of the chord in the parameter section. The **Chord Edit** dialog will appear.



2 Edit the Chord event.

Chord element	Meaning
Root	Base note of the chord.
Type	Most common types of chord (major, minor, 7th...)
Extension	Less common types of chord, or chord abbreviations.
Slash	Alternative bass note in chord like C/F. Select the checkbox above this section to enable editing.
N.C.	No Chord. The melodic and harmonic accompaniment tracks will not play when no chord is selected. Only the rhythmic tracks will be heard, together with the Keyboard Sounds and the Pads.

3 When done, touch **OK** to confirm.

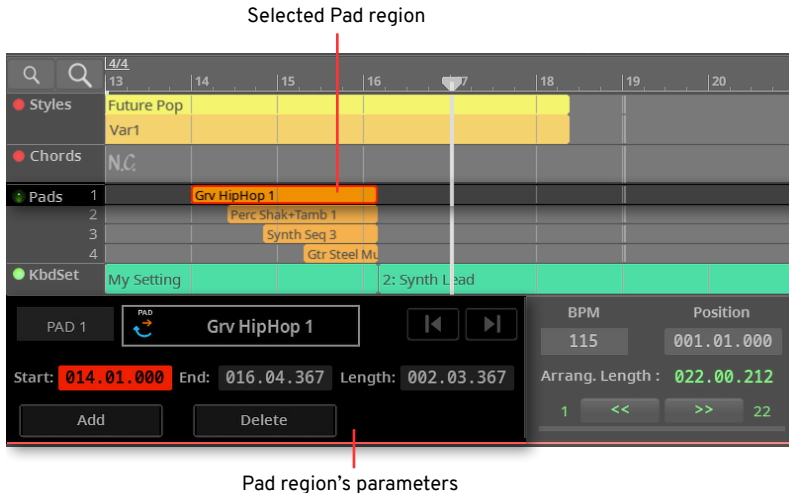
■ Change the position and length

> If you want, use the **Start**, **End** and **Length** parameters to change the regions position and length.

Editing a Pad region

You can replace the Pads. You can also add a new one or delete an existing one (see the instructions in the earlier pages).

- 1 Touch the Pads region you want to edit. The region's parameters will appear under the timeline.



- 2 Touch the **Pad name** in the parameter section, and choose a different Pad.
- 3 If you want, use the **Start**, **End** and **Length** parameters to change the regions position and length.

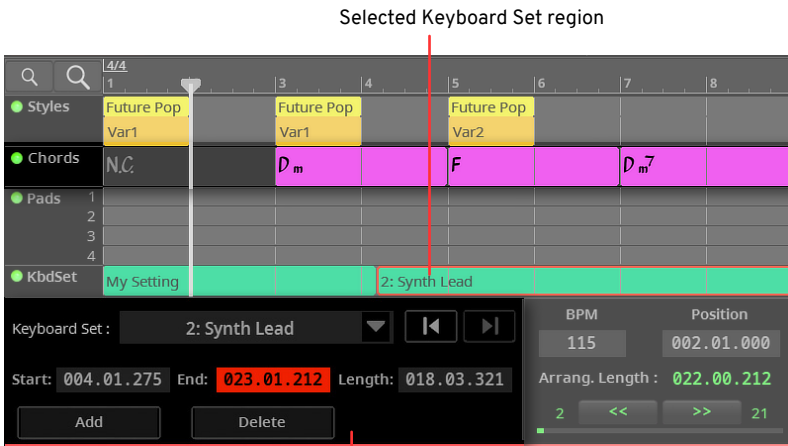
Editing a Keyboard Set region

You can replace the Keyboard Sets with one of the other four in the Arrangement (the one from the Library, and the four from the Style).

You can also add a new Keyboard Set change, or delete an existing one (see the instructions in the earlier pages). Please note that there will always be a Keyboard Set region in the timeline, so deleting a region will automatically extend the previous one.

NOTE: When editing a Keyboard Set region, only the Sounds, Effects and other 'orchestration' data are changed. The notes recorded in the track will not change. To edit them, export the Arrangement as a MIDI Song, and edit it in the Song Record/Edit mode.

1 Touch the Keyboard Set region you want to edit. The region's parameters will appear under the timeline.



Keyboard Set region's parameters

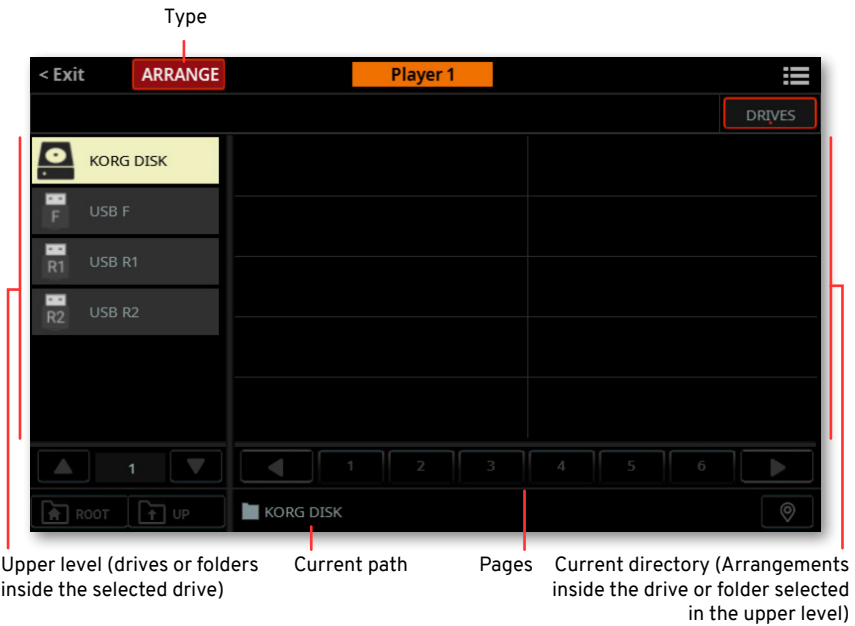
2 Touch the **Keyboard Set name** in the parameter section, and choose a different Keyboard Set. You can choose the ones contained in the Style, or the one chosen from the library when entering the Recording Studio.

3 If you want, use the **Start**, **End** and **Length** parameters to change the regions position and length.

Loading an Arrangement

■ Open the Load dialog

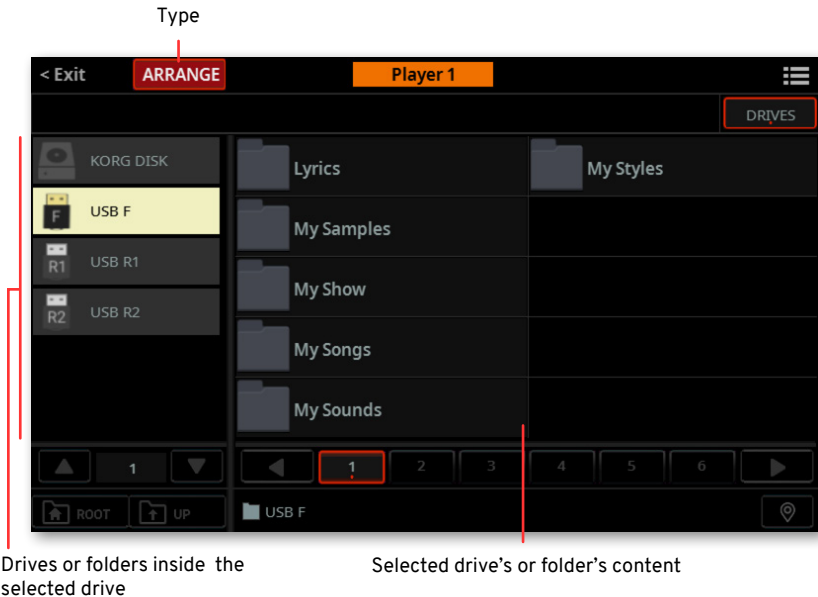
1 Choose the **Load ARG (Arrangement)** command from the **page menu** (☰). The **Load Arrangement** window will appear.



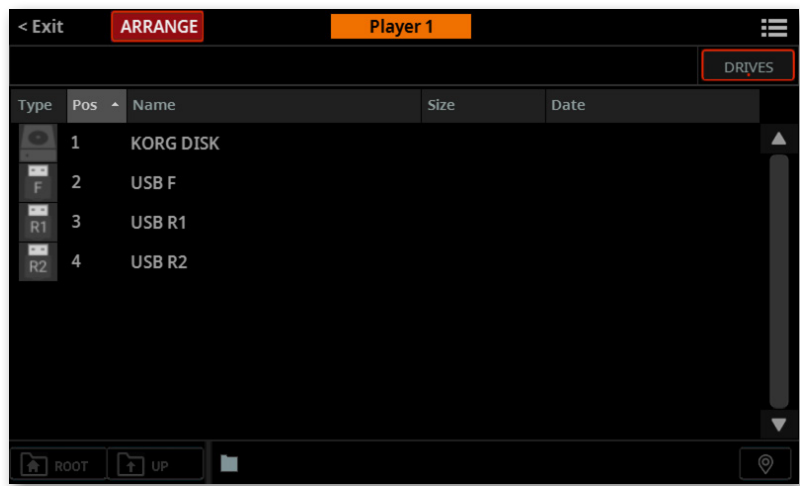
You can switch between **Tile View** and **List View** mode by using the **Show as List** option in the **page menu** (☰).

■ Choose an Arrangement

- 1 Choose one of the available **storage devices (drives)**.
 - > While in **Tile View** mode, touch the **Root** button to see the list of the drives, choose a **drive** in the left side of the display, then browse through the folders inside the **selected drive**.

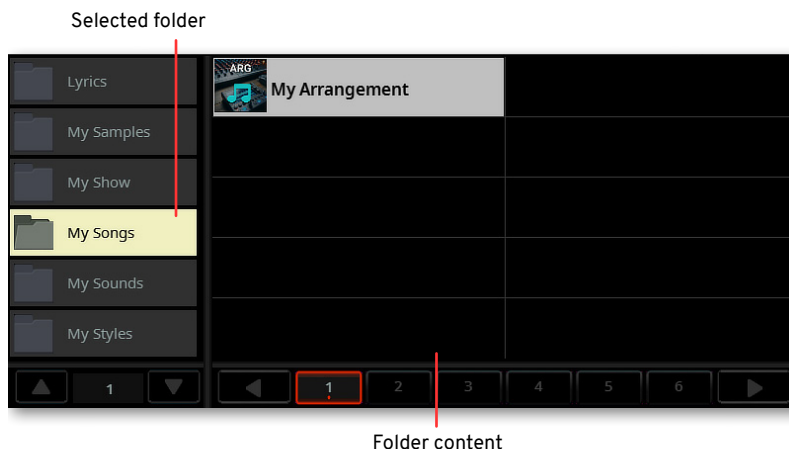


> While in **List View** mode, touch the **Root** button to see the list of the drives, choose a **drive** from the list, then browse through the folders inside the **selected drive**.



Drive	Meaning
KORG DISK	User storage space inside the internal drive
SD USER	User storage space inside the (optional) SD card
USB F	Storage device connected to the front USB HOST port
USB R1	Storage device connected to the rear USB HOST 1 port
USB R2	Storage device connected to the rear USB HOST 2 port

2 Select the **folder** containing the Arrangement. In **Tile View** mode, its content will appear in the right side of the window, and the containing folder will be moved to the left side.



3 Browse through the folders. If you want to close the current folder and go up one level, touch the **Up** button. If you want to go up to the main directory of the drive, touch the **Root** button.



4 In **Tile View** mode, the Arrangements contained in the selected folder will appear in the right side of the window.

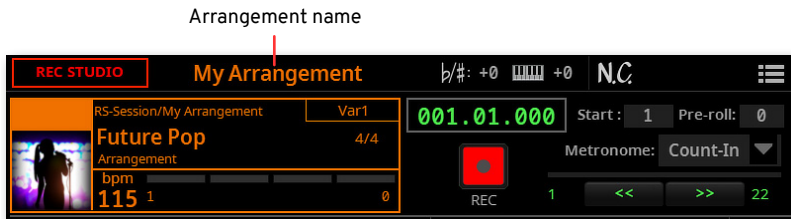


5 If you are lost while browsing though the data, you can return to the folder containing the selected element by touching the **Locate** (📍) button.

6 Touch the **name of the Arrangement** you want to choose.

7 Press the **EXIT** button to return to the **Recording Studio** pages.

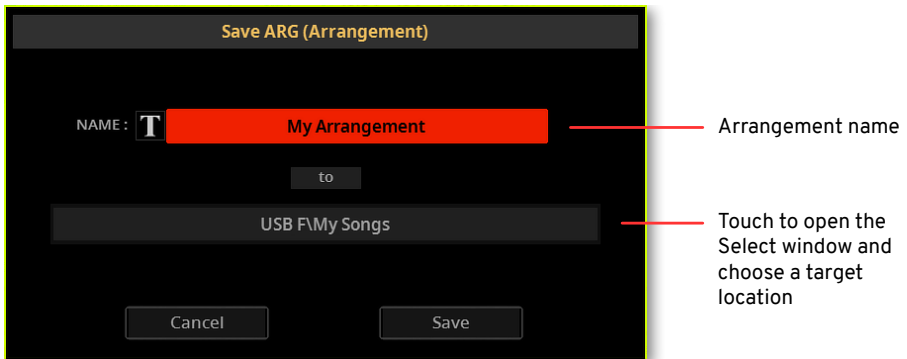
In the end, you will see the name of the selected Arrangement in the title bar.



Saving the Arrangements

■ Open the Save dialog

- > Choose the **Save ARG (Arrangement)** command from the **page menu** (☰). The **Save Arrangement** dialog will appear.



■ Save over the same Arrangement

- > If you want to overwrite the current Arrangement, just touch the **Save** button.

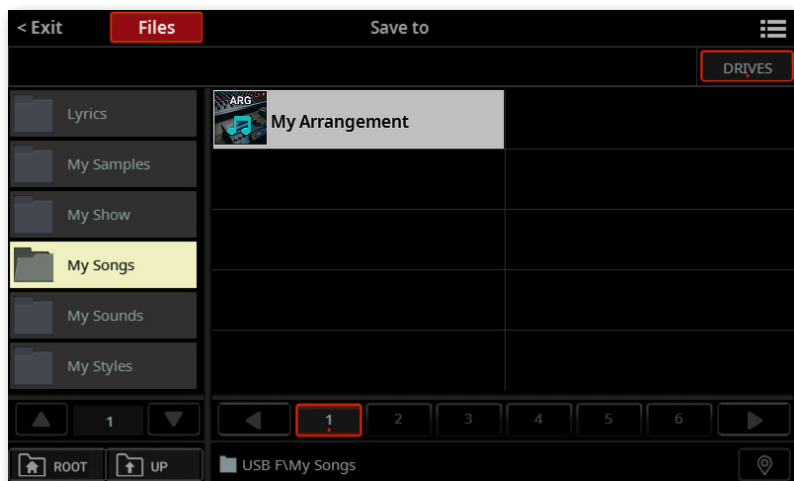
■ Rename the Arrangement

While in the **Save Arrangement** dialog, you may change the **name** of the Arrangement.

- 1 Touch the **Text Edit (T)** button to open the **virtual keyboard** and edit the name.
- 2 When done editing the name, confirm by touching the **OK** button under the virtual keyboard.

■ Save to a different place

1 If you want to save to a different folder, touch the **To (target path)** button in the **Save Arrangement** dialog, and open the **Save to** window.



You can switch between **Tile View** and **List View** mode by using the **Show as List** option in the **page menu** (☰).

2 Browse through the folders, and choose a directory where to save the Arrangement.

3 To save a new file, don't touch any of the Arrangements in the folder. On the contrary, if you want to overwrite one of the existing elements, touch it.

4 Press the **EXIT** button to close the **Save to** window and confirm your selection.

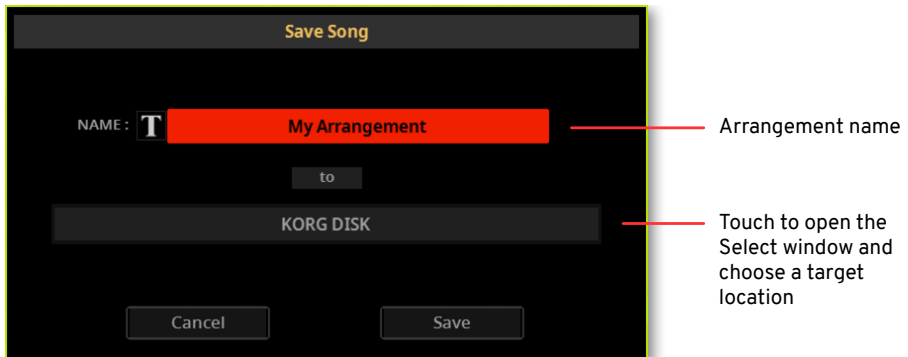
5 When back at the **Save Arrangement** dialog, confirm the Save operation by touching the **Save** button.

An Arrangement file will be created in the target storage device. The file will have an .arg extension.

Exporting the Arrangements as MIDI Files

■ Open the Export dialog

> Choose the **Export Arrangement as MIDI Song** command from the **page** menu (☰). The **Export Arrangement** dialog will appear.



■ Save over the same Arrangement

> If you want to overwrite the current MIDI File, just touch the **Save** button.

■ Rename the Arrangement

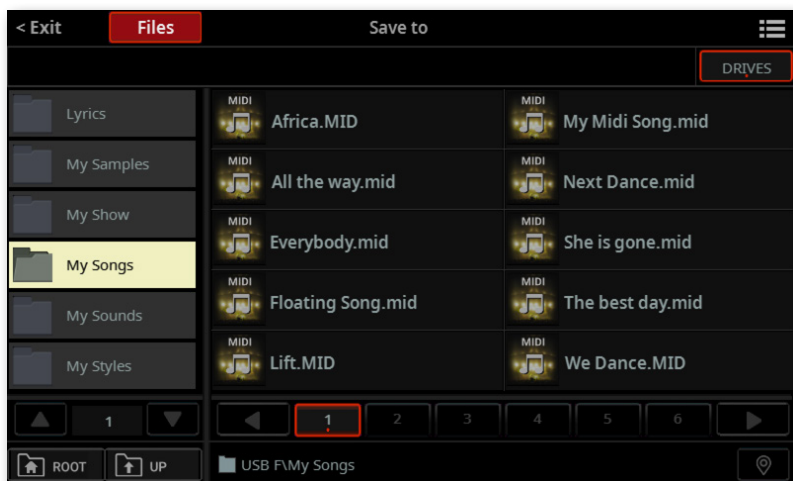
While in the **Export Arrangement** dialog, you may change the **name** of the Arrangement.

1 Touch the **Text Edit (T)** button to open the **virtual keyboard** and edit the name.

2 When done editing the name, confirm by touching the **OK** button under the virtual keyboard.

■ Save to a different place

1 If you want to save to a different folder, touch the **To (target path)** button in the **Export Arrangement** dialog, and open the **Save to** window.



You can switch between **Tile View** and **List View** mode by using the **Show as List** option in the **page menu** (☰).

2 Browse through the folders, and choose a directory where to save the MIDI File.

3 To save a new file, don't touch any of the MIDI Files in the folder. On the contrary, if you want to overwrite one of the existing elements, touch it.

4 Press the **EXIT** button to close the **Save to** window and confirm your selection.

5 When back at the **Export Arrangement** dialog, confirm the Export operation by touching the **Save** button.

A Standard MIDI File will be created in the target storage device. The file will have a .mid extension.

A setup measure, containing various Song initialization parameters, will be inserted at the beginning of the Song.

Recording and editing the MIDI Songs

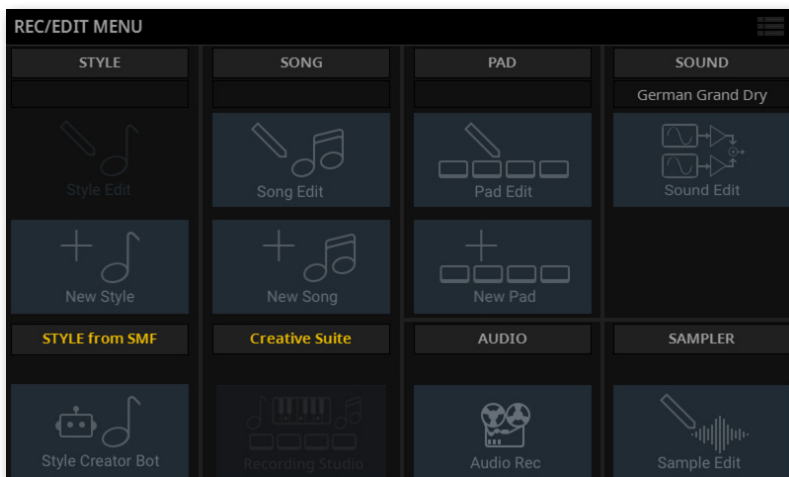
Redesigned Song Record/Edit mode

The **Song Record/Edit** mode has been entirely revamped, to make it more powerful and easier to use. The following pages will describe the new recording and editing environment.

Accessing the Song Record/Edit mode

You can record and edit MIDI Songs in **Song Record/Edit** mode. Pa5X includes a 16-track MIDI sequencer.

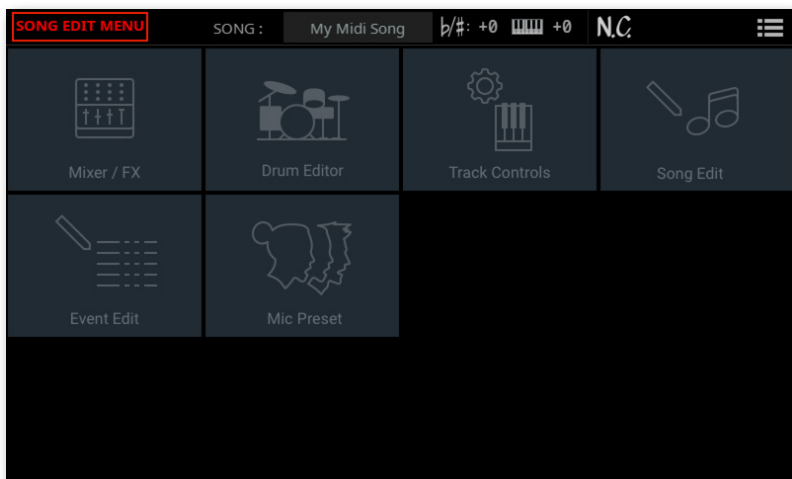
- 1 If you want to edit an existing **MIDI Song**, assign it to **Player 1**. Be sure this Player is selected.
- 2 Press the **REC/EDIT** button on the control panel to see the **Record/Edit** menu.



3 Touch the **Song Edit** button in the menu, and confirm if you agree to lose any unsaved changes. The **main page** of the **Song Record/Edit** mode will appear.



4 Press the **MENU** button on the control panel, and touch one of the buttons to choose the corresponding **edit section** of the **Song Edit** mode.



5 Press the **EXIT** button on the control panel to return to the **main page** of the **Song Record/Edit** mode.

Saving the MIDI Song

When finished editing the Song parameters, choose the **Save Song** command from the **page menu** () to save the Song. More details on saving Song at the end of this section.

Exiting the Song Record/Edit mode

To exit from the **Song Record/Edit** mode, press the **EXIT** or the **REC/EDIT** button again. In case there are unsaved data, a message will warn you.

Listening to the Song

Playing the Song from the control panel

■ Starting and stopping the Song

While in the **Song Record/Edit** mode, and no track is selected for recording, you can use the **Player 1** controls to listen to the Song.



■ Fast Rewind and Fast Forward

You can use the **<<FRW** and **FFW>>** buttons in the **CONTROL** section of the control panel to move one measure back or forward. Keep pressing these buttons to scroll the Song continuously. Release them when you have reached the desired position.



■ Jump to a Marker

You can select the Markers from the **STYLE ELEMENT / MARKER** buttons in the lower-left area of the control panel, or from the **Markers** page on the display.

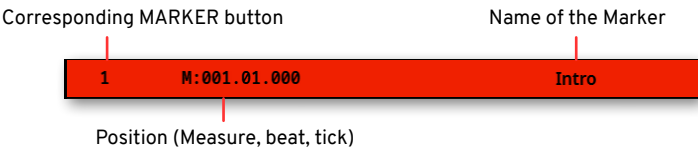
> Press the **MARKER** button corresponding to the desired Marker. If a button indicator is white, it means that it corresponds to a Marker. If it is dark, no Marker is associated with that button.



> Press the **MARKER** button on the right of the display to open the **Markers** page. Select the desired Marker from the list. Press the **EXIT** button to return to the **Song Record/Edit** pages.



Each of the Markers in the list corresponds to one of the **MARKER** buttons on the control panel.



Playing the Song from the display

The Song Record/Edit > Main page

The ideal page where to listen to the Song is the **Main page** of the **Song Record/Edit** mode. Please select the Song before accessing this mode.

Song information

Song name



Tracks

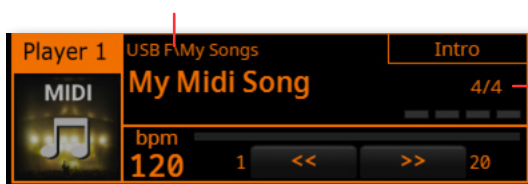
Track Select button

Getting information on the Song

The Song Information box lets you see the name, file path, meter, tempo of the Song in edit.

File path

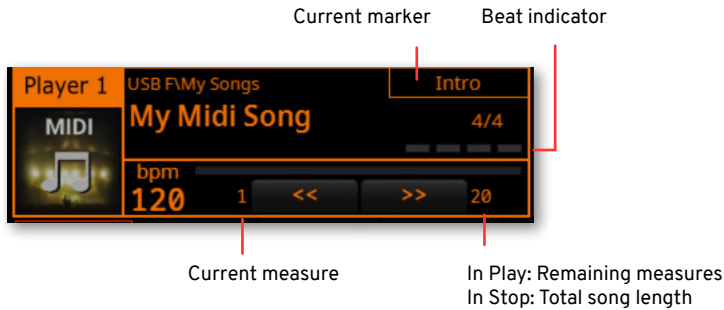
Meter (Time Signature)



Tempo

Moving through the Song

The Song Information box also shows the current position in the Song.

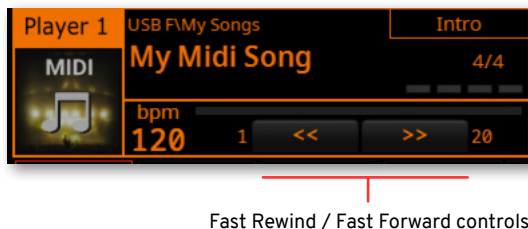


■ Move with the Markers

You can use the **MARKER** buttons on the control panel to jump to a marker position. As an alternative, you can open the **Markers** page by pressing the **MARKER** button. Press the **EXIT** button to return to the **Song Record/Edit** pages.

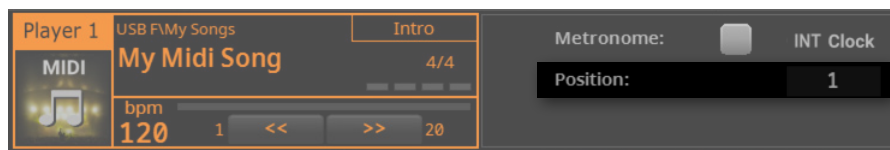
■ Move with the Fast Rewind and Fast Forward buttons

You can use the **<<FRW** and **FFW>>** buttons in the **CONTROL** section of the control panel, or the **Fast Rewind** and **Fast Forward** commands in the display to move to the previous or following measure. Keep touching these buttons to scroll the Song continuously. Release them when you have reached the desired position.



■ Move wit the Position parameter

You can also move the position from which the playback (or recording) will start by using the **Position** parameter.



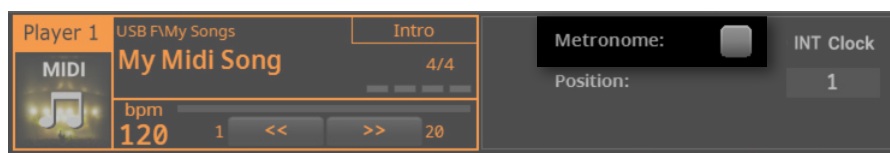
Listening to the metronome click

While trying an idea or recording, you can listen to the metronome click. To enable or disable it, you can:

- > Use the dedicated button in the **CONTROL** section on the control panel.

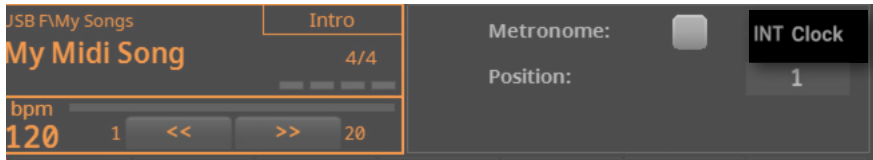


- > Select or deselect the **Metronome** checkbox.



The clock indicator

To be sure you have the full control on the Song commands, the **Clock** indicator shows you if the clock is internal or external.



Pa5X is usually synchronized to the internal clock. This means that you can start and stop the Song, and set the Tempo from the control panel or the display.

It can however be synchronized to an external device (via MIDI or USB), like another instrument or a computer software. In this case, all commands have to be sent from the external device.

The clock source can be set at the **Settings > Menu > MIDI > General Controls** page.

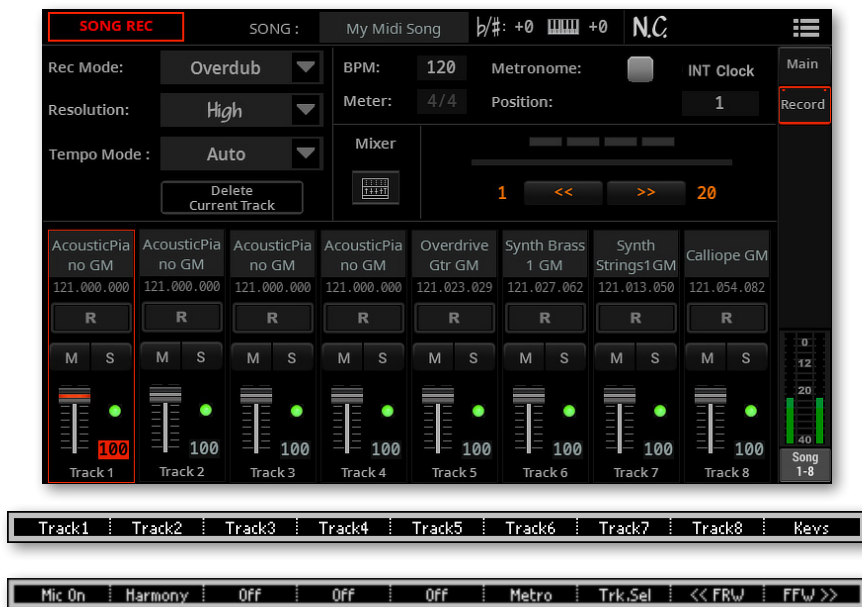
Soloing and muting the tracks

You can mute and solo each track, by using the dedicated **Mute** (**M**) and **Solo** (**S**) buttons.

To deactivate the Solo from all the tracks, you can also choose the **Disable Solo** command from the **page menu** (**≡**).

The Control section in Song Record/Edit mode

While in **Song Edit** mode, the **CONTROL** section gets a special assignment. The sliders control the tracks volume (as they do when playing a Song), while the buttons control functions dedicated for song recording.



#	Slider	controls the level of...	Button	controls...
1	Track1 (9)	MIDI Song Track 01 (09)	Mic On	Microphone input
2	Track2 (10)	MIDI Song Track 02 (10)	Harmony	Harmony voices
3	Track3 (11)	MIDI Song Track 03 (11)	Off	(deactivated)
4	Track4 (12)	MIDI Song Track 04 (12)	Off	(deactivated)
5	Track5 (13)	MIDI Song Track 05 (13)	Off	(deactivated)
6	Track6 (14)	MIDI Song Track 06 (14)	Metro	Metronome click
7	Track7 (15)	MIDI Song Track 07 (15)	Trk.Sel	Track Select (01-08 / 09-16)
8	Track8 (16)	MIDI Song Track 08 (16)	<<FRW	Fast Rewind
9	Keys	The Keyboard Sounds	FFW>>	Fast Forward

Recording a MIDI Song

Preparing to record

The Song Record/Edit > Record page

To record a MIDI Song made of up to 16 MIDI tracks, go to the **Song Record/Edit > Record** page.



When in this page, you could simply 'arm' a track by touching the corresponding **Record** (**R**) button, and start recording it. However, there are some additional settings that you might want to do.

Setting the recording mode

Recording can happen by overdubbing existing data, or overwriting them.



- > Use the **Rec Mode** pop-up menu to choose the **Overdub** or **Overwrite** recording mode.

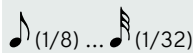
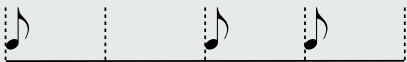
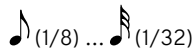
Recording Mode	Meaning
Overdub	The newly recorded events will be mixed to any existing events.
Overwrite	The newly recorded events will replace any existing events.

Setting the recording resolution

You can use automatic rhythm correction while recording.

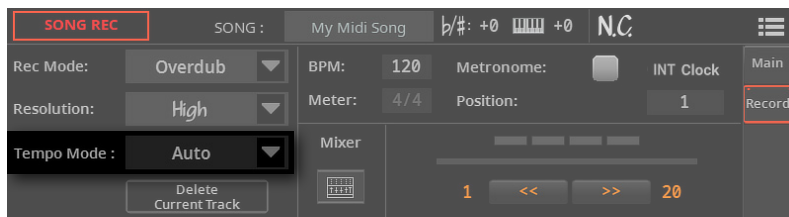


- > Set the recording **Resolution**.

Resolution	Meaning
High	No quantization applied
	Grid resolution, in musical values. For example, when you select 1/16, all notes are moved to the nearest 1/16 division. When you select 1/8, all notes are moved to the nearest 1/8 division.
	No quantization 
	1/16 
	1/8 
	The same as above, but with triplet note values.
Triplet	

Setting the Tempo mode and the Metronome click

You can set the Tempo mode, and turn on the metronome click.



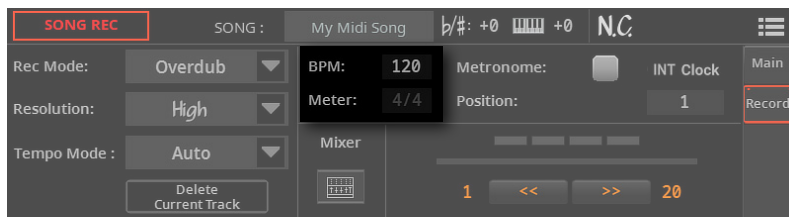
- Use the **Tempo Mode** pop-up menu to choose the way Tempo events will be recorded.

Tempo Mode	Meaning
Manual	Manual reading. The latest manual Tempo setting (made using the TEMPO buttons) is considered the current Tempo value. No Tempo change events will be recorded. This is very useful when you want to record the Song at a much slower speed than the actual Tempo.
Auto	Auto reading. The Sequencer plays back all the recorded Tempo events. No Tempo change events are recorded.
Record	All Tempo changes made during recording will be recorded to the Master track. Tempo is always recorded in overwrite mode (old data is replaced by the new data).

- Select the **Metronome** checkbox to turn on the metronome click.

Setting the Tempo and Meter value

You can set the Tempo value and the starting Meter of the Song.



- Use the **BPM (Beats Per Minute)** parameter to change the Tempo value.
- Use the **Meter** parameter to change the Meter (or Time Signature). Please note that you can only change this value before recording anything.

Choosing the Sounds

■ Choose the Sounds from the Main or Record page

You can choose the Sounds directly from the **Song Record/Edit > Main** or **Record** page.

- 1 Touch the track whose Sound you want to change.
- 2 Touch the name of the corresponding Sound to open the **Sound Select** window.



a. Select a track

b. Touch the name of the Sound you want to change

- 3 Choose a Sound, then press the **EXIT** button to return to the **Main** or **Record** page.
- 4 Repeat the same procedure with all the other tracks whose Sounds you want to change.

Making other adjustments in the Mixer

You can do other settings, like adjusting the EQ or the effects, by going to the **Mixer** pages.

- 1 Touch the **Mixer** () button to go to the **Song Record/Edit > Mixer/FX** section.
- 2 Do all the needed settings in the Mixer. The Mixer functions are detailed in the dedicated pages of the User Manual.
- 3 When done, press the **EXIT** button to return to the **Song Edit > Main** or **Record** page.

Recording

Record the Song in the **Song Record/Edit > Record** page.

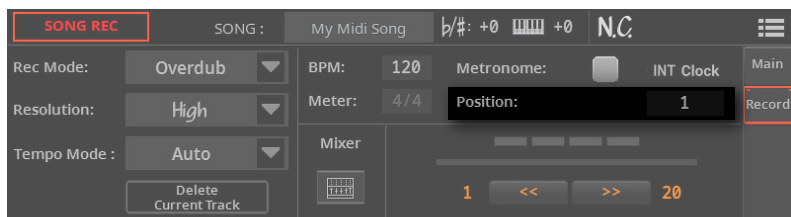
First-take recording

■ Choose the starting position

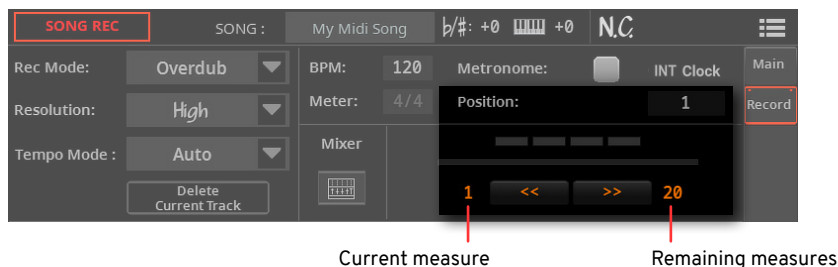
Move to the measure where you want to start recording. Please note you can only select one of the existing measures in the Song. If the Song is still empty, you can only choose the first measure.

You can move to the starting measure in one of the following ways:

> Use the **Position** parameter to choose the measure from which to start recording.



> Use the **Fast Rewind (<<)** and **Fast Forward (>>)** buttons in the display to go to the desired measure. The measures remaining in the Song will also be shown by the indicator on the right.



■ Select and arm the track to record

> Touch the track you want to record, and arm it by touching the corresponding **Record (R)** button. The button color will change to red (**R**).



a. Select a track

b. Touch the Record button and make it become red

■ Start recording

1 Press the **PLAY/STOP (▷□)** button to start recording.

A **1-measure precount** will play before the recording actually begins. When it begins, record freely.

2 When finished, press the **PLAY/STOP (▷□)** button to stop recording.

■ Record other tracks

> If you have done with the first track, select a different track, arm it, and go on recording the whole Song, one track at a time.

Recording again

You may want to record additional events, or repeat the recording of a previously recorded track. If so, repeat recording.

■ Prepare to record

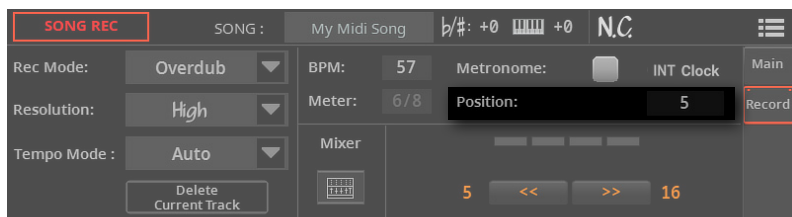
1 While in the **Song Record/Edit > Main** or **Record** page, touch the track to be recorded, and arm it by touching the corresponding **Record (R)** button. The button color will change to red (**R**).



a. Select a track

b. Touch the Record button and make it become red

2 Use the **Position** parameter to choose the measure from which to start recording.



3 While in the **Record** page, use the **Rec Mode** pop-up menu to choose the **Overdub** or **Overwrite** recording mode. Choose **Overdub** if you want to add events to the same track, **Overwrite** if you want to replace the data already recorded.

Overdub is useful, for example, when recording different percussive instruments in subsequent cycles.

■ Start recording

1 Press the **PLAY/STOP** (▷□) button to start recording.

A **1-measure precount** will play before the recording actually begins. When it begins, record freely.

2 When finished, press the **PLAY/STOP** (▷□) button to stop recording.

Recording other tracks

After having recorded a first track, choose a different track and repeat the operations described above.

Saving the Song

When done recording, you should save the Song.

- 1 Choose the Save Song command from the **page menu** () to open the **Save Song** dialog.
- 2 Choose a location where to save the Song.

For more details, please check the User Manual.

Showing Lyrics and Chords while editing a MIDI Song

While in the **Main** or **Record** page of the **Song Record/Edit** mode, you can press the **LYRICS** button to open the **Lyrics** page. The lyrics and chords shown in this page will guide you through the Song.

This page will also let you check the chords, that you can edit by going to the **Song Record/Edit > Menu > Event Edit** page, and selecting the **Chords** track.

Using the Markers while editing a MIDI Song

While in the **Main** or **Record** page of the **Song Record/Edit** mode, you can press the **MARKERS** button to open the **Markers** page. You can use the Markers to navigate through the Song. You can create and edit the Markers.

As an alternative, you can select the Markers from the **MARKER** buttons in the lower-left area of the control panel.

Editing a MIDI Song

Mixer/FX

The **Mixer/FX** section has remained unchanged since the previous operating system version.

Drum Editor

The **Drum Editor** section has remained unchanged since the previous operating system version.

Track Controls

The **Track Controls** section has remained unchanged since the previous operating system version.

Mic Preset

Since testing the Song against your singing is very important to check the harmonies, the **Mic Preset** section has been added to the **Song Record/Edit** mode. It is identical to the one in the **Home** mode.

NOTE: The changes are not saved with the Song. They are part of the general settings, and will be preserved when leaving the Song Record/Edit mode.

Editing the Song tracks

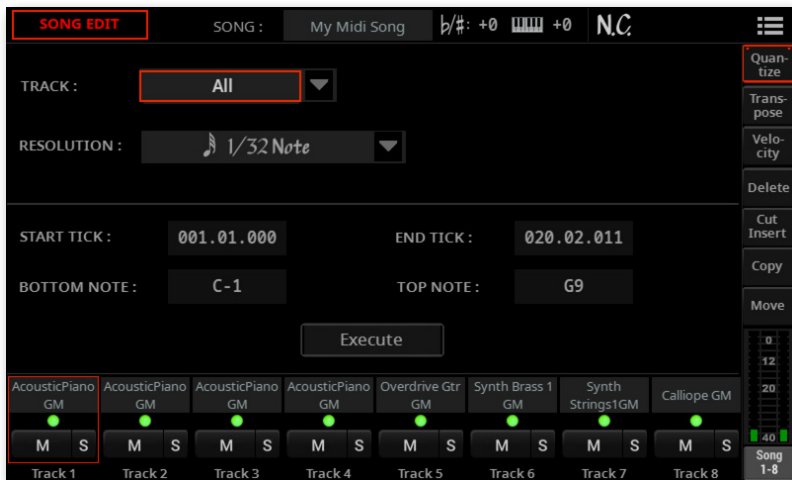
You can edit the Song data in the **Song Record/Edit > Menu > Song Edit** section.

After modifying something, press the **PLAY/STOP (▶/■)** button to listen to the edited Song. Use the transport controls to move through the Song.

Quantizing

The quantize function may be used to correct timing mistake after recording, or to give the pattern a 'groovy' feeling.

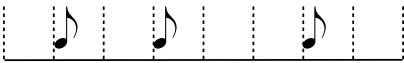
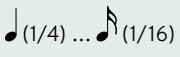
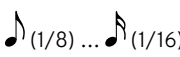
- 1 Go to the **Song Record/Edit > Menu > Song Edit > Quantize** page.



- 2 Select the **Track** to edit.

Track	Meaning
All	All tracks selected
Track 1 ... 16	Selected track

3 Use the **Resolution** pop-up menu to choose the quantize resolution.

Resolution	Meaning
	Grid resolution, in musical values. For example, when you select 1/16, all notes are moved to the nearest 1/16 division. When you select 1/8, all notes are moved to the nearest 1/8 division.
	No quantization 
	1/16 
	1/8 
 Triplet	The same as above, but with triplet note values.
 Swing (B-F)	The same as above, but with a swing rhythm. The letters are different swing degrees.

4 Use the **Start Tick** and **End Tick** parameters to set the beginning and ending of the phrase to be quantized.

If a phrase is four measures long, and you want to select it all, the Start will be positioned at 1.01.000, and the End at 5.01.000.

5 Use the **Bottom Note** and **Top Note** parameters to set key range to quantize.

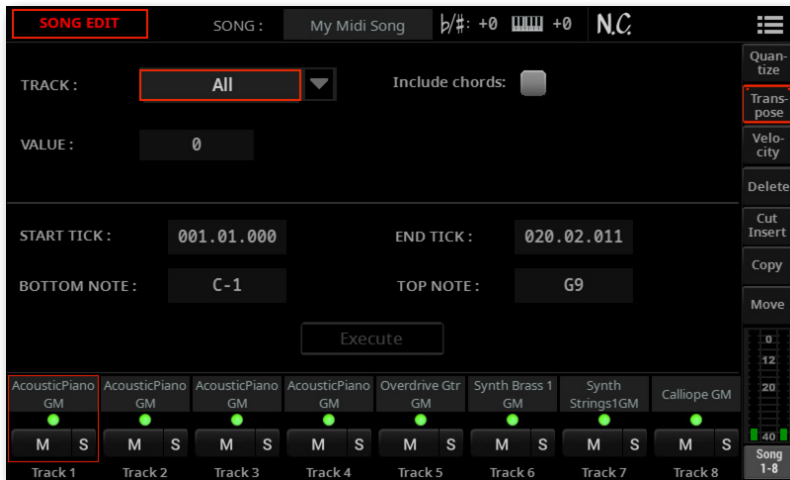
When a Drum or Percussion track is selected, you can choose the same note as the Bottom and Top parameters to select a single percussive instrument.

6 After having set the various parameters, touch **Execute**.

Transposing

The transpose function may be used to transpose the selected track(s).

- 1 Go to the **Song Record/Edit > Menu > Song Edit > Transpose** page.



- 2 Select the **Track** to edit.

Track	Meaning
All	All tracks selected, apart for the tracks set in Drum mode (like the Drum and Percussion tracks). Use the Include chords checkbox to include or exclude the Chords track.
Track 1 ... 16	Selected track.
Chords	Chords track.

- 3 Use the **Value** parameter to choose the transpose value.

Value	Meaning
-127 ... 127	Transpose value (in semitones)

- 4 Use the **Start Tick** and **End Tick** parameters to set the beginning and ending of the phrase to be transposed.

As an example, if a phrase is four measures long, and you want to select it entirely, the Start will have to be positioned at 1.01.000, and the End at 5.01.000.

- 5 Use the **Bottom Note** and **Top Note** parameters to set key range to transpose.

If you select the same note as the Bottom and Top parameters, you can select a single percussive instrument in a Drum Kit. Transposing will assign the part to a different instrument.

Selective transpose can also be used to avoid transposing RX Noises (by transposing only notes under C7).

6 Select the **Include chords** checkbox if you want to also transpose the Chord events, for example those recorded in a Quick Song.

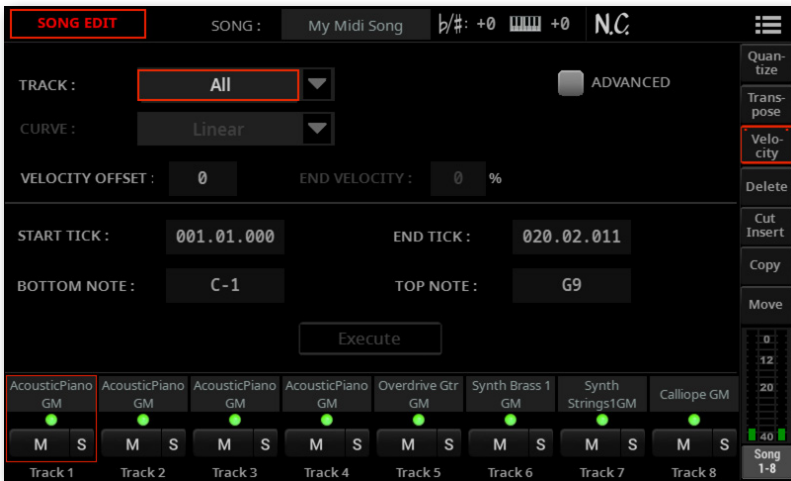
7 After having set the various parameters, touch **Execute**.

Editing Velocity data

You can change the velocity (dynamics) value of notes in the selected track(s).

Also, a fade-out may result in the level 'jumping' up next to the zero, since a higher-level layer may be selected by low velocity values.

1 Go to the **Song Record/Edit > Menu > Song Edit > Velocity** page.



2 Select the **Track** to edit.

Track	Meaning
All	All tracks selected. The velocity for all notes will be changed.
Track 1 ... 16	Selected track.

3 Use the **Velocity Value** parameter to choose the velocity change value.

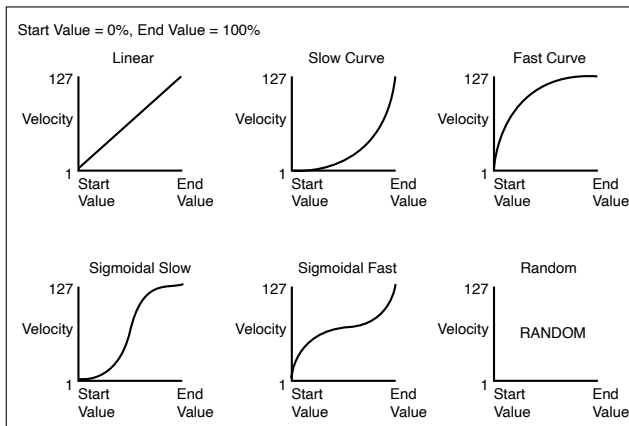
Value	Meaning
-127 ... 127	Velocity change value (in MIDI value)

4 Use the **Velocity Offset** parameter to increase or decrease the velocity value of the notes in the selected range.

Velocity Offset	Meaning
-127 ... 127	Value subtracted or added to the velocity value in the selected range. In any case, 0 and 127 are the minimum and maximum velocity value for a note.

5 If you want to use the advanced parameters, allowing you to select a velocity curve and create fade-ins or fade-outs, select the **Advanced** checkbox. When this parameter is selected, the **Curve**, **Start Velocity** and **End Velocity** parameters become accessible. The **Velocity Offset** parameter disappears.

> Use the **Curve** parameter to select one of the six curves, and specify how the velocity will change over time.



> Use the **Start Velocity** and **End Velocity** to change the velocity value at the starting and ending of the selected curve.

Start/End Velocity	Meaning
0 ... 100%	Velocity change in percentage

6 Use the **Start Tick** and **End Tick** parameters to set the beginning and ending of the phrase to be edited.

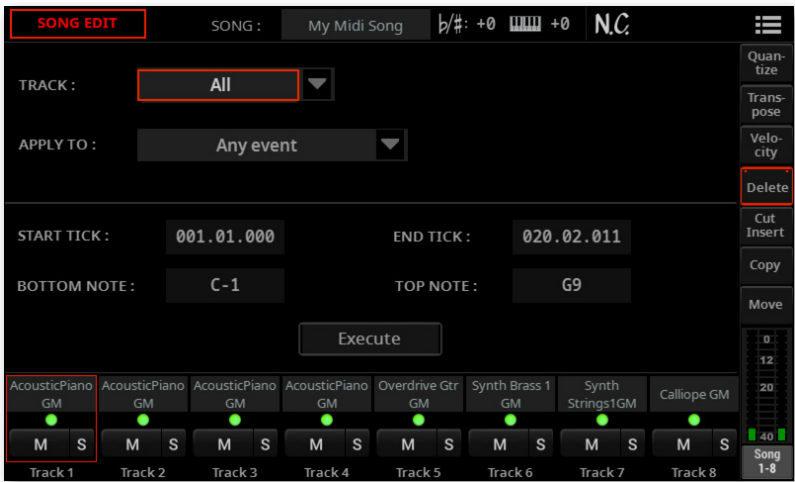
As an example, if a phrase is four measures long, and you want to select it entirely, the Start will have to be positioned at 1.01.000, and the End at 5.01.000.

- 7 Use the **Bottom Note** and **Top Note** parameters to set key range to change.
- If you select the same note as the Bottom and Top parameters, you can select a single percussive instrument in a Drum Kit. Selecting a range can also be used to only edit RX Noises (from C7) or ordinary notes (under C7).
- 8 After having set the various parameters, touch **Execute**.

Deleting data from measures

The **Delete** page is where you delete MIDI events out of the Song. This function does not remove measures from the Song. To remove whole measures, use the Cut function instead.

- 1 Go to the **Song Record/Edit > Menu > Song Edit > Delete** page.



- 2 Select the **Track** to edit.

Track	Meaning
All	All tracks selected
Track 1 ... 16	Selected track
Master	Master track. This is where the Tempo, Scale and Effect events are recorded.

3 Use the **Apply to** pop-up menu to choose the type of event to delete.

Event	Meaning
Any Event	All events. The measures are not removed from the Song.
Notes & RX Noises	All notes in the selected range.
Dupl. Notes & RX Noises	All duplicate notes. When two notes with the same pitch are encountered on the same tick, the one with the lowest velocity is deleted.
After Touch (Mono/Poly)	After Touch events.
Pitch Bend	Pitch Bend events.
Program Change	Program Change events, excluding the bundled Control Change #00 (Bank Select MSB) and #32 (Bank Select LSB).
Any Control Change	All Control Change events, for example Bank Select, Modulation, Damper, Soft Pedal...
CC00/32 ... CC127	Single Control Change events. Double Control Change numbers (like 00/32) are MSB/LSB bundles.

4 Use the **Start Tick** and **End Tick** parameters to set the beginning and ending of the phrase to be deleted.

As an example, if a phrase is four measures long, and you want to select it entirely, the Start will have to be positioned at 1.01.000, and the End at 5.01.000.

5 Use the **Bottom Note** and **Top Note** parameters to set key range to delete.

These parameters are available only when notes can be selected. If you select the same note as the Bottom and Top parameters, you can select a single percussive instrument in a Drum Kit. Selecting a range can also be used to only edit RX Noises (from C7) or ordinary notes (under C7).

6 After having set the various parameters, touch **Execute**.

Cutting or inserting measures

You can delete a selected measure (or a series of measures), or insert new ones in the middle of the Song.

- 1 Go to the **Song Record/Edit > Menu > Song Edit > Cut/Insert** page.



- 2 Use the **Start** parameter to select the first measure to be cut or inserted.
- 3 Use the **Length** parameter to choose the number of measures to be cut or inserted.
- 4 Use the **Meter** parameter to set the meter (time signature) of the measure to be inserted.
- 5 After having set the various parameters, touch **Execute**.

Copying data

You can copy tracks or phrases.

- 1 Go to the **Song Record/Edit > Menu > Song Edit > Copy** page.



- 2 Use the **Mode** parameter to choose a Copy mode.

Copy Mode	Meaning
Merge	Copied data are merged with the data at the target position.
Overwrite	Copied data replace all data at the target position.

- 3 Use the **From Track** parameter to choose the source track, and the **To Track** parameter to choose the target.

Track	Meaning
All	All tracks will be copied. The target track cannot be selected.
Track 1 ... 16	Selected track.

- 4 Use the **Start Measure** and **End Measure** parameters to set the beginning and ending of the phrase to be copied.
- 5 Use the **To Measure** parameter to choose the first of the target measures.
- 6 Use the **Repeat Times** parameter to choose the number of times the copy must be repeated consecutively.
- 7 After having set the various parameters, touch **Execute**.

Moving data

You can shift a track forward or backward by just a few ticks or whole measures.

- 1 Go to the **Song Record/Edit > Menu > Song Edit > Move** page.



- 2 Use the **Track** parameter to choose the track to edit.

Track	Meaning
All	All tracks will be moved.
Track 1 ... 16	Selected track.

- 3 Use the **Start Tick** and **End Tick** parameters to set the beginning and ending of the phrase to be moved.

As an example, if a phrase is four measures long, and you want to select it entirely, the Start will have to be positioned at 1.01.000, and the End at 5.01.000.

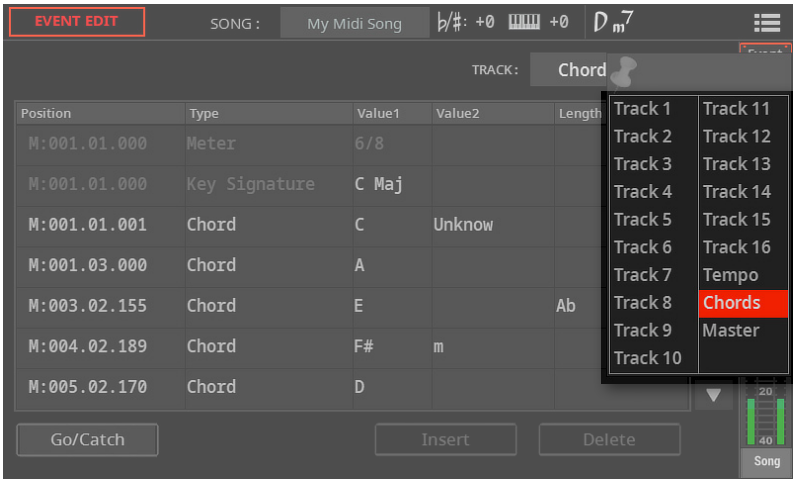
- 4 Use the **To Tick** parameter to choose the point where the data will be moved.
- 5 After having set the various parameters, touch **Execute**.

Event Edit

The Chords track

The **Chords** track has been added to the Songs. It contains Chord and Key Signature events.

Compared to the previous operating system version, Key Signature events have been moved here from the **Tempo** track.



These are now the tracks and their content:

Track Type	Description
Track 1-16	Tracks containing the notes performed by each instrument.
Tempo	Special track containing the initial Tempo and Meter events.
Chords	Special track containing the Chords, Meter and Key Signature events.
Master	Special track containing Volume and Tuning events.

New Shortcuts

Shift key modifier

Shift +	Functions
Recording Studio	
Dial, Up/Down	With the Position parameter selected, move back and forward in the timeline by finer steps of a tick.
Region in the timeline	Move the position pointer to the beginning of the region.

Other key modifiers

Modifier +	Functions
Recording Studio	
Menu + Dial, Up/Down	Scroll the timeline.
Settings + Dial, Up/Down	Zoom the timeline in or out.

New Musical Resources

Forty-six Styles have been added.

Pop

Yes Or No
Add Azizam
Slow Feather
Bouquet Beat
Italian Espresso
Lucky Babe
Give Me A Kiss
Mono Lisa
Drama Stop
No Talking Pop
Priceless Groove
I Love You Pop
Lifetime Pop
Belong Me Groove

Classic Pop

Crazy Classic Pop
World Rule Pop
Kiss Me
Times For Signs
Taboo Classic Pop

Ballad

The Way To 6/8
Ballad Of Sanity
Jam Ballad

Dance

Heartbreakers Place
Heartbeat
Bloom Dance
Electric Style
Dance Of Adore
Ilo Groove
Mornings Dance
Silent Dancer
Bad Liz Style
Wakeup Dance
Womans Dancer

Rock

Brunos A P T
Rock Chuck
Lets Try

Country

Country Bar Song
Cowboys Songs

Jazz

Chris B. Jazz
Nu Jive
Nu Swing
Ray Woman

Funk & Blues

Losing Funk
Love Something
Good Telling Funk
The Funky Way

Improvements and bug fixes in OS 1.4.0

Improvements

User Interface

General User Interface improvements.

Some Edit menus and page menus have been reorganized, to include the new features.

Some dialogs have been redesigned to host the new features.

Chord Memory in Style Record/Edit mode

The **MEMORY** button (set in **Chord** mode) now also works in the **Style Record/Edit** mode.

Bug fixes

Manual Bass sometimes playing in the wrong octave

The Manual Bass now plays in a more natural way.

Note Transposition Table not correctly applied to Chord changes

On some Styles, the Note Transposition Table (NTT) was not correctly applied to Chord changes.

Lower Sound lock not preserved

In some conditions, the Lower Sound lock was not considered.

Scale applied to the Drum Sounds

Drum Sounds could mistakenly be affected by the Scale applied to the other tracks.

Ignored Tempo events

In some Styles, the Tempo events were ignored on playback. Only the events on the first tick were considered.

Wrong beat count

The indicators showing the beat count was not updated correctly with Style Elements having different Time Signatures.

MIDI synchronization issues

If the instrument was not correctly synchronized with external MIDI devices, data transfer overload could happen on the MIDI interface.

Wrong transposition on the MIDI IN

Notes arriving on the MIDI IN to the Chord track were not transposed correctly.

Muted tracks on MIDI Files

Some MIDI Files containing particular control messages could unexpectedly mute one or more tracks, until the instrument was restarted.

External tracks Program Changes

In some cases, the Program Changes of the External tracks were reset to the GM ones.

SongBook

Some special characters were not displayed correctly in the Genre field.

Wrong panning on the Audio Outputs

The Panning on tracks sent to the separate Audio Outputs was not working properly.

Improvements and bug fixes in OS 1.4.1

Improvements

Style Creator Bot

Improved compatibility with the MIDI files.

Optimized creation of the associated Keyboard Sets.

Lyrics and MP3 Songs

Synchronization between MP3 files and lyrics has been improved.

Chord detection

Chord detection at the start of a Style is now more accurate.

Automatic power off after a Factory Restore

After completing a Factory Restore operation, the instrument will now automatically turn off. Turn it on again.

Bug fixes

Fill breaking sustained notes

Sustained notes could be interrupted when pressing the **FILL** button at a specific position within the pattern.

Bassline transposition

The bassline could play in an incorrect way when changing chord slightly too late.

Lower Sound left turned off after an Intro

The Lower Sound could remain off at the end of an Intro, even if it was on in the Keyboard Set.

Ensemble reprogrammed while playing

The **Ensemble** function could be working incorrectly if you were reprogramming it while some notes were still playing.

Assignable Switch set to Quarter Tone starting the Style

If the **Synchro Start** function was enabled, using an Assignable Switch with the **Quarter Tone** function assigned could start the Style.

Reset/Tap Tempo stopping the Style and Pads

Pressing the **RESET/TAP** button could stop the Style and the Pads.

SongBook and Style Element indicators

When switching from a Song-based SongBook Entry to Style-based one, the LED indicators in the **STYLE ELEMENTS** section on the control panel could show an incorrect selection.

Expression value on the Manual Bass

Manual Bass could receive an incorrect Expression value from the expression pedal, resulting in an undesired volume level.

Auto-saving Global Mic Preset selection

The selected **Global Mic Preset** (that you can choose in the **Settings > Menu > Mic Setup > Setup** page) was not automatically saved.

Muted Song tracks deleted when saving the Song

Song tracks in mute were sometimes deleted when saving the Song.

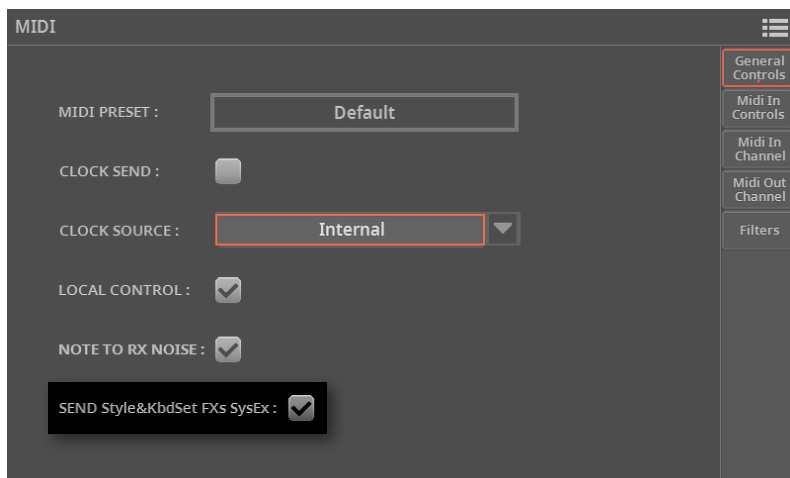
Improvements and bug fixes in OS 1.4.2

Improvements

FX SysEx filter on the MIDI OUT

When selecting a Style or Keyboard Set, Pa5X may also send out System Exclusive data related to the FXs. This could cause malfunctioning in the connected device.

To mitigate this issue, we've implemented an additional SysEx filter to reduce MIDI traffic. When you deselect the **Send Style&KbdSet FXs SysEx** checkbox (in the **Settings > Menu > MIDI > General Controls** page), these data are not transmitted.



Bug fixes

Tempo controls blocked by overlapping windows

In some situations, for example when the Metronome or Search window was open, you could no longer use to the Tempo (+/-) buttons. This issue has been resolved.

Transition between Styles

When switching between Styles, you could occasionally hear the volume increase for a brief moment in certain tracks. The transition has been improved and is now smoother.

Selection of a very short Fill

It was not possible to select a Fill with a length of $\frac{1}{4}$ if not at the very first beat. The behavior has now been improved.

Styles with multiple time signatures

When playing Styles with multiple time signatures (meters), the time signatures were not updated correctly, which could lead to an erroneous behavior of the Style.

Time estimate of long MP3 files

Depending on the file, the length of long MP3 files was sometimes not calculated accurately. This time estimate has been improved, ensuring that the Songs are no longer interrupted during playback.

Matrix Pads

Selecting a Pad in the Matrix while it was running could cause incorrect behavior. This has been improved.

Expression value on tracks with the pedal disabled

When disabling the Expression pedal on a track (in the Home > Menu > Keyboard/Ensemble > Joystick/Pedal page), the Expression value was not reset to the maximum value (CC#11=127). Instead, the previous value was retained. This issue has been resolved.

Blocked controller messages

Some controllers (for example CC#110) were not sent out correctly. This prevented their use, for example, from a MIDI Song.

Deleting SongBook Entries

Deleting a SongBook Entry could sometimes cause deletion of other Entries as well. This issue has been solved.

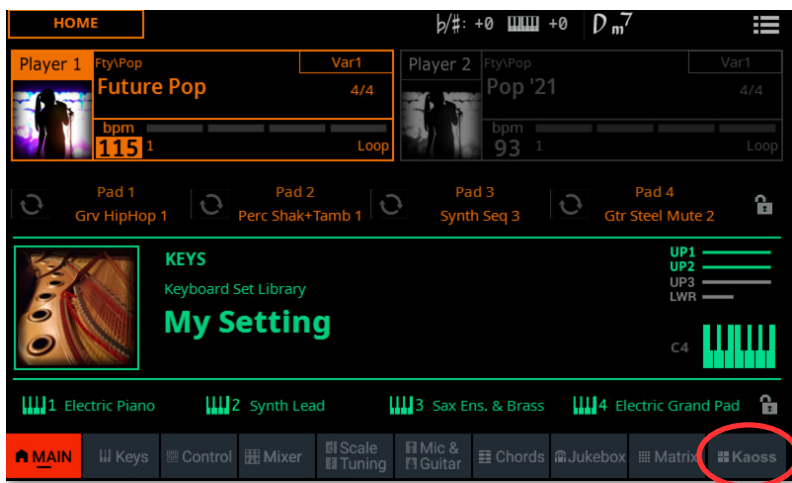
Pa5X Operating System Version 1.3

New features

Home page

Modified Home page

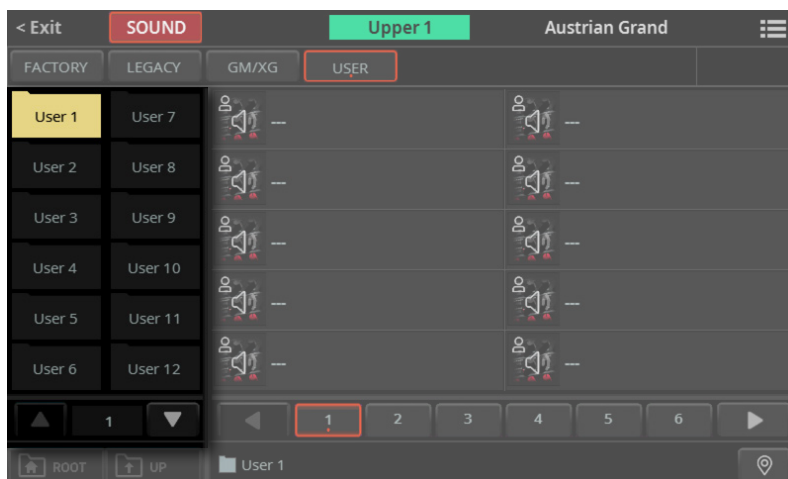
The **Home** page now includes the **Kaoss** tab. Touch it to see the **Kaoss** pane.



User Sounds and Drum Kits

Increased User Sound and Drum Kit locations

The locations where to load or save User Sounds and Drum Kits have been doubled. There are now twelve User Sound and six User Drum Kit categories.



The Matrix

Choosing a Matrix Preset from the menu

While there are only four **Matrix Preset** buttons on the control panel, you can have more **Matrix Presets**. A Matrix Preset can assign to the **Matrix Pads** different Pads, Mute commands, Chord Sequences or songs from a Set List.

- 1 Go to the **Home > Matrix** pane.



- 2 Use the **Matrix Preset** pop-up menu to choose one of the available **Matrix Presets**.

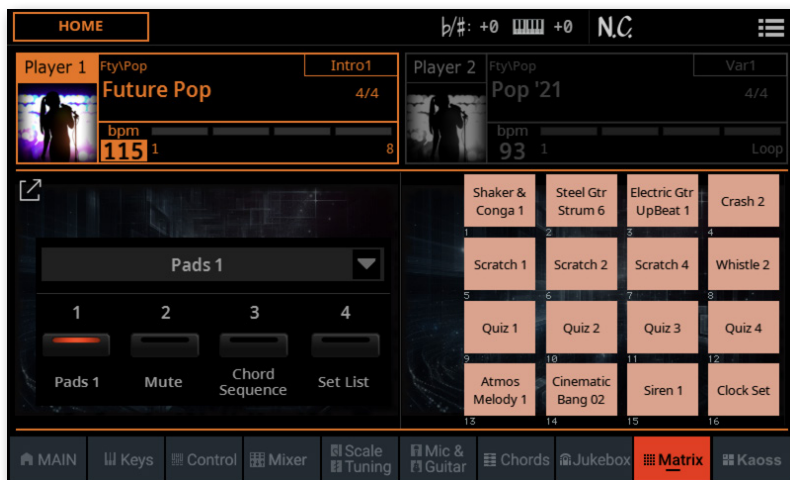
The chosen items are assigned to the **Matrix Pads**. The following table shows the available sets.

Matrix Preset	Description
Pad 1...3	Sets of Pads
Mute	Set of Track Mutes
Chord Sequence	Set of Chord Sequences
Set List	Songs from the currently selected Set List

Assigning a Matrix Preset to a Matrix Preset button

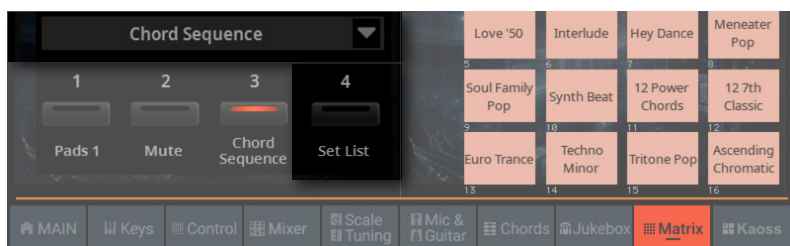
You can assign any of the Matrix Presets to any of the **Matrix Preset** buttons at the bottom of the **MATRIX** section.

- 1 Go to the **Home > Matrix** pane.



- 2 Use the **Matrix Preset** pop-up menu to choose one of the available **Matrix Presets**.

- 3 Keep one of the **Matrix Preset** buttons pressed, until the name of the assigned preset appears under the button in the **Matrix** pane. You can press either a physical button on the control panel, or a soft button on the display.



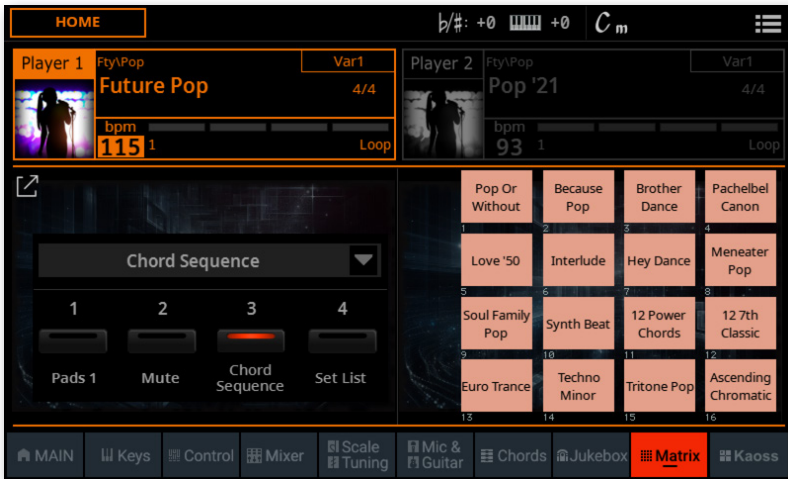
Triggering Chord Sequences with the Matrix

When a Chord Sequence preset is assigned to the Matrix (see [Assigning a Matrix Preset to a Matrix Preset button](#) above), you can select Chord Sequences with the **Matrix Pads**. You can assign short, unrelated sequences, or play entire songs from the Matrix.

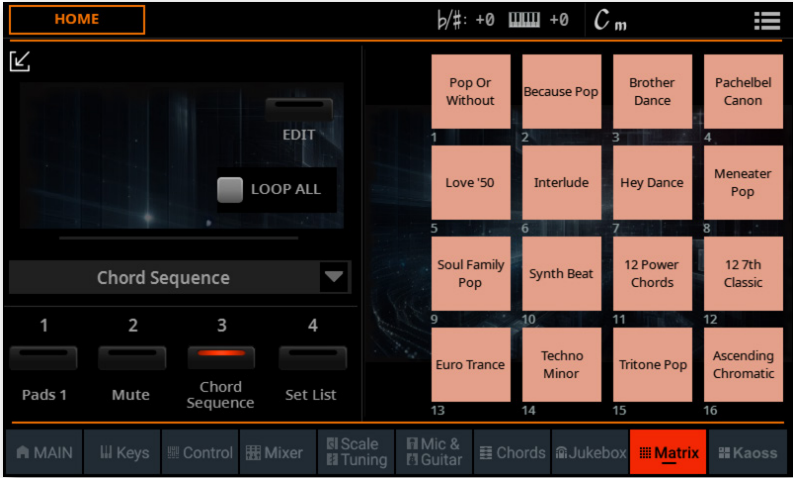
Chord Sequences assigned to the Matrix don't change when choosing different Styles or SongBook Entries. This allows for having a set of Chord Sequences that are always available, for example for recurring breaks or jingles.

■ Set the Matrix pane for playing the Chord Sequences

- 1 Go to the **Home > Matrix** pane.
- 2 Choose the **Chord Sequence Matrix Preset**.



3 To see all the options, touch the **Expand** (↗) button to enlarge the pane.



4 Use the **Loop All** checkbox to make a single Chord Sequence loop, or let all the Chord Sequences in the list be played back one after the other.

Loop All	Meaning
On	All the Chord Sequences in the list will play one after the other. When the last one has ended, the first one in the list will start playing again. The one that is playing is shown with a steady light, the pre-selected one is flashing.
Off	The selected Chord Sequence will continue to loop, until stopped, or another one is selected.

5 When you have done setting the Chord Sequence playback, you can make the pane go back to the reduced size by touching the **Collapse** (↖) button.

■ **Assign Chord Sequences to the Matrix**

To assign Chord Sequences to the **Matrix Pads**, please see [Programming the Matrix](#) in the User Manual.

■ Play and stop the Chord Sequences

- > To start the Chord Sequence(s), press the corresponding **Matrix Pad**, and start the Player.

The **Matrix Pad** that is playing is shown with a steady light. The one that is pre-selected will continue flashing before entering.

- > To stop the Chord Sequence, press the corresponding **Matrix Pad** again, or stop the Player.

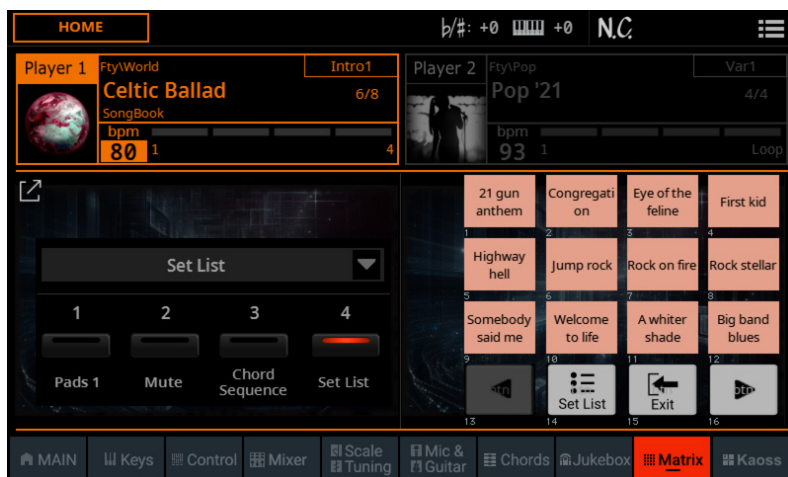
Choosing SongBook's Set List songs with the Matrix

When a Set List set is assigned to the Matrix (see [Assigning a Matrix Preset to a Matrix Preset button](#) above), you can choose the songs of the currently selected Set List with the **Matrix Pads**.

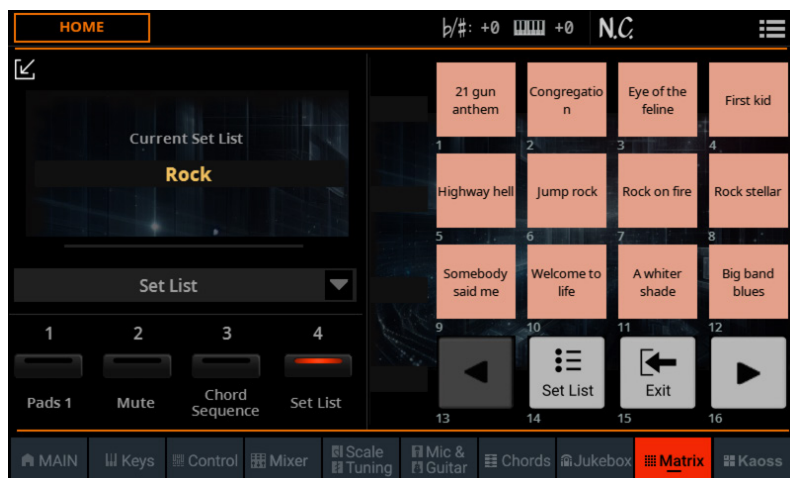
The Set List songs can only be shown if the Set List is in **Tile View** mode. If they don't appear, go to the **Set List** page (see below) and choose the **Preferences** command from the **page menu** (☰) to choose the correct view mode.

■ Set the Matrix pane for choosing the Set List songs

- 1 Go to the **Home > Matrix** pane.
- 2 Choose the **Set List** Matrix Preset.



- 3 To see all the options, touch the **Expand** (🔍) button to enlarge the pane.



- 4 You can make the pane go back to the reduced size by touching the **Collapse** (🔍) button.

■ Use the Matrix to jump to the previous or next Set List page

In case there are more than twelve songs in the selected Set List, you can browse through the pages with the **Matrix Pads**.

- Use **Matrix Pad #13 (<)** to jump to the previous Set List page.
- Use **Matrix Pad #16 (>)** to jump to the next Set List page.

■ Choose a different Set List and set the Set List Preferences

1 Press **Matrix Pad #14** (corresponding to the **Set List** command) to go to the **SongBook > Set List** page.

2 While in the **Set List** page, you can select a different Set List. You can edit the list. You can change the display preferences. Please check the dedicated section in the User Manual for more information.

3 After having chosen a different Set List, you can return to the **Home > Matrix** page by pressing the **EXIT** button, or the **Matrix Pad #15** (corresponding to the **Exit** command).

The KAOSS page

What are the KAOSS effects?

KAOSS is a KORG technology, allowing for live generation of MIDI events and simultaneous control of multiple parameters via a control surface. In Pa5X, it lets you transform the music flow live.

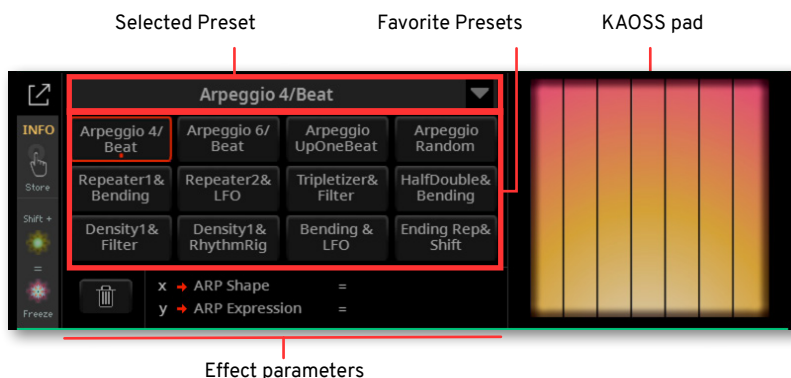
For example, you can smoothly morph between Variations and Drum Kit types, to create an evolving and always renewed arrangement. You can let KAOSS help you improvise on prerecorded music, by reshaping rhythm, pitch inversion or changing note density. You can make the mix sparser, to leave a solo player be heard better or let you interact with your audience.

There are also DJ-style note-crunching effects, for more radical changes. And you can use the KAOSS as a sophisticated arpeggiator, or an old tape delay machine.

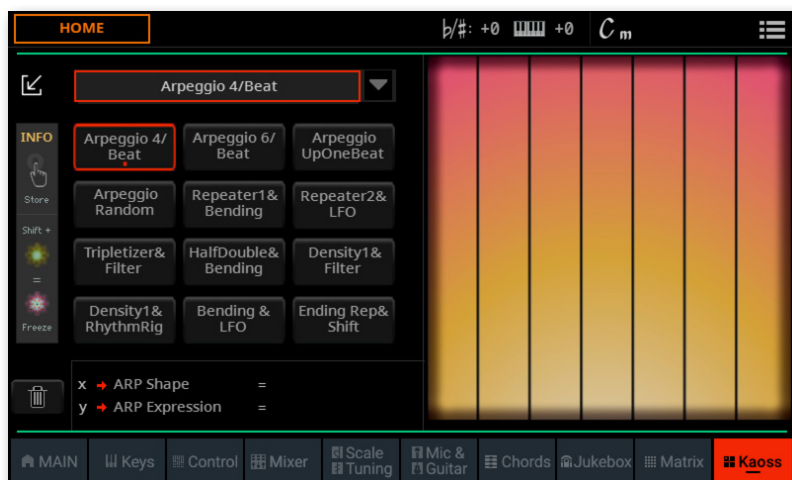
You can choose between several preset KAOSS effects. You will then control the effects' parameters on an XY surface, called the KAOSS pad.

Going to the KAOSS pane

You can go to the **KAOSS** pane by touching the **KAOSS** tab in the **main page** of the **Home** mode.



To increase the size of the pad, you can touch the **Expand** (↗) button to enlarge the pane.



You can make the pane go back to the reduced size by touching the **Collapse** (↖) button.

When you leave this pane, the KAOSS engine will automatically stop.

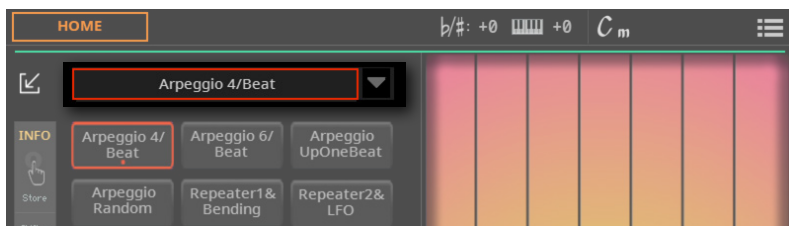
Choosing the KAOSS Presets

Choosing a KAOSS Preset or Favorite Presets

A series or KAOSS Presets is already supplied with the instrument.

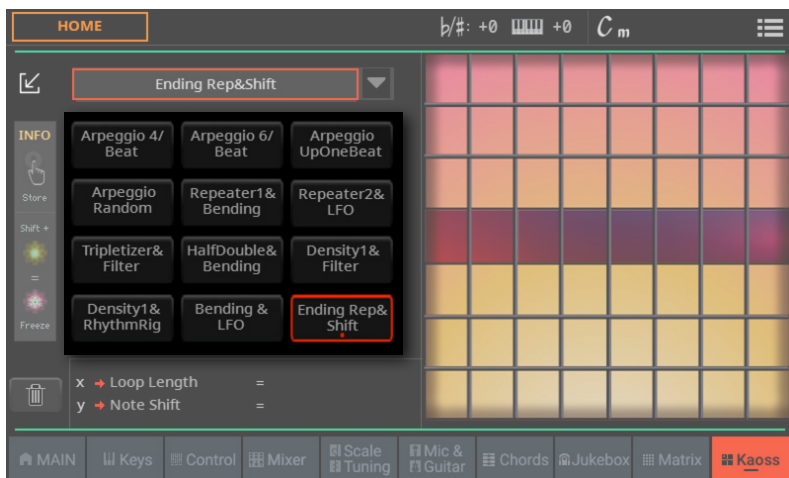
■ Choose a KAOSS Preset from the library

- > Use the pop-up menu in the top left corner of the page to choose one of the presets from the library containing all the presets.



■ Choose a KAOSS Favorite Presets from the dedicated buttons

- > Touch one of the **Favorite Presets** to choose the corresponding preset.



Storing a KAOSS Preset into one of the Favorite Preset buttons

You can assign any of the presets from the library to one of the **Favorite Preset** buttons. This way, you will have a set of favorite presets always ready.

- 1 Choose one of the **KAOSS Presets** by using the pop-up menu in the top left corner of the page.
- 2 Keep the **Favorite Preset** button, where you want to store the preset, pressed.

Deleting a Favorite Preset

You can delete a Favorite Preset, to free it for other presets.

- 1 Touch the button of the **Favorite Preset** you want to delete.
- 2 Touch the **Delete** (🗑️) icon to delete it.

KAOSS Preset list

The following table contains all the Factory KAOSS Presets. Please note that time-based effects can require a few moments, before starting to work. The effects working on the Style and Song tracks are limited to the tracks on which they can be applied (for example, Drum track only if the effect is limited to drums).

KAOSS Presets

KAOSS Preset	X-Axis	Y-Axis	Works on
Repeater1&Filter	Loop Length	Cutoff&Resonance	Style, Song Tracks
Repeater1&Bending	Loop Length	Bending&Cutoff	
Repeater2&LFO	Loop Length	LFO Depth	
Repeater2&Transp	Loop Length	Transpose	
Repeater Filt&Trps	Cutoff&Resonance	Transpose	
Repeater Halo&Bend	FX&Release	Bending&Cutoff	
Repeater Filt&Tape	Cutoff&Resonance	Tape Speed	
Ending Rep&Shift	Loop Length	Note Shift	
Ending Rep&LFO	Loop Length	LFO Depth	
Ending Halo&Bend	FX&Release	Bending&Cutoff	
Tape Machine	BPM	Bending	
Tape & Filter	Tape Speed	Cutoff&Resonance	
Tape & Balance	Tape Speed	D&B Balance	
Bending & LFO	Bending	LFO Depth	
Delay & Balance	Delay Length	D&B Balance	
Delay & LFO	Delay Length	LFO Depth	
Tripletizer&Filter	Tripletizer	Cutoff&Resonance	
Tripletizer&Envelope	Tripletizer	Attack&Decay	
Tripletizer&Balance	Tripletizer	D&B Balance	
RhythmRig&Halo	Rig Set	FX&Release	
RhythmRig&Balance	Rig Set	D&B Balance	
TimeMirror&Envelope	Time Mirror	Attack&Decay	
TimeMirror&Filter	Time Mirror	Cutoff&Resonance	

KAOSS Preset	X-Axis	Y-Axis	Works on
HalfDouble&Bending	D&B Speed	Attack&Decay	Style, Song Tracks
HalfDouble&Halo	D&B Speed	FX&Release	
HalfDouble&Filter	D&B Speed	Cutoff&Resonance	
RhytSpeed&Balance	D&B Speed	D&B Balance	
DrumDecim&Filter	Drum Decimator	Cutoff&Resonance	
DrumDecim&Envelope	Drum Decimator	Attack&Decay	
Decimator&Halo	Decimator	FX&Release	
Decimator&Balance	Decimator	D&B Balance	
Decimator&Transp	Decimator	Transpose	
NoteMirror&Transp	Mirror Note	Transpose	
NoteMirror&Balance	Mirror Note	D&B Balance	
Arpeggio 2/Beat	ARP Shape	ARP Expression	Upper Sounds
Arpeggio 3/Beat	ARP Shape	ARP Expression	
Arpeggio 4/Beat	ARP Shape	ARP Expression	
Arpeggio 6/Beat	ARP Shape	ARP Expression	
Arpeggio UpCycle	ARP Speed	ARP Expression	
Arpeggio DownCycle	ARP Speed	ARP Expression	
Arpeggio UpOneBeat	ARP Speed	ARP Expression	
Arpeggio Random	ARP Speed	ARP Expression	
Arpeggio WeirdShift	ARP Shift	ARP Expression	

KAOSS Preset	X-Axis	Y-Axis	Works on
Density1&Filter	Density	Cutoff&Resonance	Style, Song Tracks
Density1&RhythmRig	Density	Rig Set	
Density1&HalfDouble	Density	D&B Speed	
Density2&DrumDecim	Density	Drum Decimator	
Density2&Halo	Density	FX&Release	
Density2&Repeater2	Density	Loop Length	
Density3&Filter	Density	Cutoff&Resonance	
Density3&Balance	Density	D&B Balance	
Density4&Halo	Density	FX&Release	
Ending Den1&Rep	Density	Loop Length	
Repeater Den1&Bend	Density	Bending&Cutoff	
Var & DrumDecim	Variation	Drum Decimator	
Var & HalfDouble	Variation	D&B Speed	
Var & Mute1	Variation	Muting	
Var & Mute2	Variation	Muting	
VarPad1 & DrumDecim	Variation&Pad	Drum Decimator	
VarPad1 & Mute1	Variation&Pad	Muting	
VarPad2 & Decimator	Variation&Pad	Decimator	
Double Var&Balan	Variation	D&B Balance	
Half Var&Halo	Variation	FX&Release	
DrumDecim&Mute1	Drum Decimator	Muting	
Decimator&Mute2	Decimator	Muting	
RhythmRig&Mute1	Rig Set	Muting	
RhythmRig&Mute2	Rig Set	Muting	

Using the KAOSS effects

Using the KAOSS effects is just a matter of letting the instrument play, or playing some notes, and swiping your finger in the KAOSS pad area to change the music flow.

Starting the original music flow

■ Transformation vs. Arpeggiator

There are two general categories of KAOSS effects:

- Transformation effects, where the music flow generated by the Player is processed to create new music.
- Arpeggiator effects, where the latest recognized chord, or the notes you play on the Upper part of the keyboard, are used to generate an arpeggio. The name of these presets begins with 'Arpeggio'.

Please note that when using Arpeggiator-type effects, the Damper pedal is deactivated.

■ Choose the original music flow

- Assign to a Player a Style or a MIDI Song.
- If you want to play an arpeggio, choose a Keyboard Set including the Sounds you want to arpeggiate.

■ Choose a KAOSS preset

- Choose a KAOSS Preset or Favorite Preset, as seen above.
- If you want to play an arpeggio, choose a preset whose name begins with Arpeggio.

■ Start the Player

- Start the Player as usual.
- If you are using an Arpeggiator preset, play a chord or some notes on the Upper part of the keyboard and touch the pad. You do not need to start the Player.

Using the KAOSS pad

■ Check the effect's parameters assigned to the X/Y axis

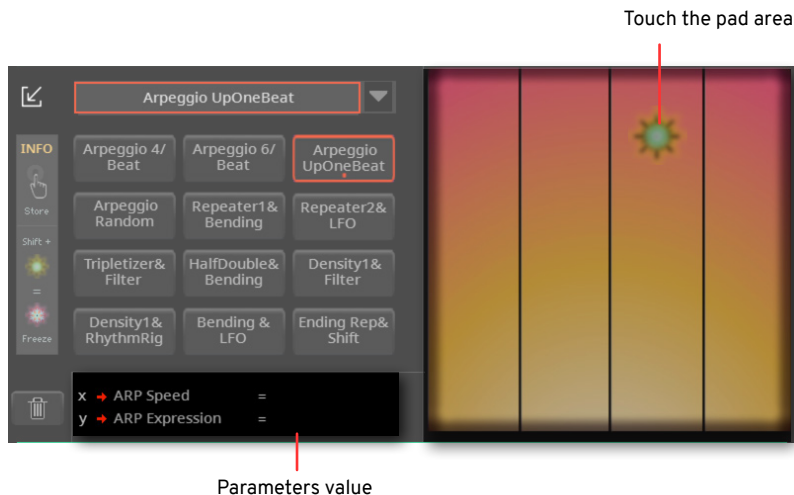
- > See the name of the parameters next to the pad.



Axis	Meaning
X	Finger movement from left to right, right to left.
Y	Finger movement from top to bottom, bottom to top.

■ Change the parameters' value

- > To change the parameters' value, move your finger in the KAOSS pad. A green indicator appears at the point of contact. The X and Y values are shown next to the pad.



Depending on the selected preset, the grid in the KAOSS pad will change. Each cell corresponds to a block of values (also called a step). The lighter grey cells are the default value for the corresponding parameter.

When no grid lines appear in the pad, values are continual, without intermediate steps, changing with a finer detail.

- > When you release your finger, the default values are reset.

■ Freeze the current values

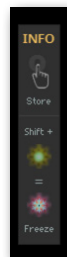
You can freeze the current values, as shown on the left of the pane. Do one of the following:

- > Keep the **SHIFT** button pressed, and touch an **area** of the KAOSS pad. Then release the **SHIFT** button and finally raise your finger.

You can continue to move your finger to change the values, or release it to freeze the current values.

- > Press the **SHIFT** button while the finger is touching the KAOSS pad. Then raise your finger and finally release the **SHIFT** button.

The values of the latest position of your finger will be frozen. The processed music flow will go on by following those values.



When the values are frozen, the indicator turns to a snowflake and remains in the display even when removing your finger.



■ Release the position indicator

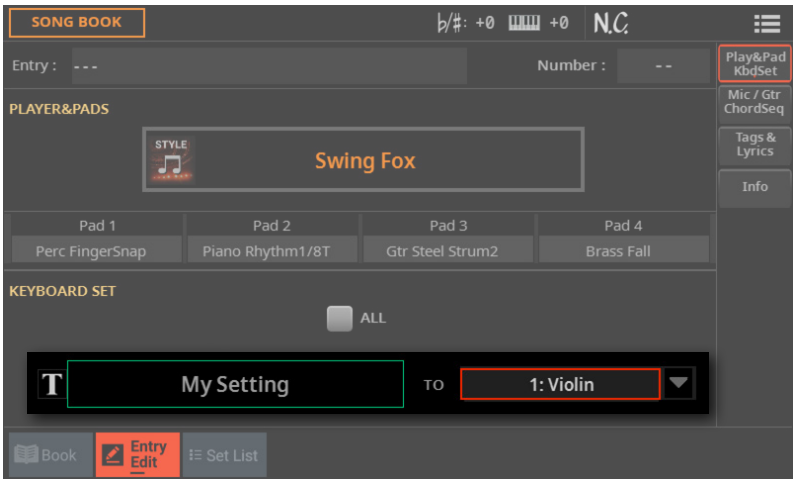
You can ‘unfreeze’ the frozen parameters.

- Touch anywhere in the pad to exit from freeze.

SongBook

Choosing a Keyboard Set target location when saving a SongBook Entry

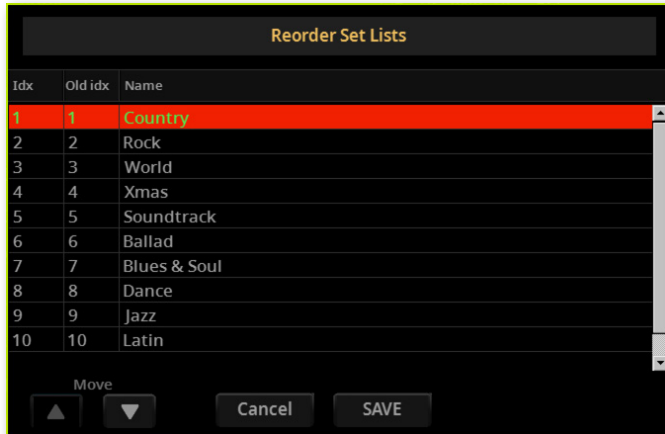
When saving a SongBook Entry, you can now choose a target location for a single Keyboard Set, even without first having to choose a different Keyboard Set.



Rearranging the Set Lists order

If the order of the Set Lists in the **SongBook > Set List** page is not the desired one, rearrange them.

- 1 Press the **BOOK** or **SET LIST** button in the **SONGBOOK** section to open the **Book** or **Set List** page.
- 2 Choose the **Reorder Set Lists** command from the **page menu** (☰) to open the **Reorder Set Lists** dialog.



- 3 Touch the Set List to be moved.
- 4 Use the **Move > Up** (▲) and **Move > Down** (▼) buttons on the display to move the selected Set List to a different position.
- 5 When done, touch the **Save** button to confirm saving the order, or the **Cancel** button to exit the dialog.

Lyrics and chords

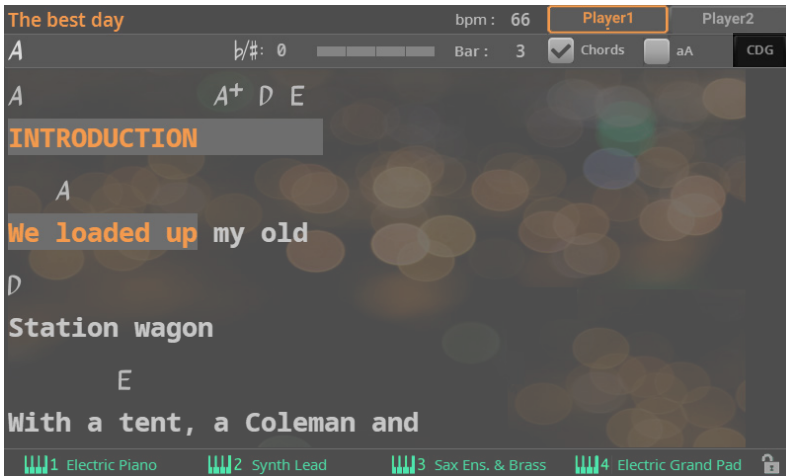
Loading a CDG file with an MP3 Song (MP3+G)

Compatibility with CDG files has been added.

Lyrics and chords may be contained in a CDG file having the same name of an MP3 Song, and residing in the same folder. For example, if a 'MySong.cdg' file exists in the same folder as the 'MySong.mp3' file, loading this latter will also load the CDG Lyrics file.

This is often called the MP3+G song format.

To see the CGD content, a **CDG** button has been added to the Lyrics page.



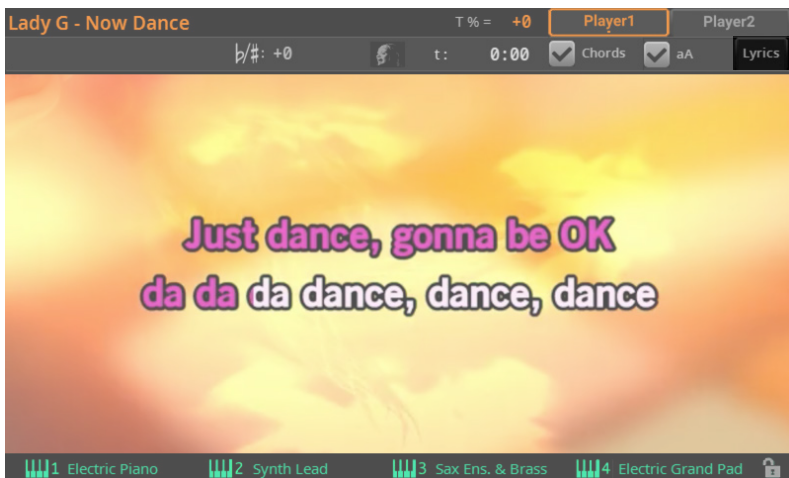
Reading the lyrics and chords loaded as a CDG file

CDGs are graphic files that change in sync with the associated MP3 Song.

- 1 Go to the **Lyrics** page.



- 2 Touch the **CDG** button to show the CDG content. When this happens, the button's label changes to **Lyrics**.



- 3 Start the associated MP3 Song. Lyrics and chord in the CDG file will follow the song.
- 4 Stop the Song. Lyrics and chord will also stop.
- 5 If you want to return to the Lyrics mode, touch the **Lyrics** button.

Scale

Synchronized Scale tuning parameters between the Keyboard Set and the general Settings

You can edit the Scale tuning parameters in the **Home > Scale/Tuning** pane (selected Keyboard Set), or in the **Settings > Tuning > Scale/Tune** page (general Settings).

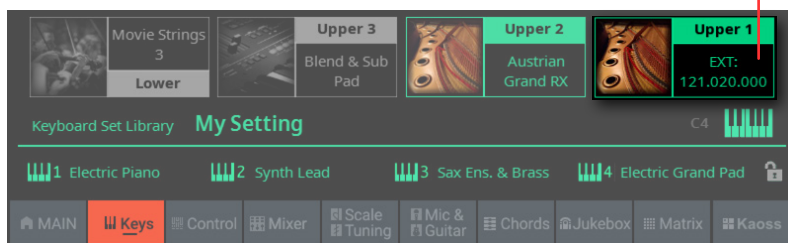
When editing the parameters in one of the above pages, they are immediately updated in the other one. This way, you can immediately check the effect of your edits, wherever you have done them.

Tracks and Sounds

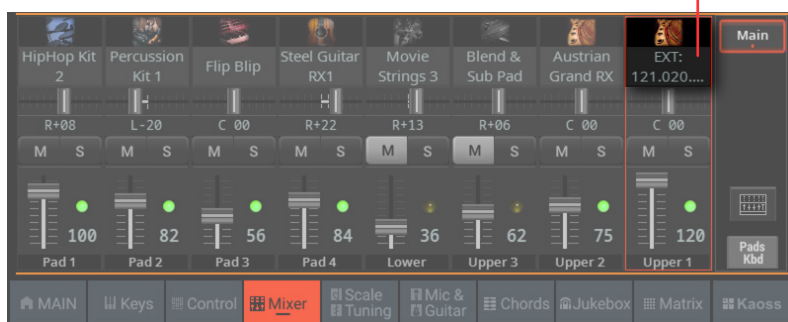
External Sounds and Program Change messages

A part/track set to the External status cannot play the internal sounds. Instead of the assigned Sound name, the **<EXT: aaa.bbb.ccc>** indicator is shown on a track's area in the **Main > Keys** or **Main > Mixer** pages, or in the **Home > Menu > Mixer/FX > Main** page.

Control Change/
Program Change area

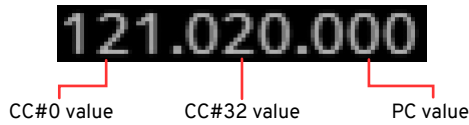


Control Change/
Program Change area



This indicator begins with a remark saying the track is in External ('EXT') mode, and continues with a string of transmitted Control Change and Program Change data. This will let you know what the track is transmitting.

In the following example, CC#0 is Control Change 0 (Bank Select MSB), CC#32 is Control Change 32 (Bank Select LSB), PC is the Program Change:



When touching the Sound area, the **numeric keypad** appears instead of the **Sound Select** window. You can enter the Control Change/Program Change bundle shown above.

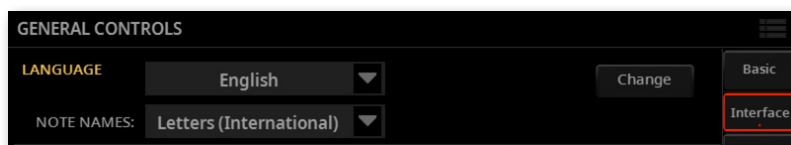


Settings

Choosing the note names system

You can choose the system used to display the note names, separately from the lyrics language.

- 1 Go to the **Settings > Menu > General Controls > Interface** page.



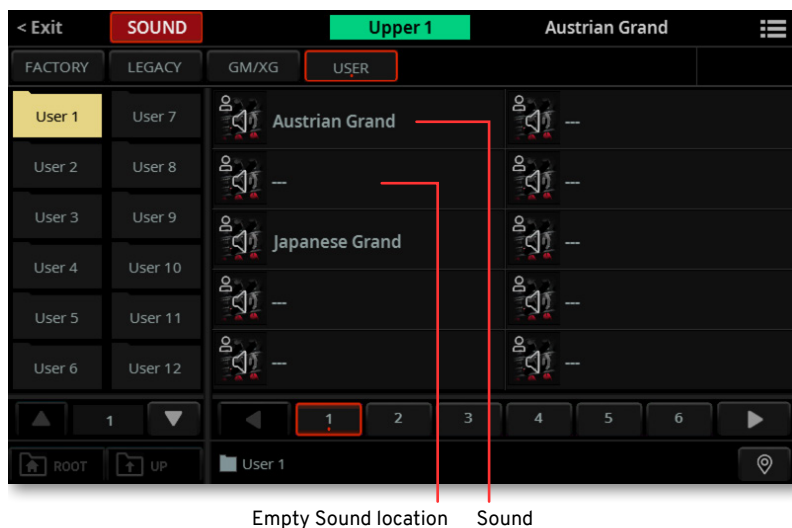
- 2 Use the **Note Names** pop-up menu to select one of the available systems.

Note Name System	Meaning
Letters (International)	The naming system used in most English-speaking countries. The note names are C D E F G A B.
Letters (German)	The naming system used in most German-speaking countries. The note names are C D E F G A H.
Solfège	The naming system used in most Romance and Slavic language-speaking countries. It is also used in many schools in other countries. The note names are (in Italian) Do Re Mi Fa Sol La Si.

Showing/Hiding empty User data locations

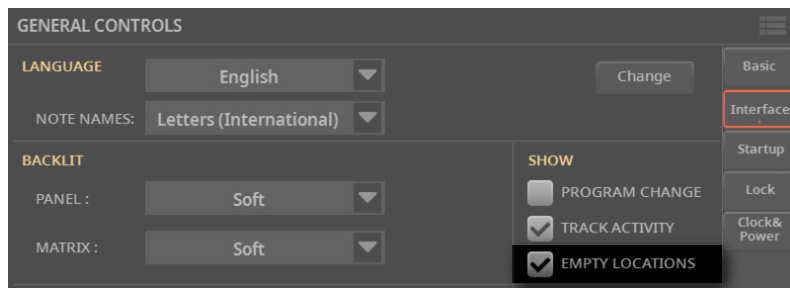
While some types of data are **freely organized** in the same way as files and folders in a computer, some other types are organized in a **reference grid**. These are the Sounds, Mic Presets, Guitar Presets, MIDI Presets, as well as other types of data.

Since positions are fixed, data organized in a reference grid may appear as a mix of musical resources and empty locations in a **File** or **Select** window, when the **User** group of data is selected.



You can hide the empty locations from the **User** pages, if you think this makes browsing data faster.

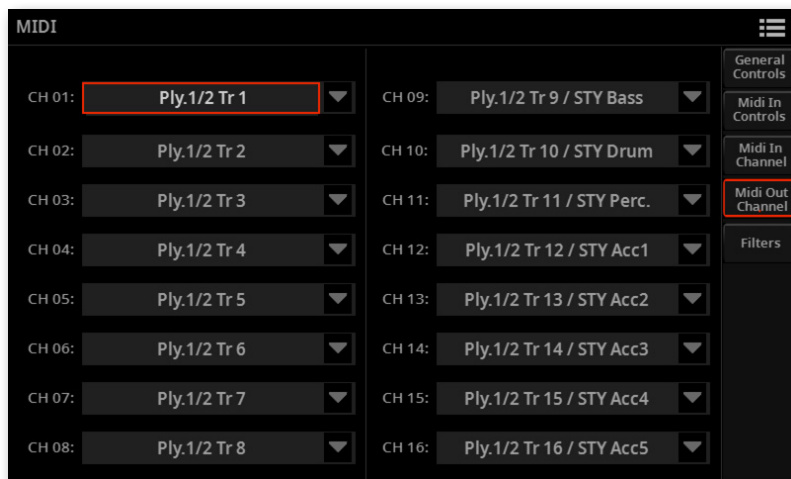
- 1 Go to the **Settings > Menu > General Controls > Interface** page.
- 2 Select/deselect the **Show > Empty Locations** checkbox, to make the empty locations appear/disappear.



MIDI

The same MIDI OUT channel can now be assigned to both Players

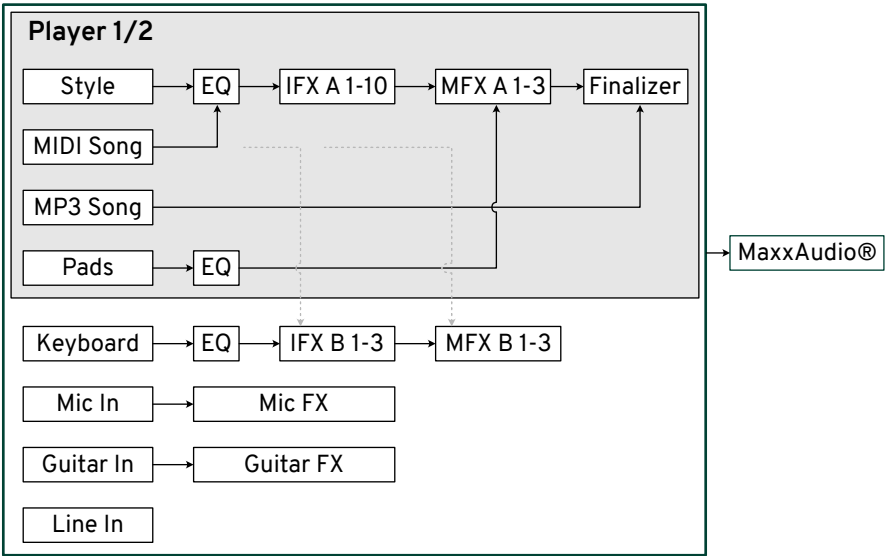
While in the **Settings > MIDI > MIDI OUT Channels** page, you can now choose both Players as the origin of the MIDI data. The new options start with the 'Ply 1/2' abbreviation (standing for 'Player 1+2').



Audio Out

MP3 Songs routed to the Finalizer

MP3 Songs can be routed to the Finalizer, as are the MIDI Songs, the Styles and the Pads. The settings can be saved into a SongBook Entry.



Style/Pad Edit

Listening to the recorded tracks before recording

The **Main** page of the **Style** and **Pad Edit** modes has been changed. Now you can press the **PLAY/STOP** (▶◻) button to listen to what has already been recorded, without risking to overwrite the existing data. While in this state, you can rehearse the selected track before recording.

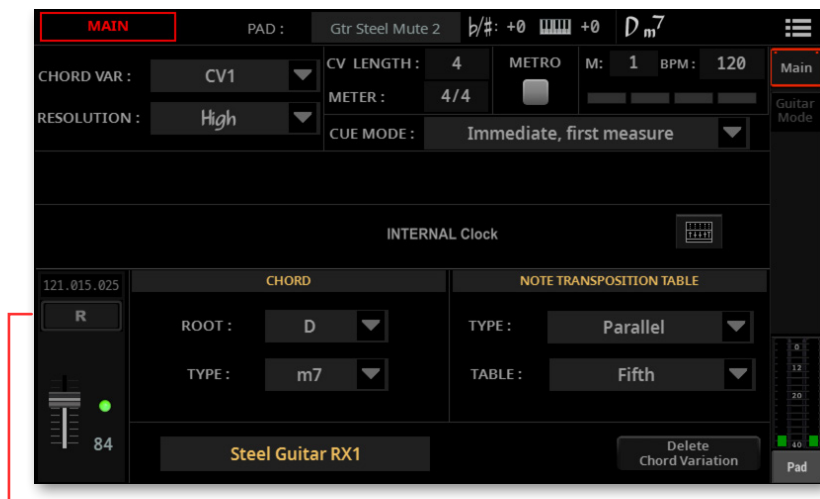
To start recording, you have to first arm a track (by touching the 'R' button on the track).

This is the new **Main** page of the **Style Edit** mode:



Track Record arming buttons

And this is the new **Main** page of the **Pad Edit** mode:



Track Record arming button

Recording a Style or Pad track

You must arm the track to be recorded before starting to record it.

- 1 While in the **Main** page of the **Style/Pad Edit** mode, touch the '**R**' (**Record**) button to arm the track to be recorded.

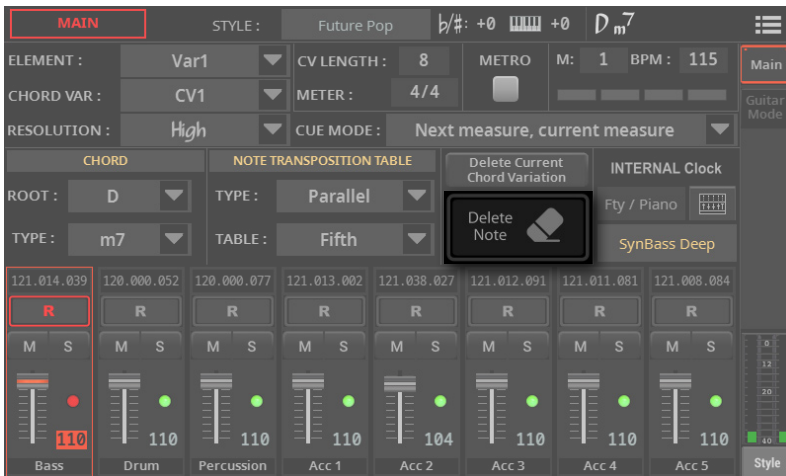


- 2 Press the **PLAY/STOP** (▶□) button to start recording.
- 3 When finished, press the **PLAY/STOP** (▶□) button to stop recording.

Deleting notes from the recorded tracks

Use the **Delete Note** button to delete a single note or a single percussive instrument from a track. For example, to delete a snare, keep the D2 note (usually corresponding to a snare drum) pressed.

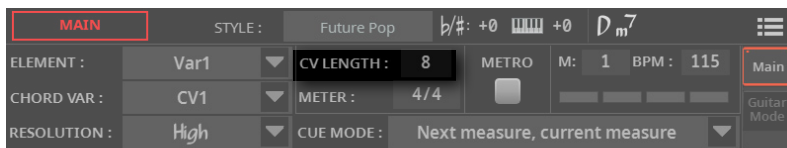
- 1 While in the **Main** page of the **Style/Pad Edit** mode, touch a Style track to select it.
- 2 Touch the **'R' (Record)** button to arm the track from which to delete a note. The **Delete Note** button becomes available.
- 3 Touch the **Delete Note** button, and keep it pressed.



- 4 Press the **PLAY/STOP** (▷◻) button to start playing the sequence.
 - 5 When you reach the passage containing the note to be deleted, play the note on the keyboard. Keep it pressed, up to the last note to be deleted.
- If the note is at the beginning of the sequence, press the note before starting playback.
- 6 When finished, release the **Delete Note** button and the note to be deleted, and press the **PLAY/STOP** (▷◻) button again to stop the sequence.
 - 7 Touch the **'R' (Record)** button to set the track to play mode again, and press the **PLAY/STOP** (▷◻) button to listen to the results.

Changing a Chord Variation length after recording

You can now change the length of a Chord Variation before or after recording.



The Chord Variation Length parameter in Style Edit mode



The Chord Variation Length parameter in Pad Edit mode

■ Choose the Style track, Style Element and Chord Variation

With Styles, you record one or more **Chord Variations**, inside a **Style Element**, for each **Style track**. This is the musical pattern you listen when playing a chord.

Pads are made of a **single Pad Element** and a single **Pad track**, so you only have to choose the **Chord Variation**.

- 1 Go to the **Style/Pad Edit > Main** page.
- 2 With Styles, choose the **Style track** to be recorded.



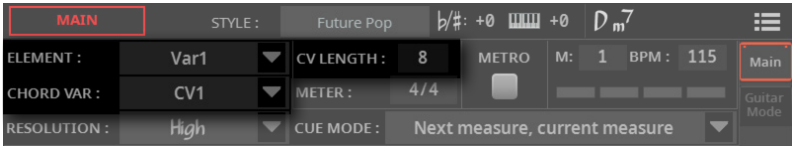
- 3 With Styles, use the **Element** pop-up menu to choose a **Style Element**. As an alternative, press the corresponding button on the control panel to select one of the **Style Elements** (INTRO 1 ... ENDING 3).

Each Style Element corresponds to a button on the control panel carrying the same name. After selecting a Style Element, select a Chord Variation for actual editing (see below).

Style Element	Meaning
Intro1 ... End3	Selected Style Element

4 Choose the Chord Variation to be recorded, and set the recording parameters.

> With Styles:



> With Pads:



> Use the **Chord Var** pop-up menu to choose a **Chord Variation** inside the selected **Style/Pad Element**.

When the name of a Chord Variation is in lowercase and in round brackets, like (cs1) or (cs6), the Chord Variation is empty.

Style Element	Chord Variation
Var1, Var2, Var 3, Var4	CV1 ... CV6
Intro1, Intro2, Intro3, Fill1, Fill2, Fill3, Fill4, Break, Ending1, Ending2, Ending3	CV1 ... CV2

Pad Element	Chord Variation
Pad's single Element	CV1 ... CV6

■ Adjust the Chord Variation length before recording

> Use the **CV Length** (Chord Variation Length) parameter to set the length of the Chord Variation (in measures).

The maximum length of the selected Chord Variation is 32 measures.

■ Adjust the Chord Variation length after recording

You can also change the length of a Chord Variation after recording.

- > If you increase its length, the recorded data will start being repeated from the beginning of the Chord Variation.



- > If you decrease it, the data at the end will be deleted.



■ Adjust the Chord Variation length after recording by cutting or inserting measures

To add or remove some measures after recording, you can also use the **Cut** or **Insert Measure** functions in the **Style/Pad Edit > Style/Pad Edit > Cut/Insert** page.

Assigning the same Chord Variation number to a chord on all the tracks of the Style Element

You can now decide if the same Chord Variation (CV) number has to be assigned to a chord for all the tracks of the same Style Element, or if each track can have its own Chord Variation assignment.

For example, you may want that the Major chords use CV1 in all the tracks of the current Style Element, and program them at once. On the contrary, you might want to use a different CV for some of the tracks, and program each of them separately.

- 1 Go to the **Style Edit > Menu > Chord/Variation Table > Chord Table** page.



- 2 Check the status of the **All/Single Track** radio buttons.

All/Single Track	Meaning
All	If it is selected, each chord uses the same Chord Variation (CV) in all the tracks of the current Style Element and all the other Style Elements of the Style. When you assign a Chord Variation to a chord, the same CV will be automatically assigned to all the tracks of the Style Element. You are still free to program the other Style Elements separately.
Single	If it is selected, each chord may use different Chord Variations (CV) in different tracks of the Style Element. When you assign a Chord Variation to a chord, the other tracks of the Style Element are left unchanged.

- 6** Press the **PLAY/STOP** (▶□) button and play some chords to check how it works. Select any Style Element using the control panel button. Press the **PLAY/STOP** (▶□) button again to stop playback.

Assigning empty Chord Variations to the tracks

While in the **Chord Table** page, you can now assign empty Chord Variations to the chords in the selected track and Style Element.

This is useful to mute the corresponding track, if you want it not to play for that chord in that Style Element. If you want to mute that track for the whole Style Element, assign an empty Chord Variation to all the chords for that track in that Style Element.

Empty Chord Variations are shown in lowercase and in round brackets, like (cv1) or (cv6).

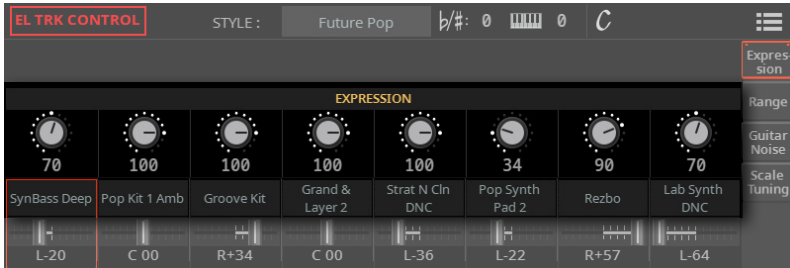


NOTE: When loading a Style made on another instrument or an older operating system, some tracks might not play with some chords. Should this happen, check in this page which chords have an empty Chord Variation assigned in any of the Style Elements, and assign them a non-empty Chord Variation.

Adjusting the Expression level with the physical sliders

Now you can adjust the Expression level for the Style tracks with the physical sliders. You can also keep the **SHIFT** button pressed, and adjust all the Expression level with a single slider.

While you are in the **Style Edit > Element Track Controls > Expression** page, you can adjust the Expression level with the physical sliders.



- 1 Touch one of the Style's **Expression** knobs to select it.
- 2 Use the **CONTROL sliders** to adjust the **Expression** level in the corresponding Style tracks.
- 3 Keep the **SHIFT** button pressed, and move **one of the CONTROL sliders** to proportionally adjust the **Expression** level on all the Style tracks. At the end, release the **SHIFT** button.

Tempo shown as Tempo metronome values

Tempo events are now shown as absolute Tempo metronome values. They are no longer shown as percentage.

Undo command

While in **Style Edit** mode, you can use the **Undo** command to undo the latest action. Please note that this command may not be available for all the actions.

1 After having recorded or edited something, choose the **Undo** command from the **page menu** (☰). The **Undo** dialog appears.



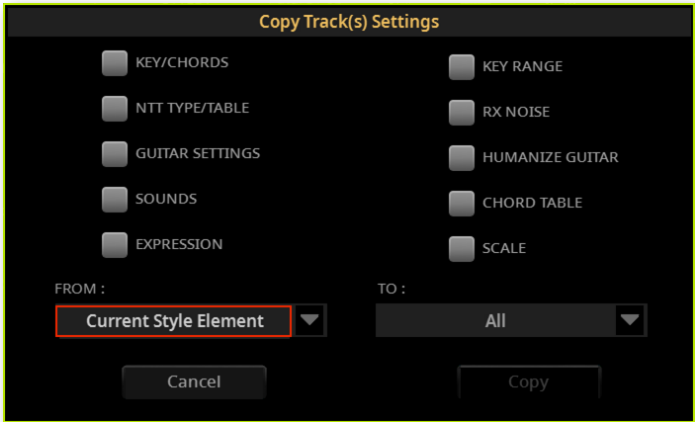
The dialog shows the latest action that you are going to undo, together with up to five of the previous actions. If there is nothing to undo, the 'Undo memory is empty' message appears instead.

2 Touch the **Undo** button to undo the latest action (or press the **EXIT** button to cancel).

Copying the Style track settings

Once you have edited a Style track, you can copy and paste its settings to another track, Chord Variation or Style Element.

- 1 Choose the **Copy Track(s) Settings** command from the **page menu** (☰) to open the **Copy Track(s) Settings** dialog.



- 2 Check all the track settings you want to copy.
- 3 Use the **From** pop-up menu to choose the source.

Style Element	Meaning
Current Style Element	Settings will be copied from all the tracks in the current Style Element to all the tracks in the target Style Element(s).
Current Track	Settings will be copied from the selected track in the current Style Element to the same track in the target Style Element(s).

- 4 Use the **To** pop-up menu to choose the target Style Element.

Style Element	Meaning
All	Settings will be copied to all the Style Elements (whole Style).
All Var	Settings will be copied to all the Variation Style Elements.
All Fill/Break	Settings will be copied to all the Fill/Break Style Elements.
All Intro/Ending	Settings will be copied to all the Intro/Ending Style Elements.
Var1 ... End3	Settings will be copied to the selected Style Element.

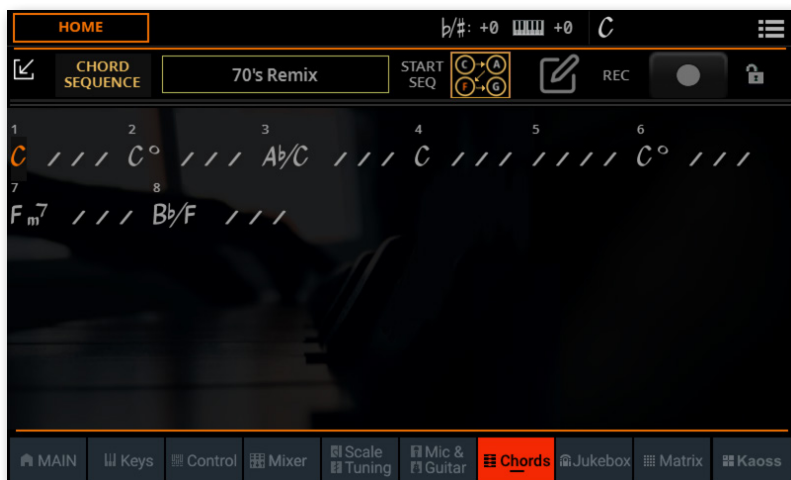
Chord Sequence Edit

Editing the Chord Sequences

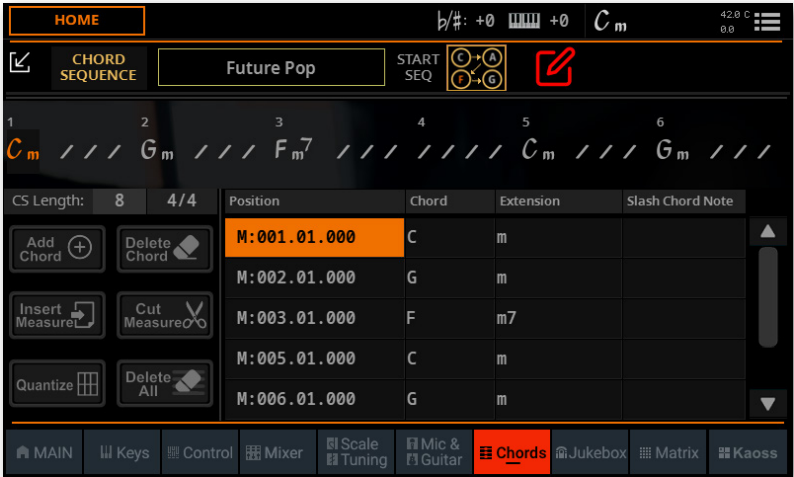
You can edit the Chord Sequences selected in the **Home > Chords** pane. After editing, you can save it over itself or as a new one.

■ Access Chord Sequence editing

- 1 Go to the **Home > Chords** pane.
- 2 To see all the options, touch the **Expand** (🔍) button to enlarge the pane.



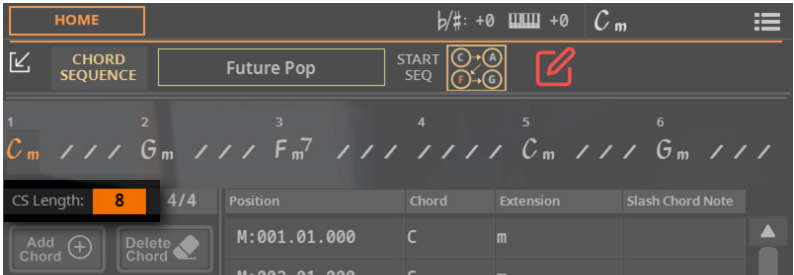
3 Touch the **Edit** () button to open the **Chord Sequence Edit** page.



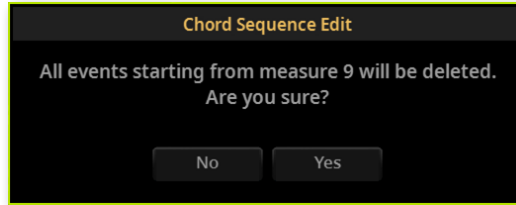
■ Change the Chord Sequence length

You can change the length of the Chord Sequence.

1 Select the **CS Length** parameter, and use the **DIAL** or **UP/DOWN** buttons to change the sequence's length in measures. As an alternative, touch it a second time to open the **numeric keypad**.



- 2 If choosing a lower value than the current one, a message will ask if you want to delete all the events in the measures you are cutting away.



Touch **Yes** to confirm, or **No** to keep everything as it is.

■ Edit the chords

- 1 Touch the **chord** to be edited in the event list. The corresponding **chord** in the Chord Sequence shown on top of the display will be highlighted.
- 2 Select the **M (Measure)**, and use the **DIAL** or **UP/DOWN** buttons to change the event's position. As an alternative, touch it a second time to open the **numeric keypad**.
- 3 Select the **Chord**, **Extension** or **Slash Chord Note** parameter, and use the **DIAL** or **UP/DOWN** buttons to change their value.

■ Add or delete a chord

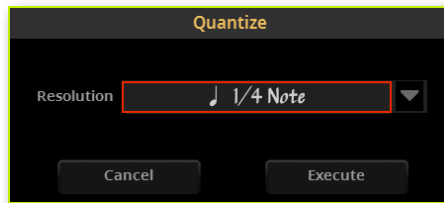
- > Touch the **Add Chord** button to add a chord at the current position.
- > Touch the **Delete Chord** button to delete the selected chord.

■ Add or delete a measure

- > Touch the **Insert Measure** button to insert an empty measure at the current position.
- > Touch the **Cut Measure** button to delete the current measure. All the events it contains will be deleted.

■ Quantize the Chord Sequence

- 1 Touch the Quantize button to open the Quantize dialog.



- 2 Choose the desired **quantize resolution** from the **pop-up menu**, and touch **Execute** (or **Cancel** to exit with no change).

■ Delete all the chords

- > Touch the **Delete All** button to delete all the chords in the sequence.

■ Exit from editing

- > Touch the **Edit** () button to exit from the **Chord Sequence Edit** page.
- > When done editing, you can make the pane go back to the reduced size by touching the **Collapse** () button.

■ Save the Chord Sequence

- > Choose the **Save Chord Sequence** command from the **page menu** (). Follow the instructions shown in the [Saving a Chord Sequence](#) section in the User Manual.

Sound Edit

Drum Layers increased to sixteen

Drum Layers can be now up to 16. This will improve compatibility with third-party sound developers.

To choose between the layer groups, use the dedicated **1-8** and **9-16** buttons in the **Sound Edit > Menu > Drum Kit > Drum Kit** page.



Checking the Drum Sample Levels, and adjusting the Velocity Switch

You can check the volume level of each of Drum Samples contained in a Drum Kit, and adjust the Velocity Switch.

■ Access editing

- 1 Press the **REC/EDIT** button on the control panel to see the **Record/Edit** menu, and touch the **Sound Edit** button.
- 2 While in the main page of the **Sound Edit** mode, choose the **Drum Kit** to be edited.
- 3 Go to the **Sound Edit > Menu > Drum Kit > Drum Sample Levels** page.

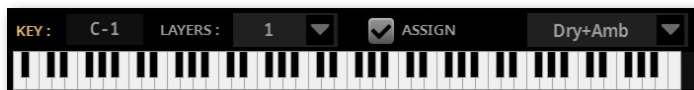
#	Drum Sample	S1		S2		S3		S4		VEL
		Dry	Amb	Dry	Amb	Dry	Amb	Dry	Amb	
8	FTY 0 BD Spn Sof 1 Room	-Inf.	-Inf.	-Inf.	-Inf.	-Inf.	-Inf.	-Inf.	-Inf.	127
7	FTY 0 BD Spn Sof 1 Room	-Inf.	-Inf.	-Inf.	-Inf.	-Inf.	-Inf.	-Inf.	-Inf.	127
6	FTY 0 BD Spn Sof 1 Room	-Inf.	-Inf.	-Inf.	-Inf.	-Inf.	-Inf.	-Inf.	-Inf.	127
5	FTY 0 BD Spn Sof 1 Room	-Inf.	-Inf.	-Inf.	-Inf.	-Inf.	-Inf.	-Inf.	-Inf.	127
4	FTY 3812 HH S2 OT0 4	-1.5	-6.8	-0.2	-6.5	0.0	0.0	0.0	0.0	127
3	FTY 3811 HH S2 OT0 3	0.0	-5.5	-1.7	-6.0	0.0	0.0	0.0	0.0	107
2	FTY 3810 HH S2 OT0 2	+1.2	-5.2	-0.7	-5.3	0.0	0.0	0.0	0.0	76
1	FTY 3809 HH S2 OT0 1	+1.7	-4.7	+0.5	-5.1	0.0	0.0	0.0	0.0	45

Layers

Round Robin 1 Round Robin 3
Round Robin 2 Round Robin 4

■ Check a percussive instrument

- 1 Use the **Key** parameter to choose the percussive instrument to be checked. As an alternative, play the corresponding note on the keyboard.
- 2 For your convenience, on top of the list some parameters are replicated from other pages. Here, you can change the number of velocity layers in the selected key (**Layers** parameter), turn the key on or off (**Assign** checkbox) and choose if you want to listen to the Dry or Ambience part of the sound (**Dry+Amb** pop-up menu).



- 3 Play the corresponding note on the keyboard, and check the levels of the various samples.
 - > The samples that you just played are highlighted in green. In Drum Kits with Ambience, the **Dry** and **Amb(ience)** sample will play together.
 - > In Drum Kits with Round Robins, you can see the (up to) four round robins (**S1-S4**). Repeatedly play the same key to make them play in cycle.

1	FTY	3809	HH S2 OT0 1	+1.7	-4.7	+0.5	-5.1	0.0	0.0	0.0	0.0	0.0	45
---	-----	------	-------------	------	------	------	------	-----	-----	-----	-----	-----	----

NOTE: The level values are read-only, and you can't modify them.

- 4 While checking the velocity layers, you can adjust the **Vel(ocity)** parameter, replicating the **Velocity Sample Switch** parameter from the Drumkit page. This is the velocity switch between the velocity layers.

■ Exit from editing

- > Press the **EXIT** button on the control panel to return to the **main page** of the **Sound Edit** mode.

If you want, you can save the modified Drum Kit.

Sample Edit

Viewing the sample playback position

While in Sample Edit mode, the current playback position in the sample can be seen in the waveform diagram.

Sample names can now be 34-characters long

The name of the samples (ordinary or percussive) can now be up to 34 characters long (instead of 16). This prevents their names from being cut on import.

The length of the Sound and Drum Kit names remains the same (up to 34 characters).

Importing stereo multisamples

You can now import stereo multisamples when importing SoundFont or TX16Wx data. For compatibility reasons, KORG KMP multisamples are always mono. Stereo KMP multisamples are made with two mono ones, having the same name and the ‘_L’ (Left) and ‘_R’ (Right) extensions at the end.

Increased maximum number of Sample in memory

Then maximum number of Samples that can be loaded in memory has been increased (from 30,000 to 53,000).

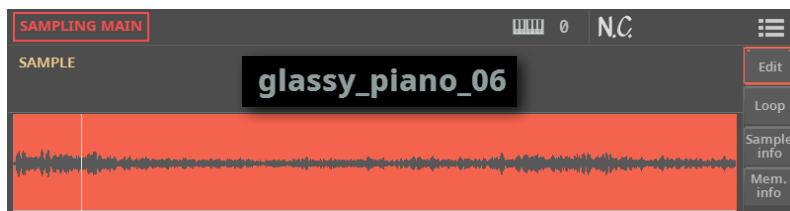
Increased Sample Preload Buffer size

The preload buffer size has been increased (from 260MB to 420MB). This means that you can now load more samples in memory, and have more samples play directly from the preload buffer.

Deleting multiple selected samples at once from the Sample Select window

You can delete multiple selected samples at once.

- 1 While in one of the **Sample Edit > Main** pages, touch the name of the sample in edit, and open the **Sample Select** window.



Please note that the **Sample Select** window will not open, if no sample has been saved.

- 2 While in the **Sample Select** window, keep the **SHIFT** button pressed, and touch the sample you want to select. To select more samples consecutively, keep the **SHIFT** button pressed, touch the first sample to be selected, then use the **DIAL** or **UP/DOWN** buttons to select the following items.

CHOOSE SAMPLE		SELECTED : 23				Delete	
#	Name	ST	CP	Enc	Prel	Dr F	
25	SD1 - 2		✓			SD	▲
26	HH Close 1		✓			HH	
27	HH Close 2		✓			HH	
28	HH Pedal Close		✓			HH	
29	HH Pedal Splash EX		✓			HH	
30	HH Open 1		✓			HH	▼
31	HH Open 2		✓			HH	
32	Floor Tom EX		✓			Tom	
33	Rack Tom 2 EX		✓			Tom	
34	Rack Tom 2 EX		✓			Tom	
35	Rack Tom 1 EX		✓			Tom	
36	Rack Tom 1 EX		✓			Tom	
37	Floor Tom EX		✓			Tom	
38	Ride Edge 1 EX		✓			Cym	
39	Ride Bell EX		✓			Cym	

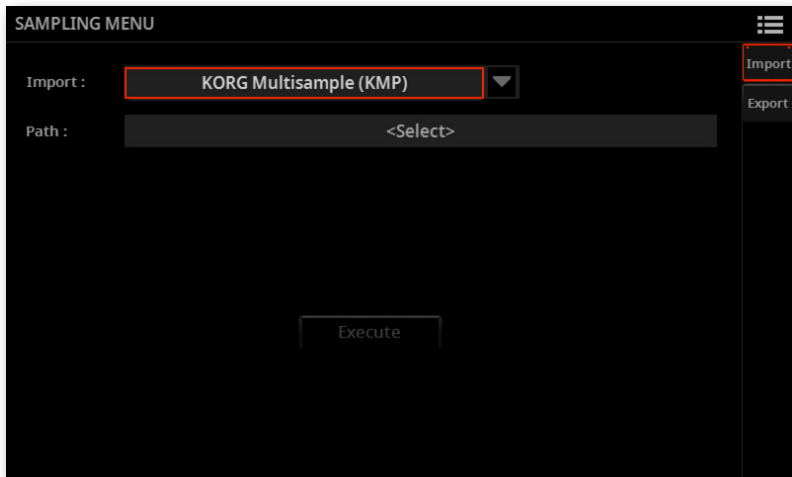
- 3 Touch the **Delete** button in the title bar to delete the selected samples, then confirm.

Importing Sounds, Multisamples, Samples

New Import page

The **Import** command in the **Sample Edit > Multisample** page has been removed from the **page menu** (☰).

It has been replaced by the **Sample Edit > Import/Export > Import** page. Here, you can import Sounds and Multisamples. The linked samples are also imported.



New import file formats

In addition to the PCG, KMP and SF2 file formats, the new TXPROG and TXPERF file formats (mono or stereo) have been added.

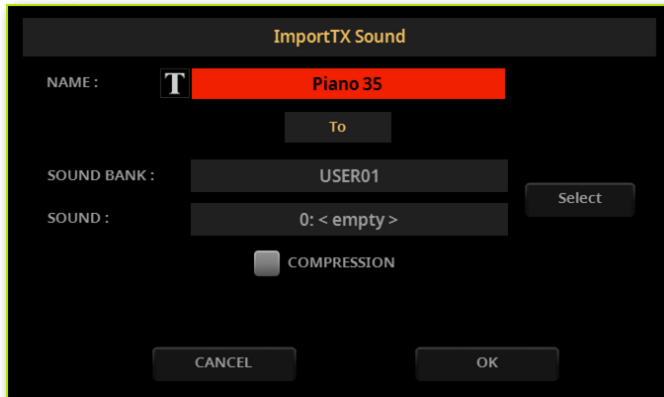
SF2 files can now be either mono or stereo. Compatibility with the SF2 files has been improved. Please note that the many variants of the SoundFont format make compatibility not always possible.

This is the updated compatibility table.

Import format	Meaning
Triton program (PCG)	KORG's native Program (Sound) format, first used by the Triton series of workstations. The file name has the .pcg extension. Note that Drum Kits cannot be imported.
KORG Multisample (KMP)	KORG's native multisample format (mono), first used by the Trinity and Triton series of workstations. The file name has the .kmp extension. For stereo sounds, two KMP files with the same name are used, each one ending with the '_L' (Left) or '_R' (Right) extension.
SoundFont (SF2)	Sound bank format by Creative Labs (mono or stereo). The file name has the .sf2 extension. Multisample data are imported. Due to the deep differences with KORG's own format, some Instruments from the SF2 file could not be imported (for example, Instruments with overlapping zones).
TX Sound (TXPROG)	TX16Wx Program (mono or stereo), corresponding to a Pa5X Sound. Importing it will also import all the linked samples.
TX DrumKit (TXPERF)	TX16Wx Performance (mono or stereo), corresponding to a Pa5X Drum Kit. Importing it will also import all the linked samples.
Import samples in a folder (AIFF, WAV)	This option lets you import a folder containing samples in the AIFF (.aif, .aiff) or Wave (.wav) format.

Importing TXPROG files

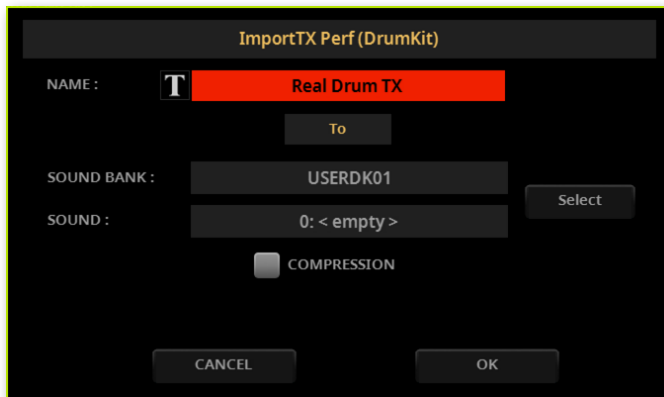
When importing a TXPROG file, you can choose the target Sound location and edit the name. You can also choose to compress the samples.



The dialog box is titled "ImportTX Sound". It features a "NAME:" label followed by a text input field containing "T" and "Piano 35". Below this is a "To" button. The "SOUND BANK:" label is followed by a text input field containing "USER01" and a "Select" button. The "SOUND:" label is followed by a text input field containing "0: < empty >". Below these fields is a checkbox labeled "COMPRESSION". At the bottom are "CANCEL" and "OK" buttons.

Importing TXPERF files

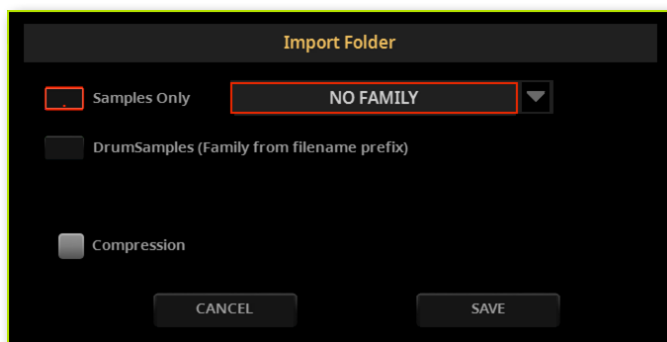
When importing a TXPROG file, you can choose the target Sound location and edit the name. You can also choose to compress the samples.



The dialog box is titled "ImportTX Perf (DrumKit)". It features a "NAME:" label followed by a text input field containing "T" and "Real Drum TX". Below this is a "To" button. The "SOUND BANK:" label is followed by a text input field containing "USERDK01" and a "Select" button. The "SOUND:" label is followed by a text input field containing "0: < empty >". Below these fields is a checkbox labeled "COMPRESSION". At the bottom are "CANCEL" and "OK" buttons.

Importing a folder of samples

You can collect AIFF or WAV samples in a folder, and import them all at once. You can also choose to compress the samples.



You can decide to assign the imported samples to a Drum Family. Choose the **Samples Only** option, and use the **Drum Sample Family** pop-up menu to assign them to a family.

As an alternative, choose the **Drum Sample (Family from filename prefix)** option to selectively assign the imported samples to the relevant percussive families. This can be made automatically, by first adding to the sample names a special prefix, as shown in the following table. So, for example, 'S_Maple_Snare.wav' will be automatically assigned to the Snare Drums family.

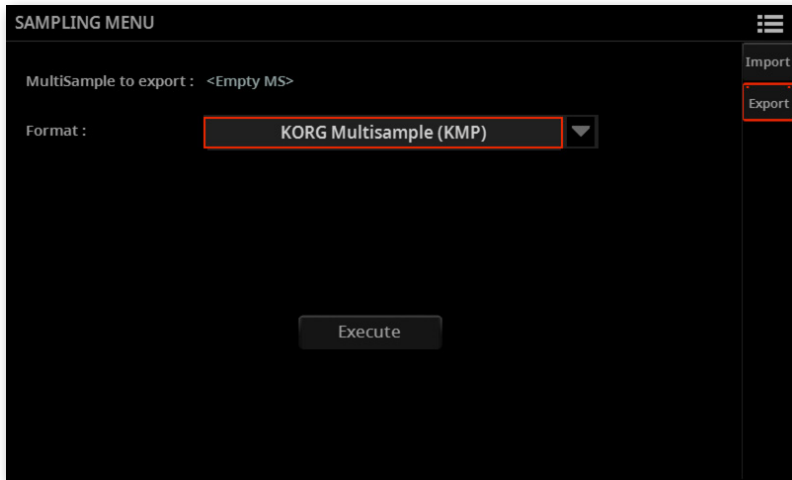
The following table shows the available families and the corresponding abbreviations.

Drum Family	Prefix
Bass Drums	B_
Snare Drums	S_
HiHat	H_
Toms	T_
Cymbals	C_
Latin Percussions	L_
Ethnic Percussions	E_
Special FX	X_

Exporting Multisamples, Samples

New Export page

In addition to the **Export Sample** command found in the **page menu** (☰) of the **Sample Edit > Main** page, where you can export the sample in edit, there is now a new **Sample Edit > Menu > Import/Export > Export** page. Here you can export all the samples from the selected multisample, or all the sample in memory.



New export file formats

You can now export all the samples of a multisample to the WAV or TXPROG file format. You can also export all the samples in memory as WAV files.

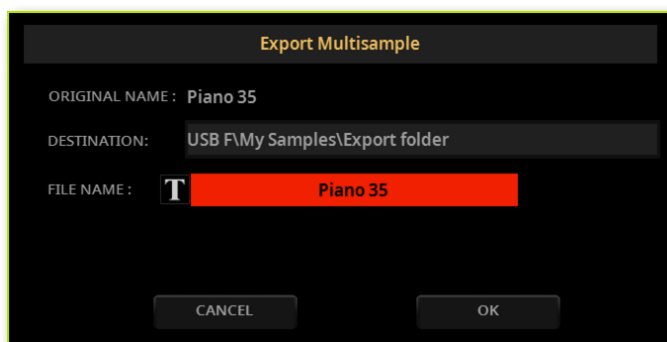
Adding the Original, Low and High Key parameters to the sample name would let you rebuild a Pa5X Multisample on an external sample editor (including TX16Wx).

These are the file format into which the data can be exported.

Export format	Meaning
KORG Multisample (KMP)	KORG's native multisample format (mono), first used by the Trinity and Triton series of workstations. The file name has the .kmp extension.
WAV files with sample names	All the samples from the selected multisample will be exported as WAV files. The samples will only get the sample name.
WAV files (_OrgKey)	As the above, but with the Original Key appended to the sample name.
WAV files (_OrgKey_LowKey_HighKey)	As the above, but with the Original, Low and High Key appended to the sample name.
TX16Wx program (TXPROG)	TX16Wx Program (mono or stereo). Exporting it will also export all the linked samples in WAV format.
All samples as WAV files	All the samples in memory will be exported as WAV files.

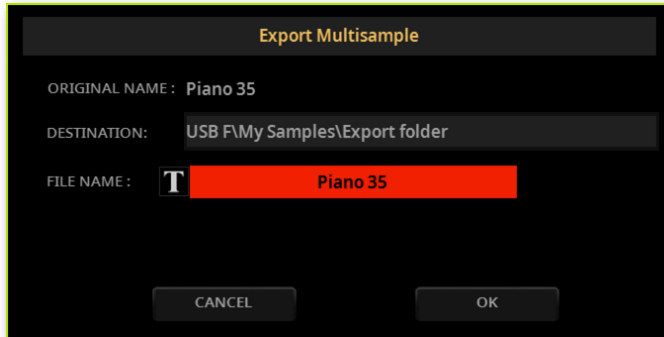
Exporting a multisample to KMP and KSF files

When exporting the current multisample (the one selected in the **Multisample** edit section), the KMP multisample(s) and a series of KSF sample files will be generated. You can choose the destination in the drives and the basic name of the files.



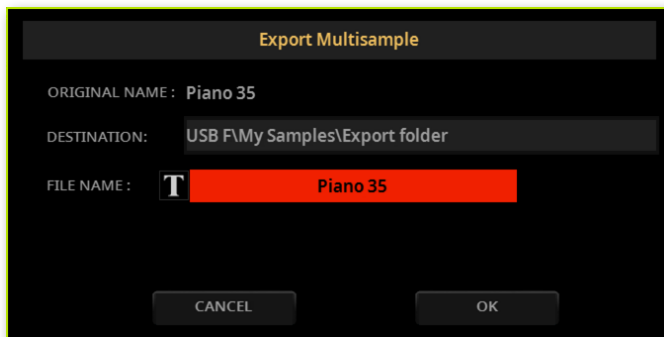
Exporting a multisample to WAV files

When exporting the current multisample (the one selected in the **Multisample** edit section) to WAV files, a series of WAV sample files will be generated. You can choose the destination in the drives and the basic name of the files.



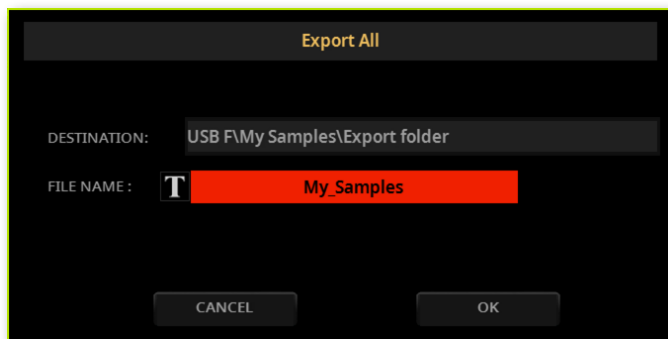
Exporting a multisample to TXPROG and WAV files

When exporting the current multisample (the one selected in the **Multisample** edit section) to a TX16Wx Program, a TXPROG Program file and a series of WAV sample files will be generated. You can choose the destination in the drives and the basic name of the files.



Exporting all the samples in memory as WAV files

When exporting all the samples contained in the User Sample memory, a series of WAV sample files is generated. You can choose the destination in the drives and the basic name of the files.



Exchanging data with TX16Wx

TX16Wx is a software sampler from [CWITEC](#), that can run on Macs and Windows PCs. Pa5X (starting from OS v1.3.0) is compatible with its file format, and can import data from it. You can therefore use TX16Wx to develop Sounds and Drum Kits for Pa5X.

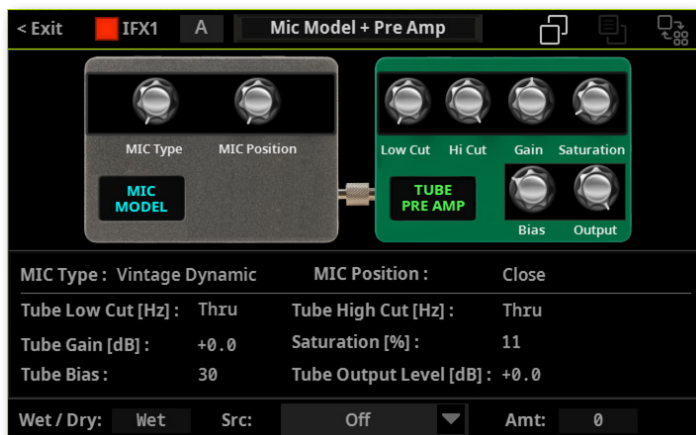
You can also export Multisamples from Pa5X to be edited in TX16Wx. You can also use the software to edit samples in the WAV format.

Please see the separate ‘Making Pa5X Sounds and Drum Kits with TX16WX’ manual for details on how to use TX16Wx with Pa5X.

Effects for the Sounds

Detailed images were added to sixty-six effects. This makes the way the effects are working clearer and more intuitive.

Some examples:



New Musical Resources

Styles

Forty-five new Styles have been added.

Pop
Baddie
Bury a man
Dua Magic
Fall back to you
Gonna be alright
I cut my hair
Juicy Pop
Looking at
My Flowers
No friends
Nothing Lasts
Some bad decisions
Takes 2
Thank Pop
We're Seventeen
Yes, and then
Yours Girls

Classic Pop
En Rose
Feeling Emotions
Got Me Started
I'm Torn
Next To Me
Red Stars.stg
That Face Before
Ballad
All I Need
Be Free With You
Cuz angels don't cry
In The Dark
No Money
Parallel Universes
Take Good Care
This Love I Have
With you

Dance
Love What is
P-A-D-E
R-E-A-C-T
Rock
In The Dirt
We Rock U
Country
Broken Heart
Memory Country
Orange Ballad
What God Gave
You Should Leave
Jazz
Going With Me
Funk & Blues
Soul Singer

Improvements and bug fixes in OS 1.3.0

Improvements

User Interface

General User Interface improvements.

Some Edit menus and page menus have been reorganized, to include the new features.

The **Tempo** window is no longer preventing the use of some control panel buttons (for example, BOOK or REC/EDIT).

Audio Out

The Finalizer's compressor behaves smoothly when choosing a different Style.

Video out

The Lyrics font on the video output is now bigger for better readability.

File conversion

Converting Pa4X to Pa5X data improves Drum Kit conversion, in particular the way the Assign parameter is translated.

Bug fixes

Chord playback

Under some conditions, Intro and Ending chords could not be the correct ones, when changing between Major and Minor while playing.

Scale and Tuning reset

After selecting a Scale and Key in the **Home > Scale/Tuning** pane, the parameter might be reset when choosing a different pane or page.

SongBook

The Transpose value saved in MIDI Song-based SongBook Entries could be ignored when starting a Player (despite being set correctly after choosing the Entry).

When saving a SongBook Entry, the wrong Style Element could be saved.

Video Output

When using a TXT file for Lyrics, it might disappear from video out when switching between the Players.

Damaged Style data

Loading damaged Style data could led to a system crash under particular conditions.

MP3 Record

If the target USB memory device was removed while recording, it was no longer possible to save the recorded file (even if reconnecting it).

Strip display brightness

The **Settings > General Controls > Interface > Display Brightness > Strip** parameter might not work under some conditions.

Improvements and bug fixes in OS 1.3.1

Improvements

Power saving

Pa5X will now automatically enter standby mode after not using it for twenty minutes. Please save your data frequently.

NOTE: After an OS update, the **Auto Power Off** checkbox in the **Settings > Menu > General Controls > Clock & Power** page will be automatically enabled. If you prefer, you can disable it.

Save My Settings

While in the **Home** pages, the **My Settings** Keyboard Set can now also be saved by choosing the **Save My Setting** command from the in the **page menu** (☰).

Bug fixes

Keyboard Set to Style function resetting Octave value and Mute status

Sometimes, with the **Keyboard Set to Style** feature turned off, the **Octave** value and **Mute** status were reset when choosing a different Keyboard Set. They now stay at the correct values.

SongBook and Style track parameters

Some Style track parameters, like Program Change and Expression values, were always saved with fixed values for all the Style Elements in a SongBook Entry. Now Sounds and Expression values can change on each Style Element.

Audio routing of the Effects

Insert Effects could arbitrarily route a track's signal to a separate audio output. They now follow the correct routing.

Scale Key and transposed scale

The **Key** parameter in a User Scale wasn't saved correctly and was wrongly reset in some conditions. Also, we fixed another rare issue happening, when using a particular scale setting together with transpose, while an Intro or Ending was playing.

Lyrics and Chord alignment (HDMI video out)

Sometimes, chords and lyrics contained in TXT files were not correctly aligned when shown on an external display connected through the HDMI port. They are now aligned.

Text character sets

Lyrics containing non-Latin characters could not be shown correctly.

Various bugs

Various bugs have been fixed, improving speed and stability.

Pa5X Operating System Version 1.2

New features

Add-On musical resources

Support for Add-On musical resources

Pa5X supports the installation of Add-On packages of musical resources. This will let you add new collections of Samples, Sounds, Styles, or other resource into the reserved Local area, without having to use the User area. Please read the documentation supplied with the Add-On for more information.

■ Protected and non-protected Add-Ons

Add-On musical resources can be non-protected, or protected via a dedicated microSD card (that will act as a protection key). If they are protected, the protection key must be inserted into the lower microSD slot on the back of the instrument.

■ Storage area available in the protection key (microSD card)

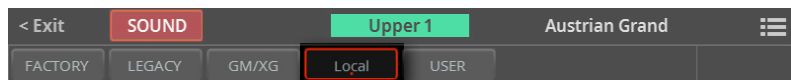
When a microSD card containing a protection key is inserted into the dedicated slot, you can also use it as a storage device.

■ Only a single Add-On at a time can be used

Only a single Add-On can be used at a time. If installing a different Add-On, the older one will be replaced.

■ Local musical resources

Musical resources added by the Add-On can be accessed from the **Local** area in the various **Select** windows.



The **Local** area may however be localized and show a different name, depending on the installed Add-On. Please refer to the documentation accompanying the Add-On.

Local resources are like **Factory** ones. You can't delete or overwrite them.

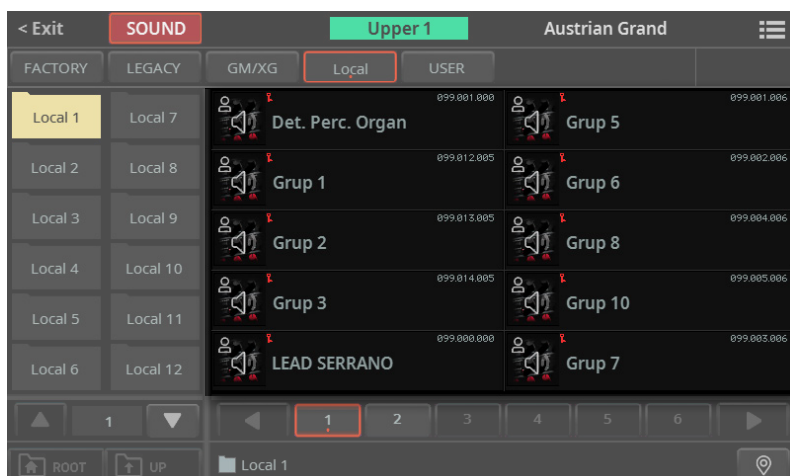
■ Protected resource symbol

Protected musical resources are shown with a key symbol (🔑) next to the resource's name.

- > Styles and Pads (that are freely organized as single files) only show the key symbol after having been selected.



- > Sounds and Drum Kits (that are organized in banks) show the key symbol in the Select window.



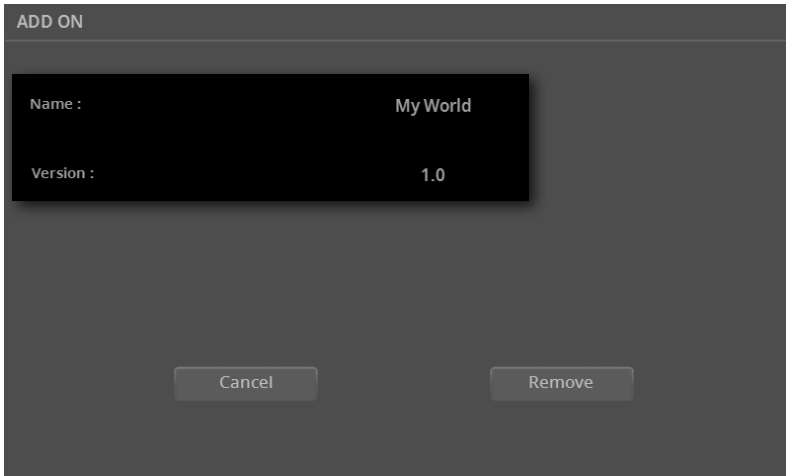
Installing an Add-On

You install the Add-Ons as any operating system update. Please refer to the documentation supplied with the Add-On for detailed instructions.

NOTE: Add-Ons can only be installed in the Pa5X INTERNATIONAL.

Getting information on the installed Add-On

You can get information on the installed Add-On in the **File > Menu > Add-On** page. Detailed information may be contained in the documentation supplied with the Add-On.

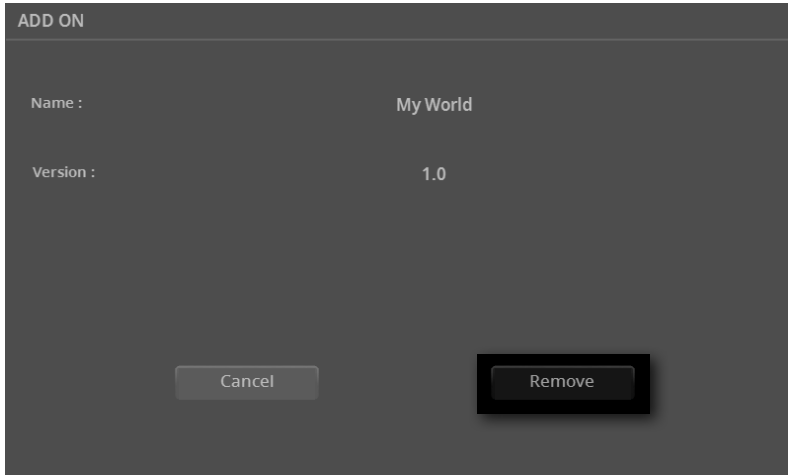


Removing the installed Add-On

You can deinstall an Add-On. By deinstalling an Add-On, the corresponding resources are removed from the Local area.

Please note that the **File > Factory Restore** command leaves the Add-On resources untouched, as it happens with Factory-type data.

- 1 Go to the **File > Menu > Add-On** page.



- 2 Touch the **Remove** button. A message appears, asking you to confirm.
- 3 After confirming, please turn the instrument off, then on again.

Possible issues with the installed Add-On

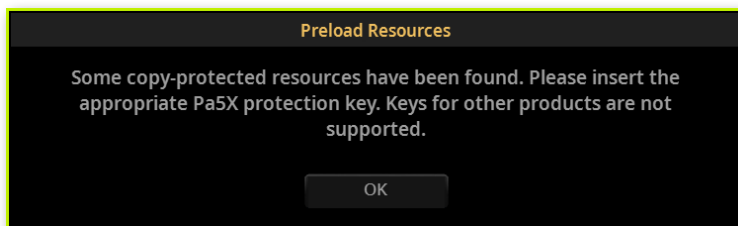
■ Error when preloading resources at startup

In case there was an error while preloading the protected resources when turning the instrument on, the 'Failed to preload' message appears. Turn the instrument off and then on again to see if this can solve the issue.

If the issue is not solved, please try reinstalling the Add-On again. If this doesn't solve this issue, please contact the Add-On's developer.

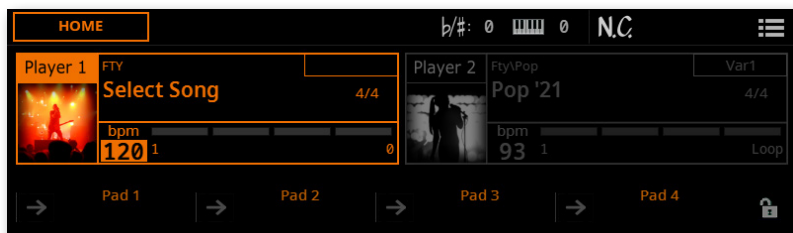
■ Protected resources and missing protection key

When the protection key is not found, and there are protected resources in the Local area, a warning message appears when turning the instrument on, advising about the presence of protected resources, and asking to insert the appropriate protection key.



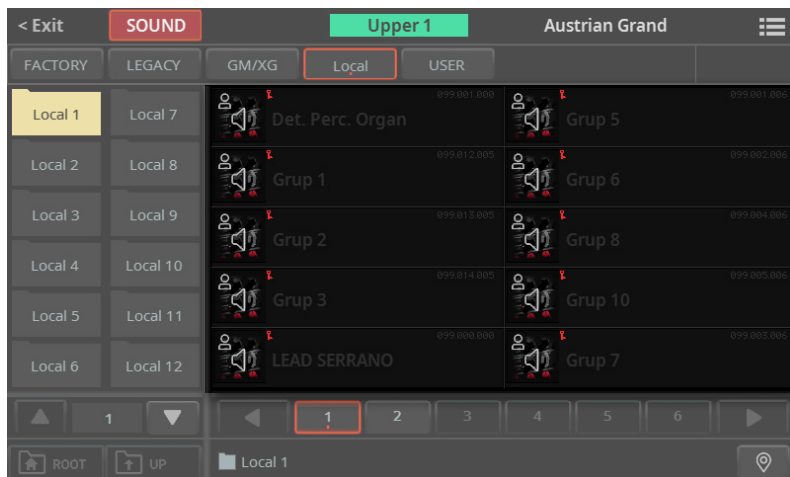
You can either turn the instrument off and install the protection key, or just proceed and avoid using the protected resources.

If you had protected Styles and Pads assigned to the Players in **Settings > Menu > General Controls > Startup**, they will not sound.



If you try to select a protected resource without the protection key inserted, you can't actually load it.

- > Resources organized in a reference grid (like Sounds or Drum Kits) appear dimmed.



- > Resources that are organized freely (Styles and Pads) appear as regular files, but when trying to select them you get an error message.
- > In **Sample Edit** mode you can't see the **LOC** (Local) bank of multisamples or drum kits.

If you turn the instrument off and install the protection key, the protected resources will start working again.

As an alternative, in case you don't plan to use them again in your instrument, you can delete the protected resources from the internal memory, by following the procedure described above.

Converting data from Pa4X

Extended support for Pa4X data

Pa5X now has extensive support for data from Pa4X.

- User Sounds, User Drum Kits and User Samples are converted.
- Keyboard Sets are converted.
- Styles and Pads are converted. Chord Sequences saved into the Styles are converted.
- Chord progressions in the Intro and Ending Style Elements are now shown in the Chords track.
- The Global/Settings, MIDI Presets, QT Scale Presets and Maxx Presets are not converted.
- The User Voice Presets are not converted.
- The SongBook is converted and the Sounds, Styles and Mic/Voice Presets are remapped to an equivalent one, when available. Pads, Chord Sequences saved in the Entries are converted. Linked resources (MID, MP3, TXT files) are relinked according to the rules described in the following section.
- Sounds and Drum Kits from localized versions (like the MUSIKANT or the ORIENTAL) may be missing after the conversion on the INTERNATIONAL version. Other data may be missing as well.
- Data that are missing from the original SET folder will be missing in the converted KST folder. For example, you might have saved the User Keyboard Sets, but not the User Sounds or Samples, and these will be missing.

Compatibility with other models, older data and third-party converters

Please note that Pa5X can only convert user data created with Pa4X. When loading data created on different models, or converted through third-party utilities, compatibility can't be granted. They may work, but may exhibit an unexpected behavior.

If you still need to use older data, and you experience issues with them, please send them to KORG through your Dealer or Distributor, so that we can analyze them and try to fix the problem. Please detail the symptoms, and explain the procedure to replicate your issue.

Converting the Pa4X data

(Please note that the **File > Import** edit section has been replaced by the **File > Data Conversion** edit section).

Before loading the data from Pa4X you have to first convert its SET folders into Pa5X's KST folders, where the converted data will be automatically saved.

Please note that conversion times may be long. A progress bar will show the current situation on the display.

When the conversion is done, the **ConvertReport.txt** file containing a list of conversion messages will appear inside the new KST folder.

■ Save the old data into a SET folder

Before moving the data to Pa5X, save all the older instrument's memory content into a new SET folder onto an USB storage device.

■ Collect the linked SongBook files (MID, MP3, TXT files)

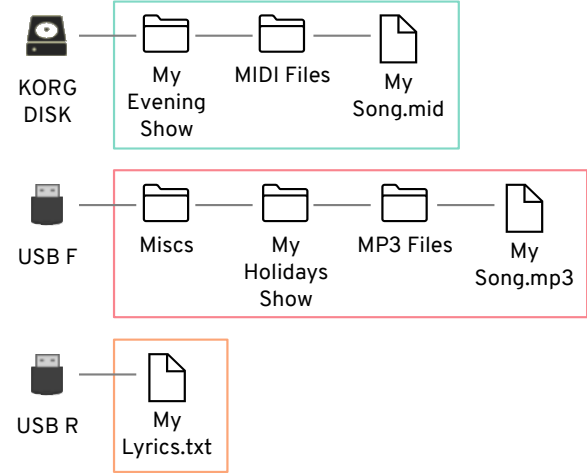
The SongBook can link MID, MP3 and TXT files from multiple sources, for example the internal drive and external USB storage devices, or different folders inside them. Conversion will try to preserve the same structure.

Collect all the linked files into the root or a single parent folder inside the Pa5X's KORG DISK. Copy the entire containing folder, and not only the individual files. The original directory structure will have to remain the same as in the original.

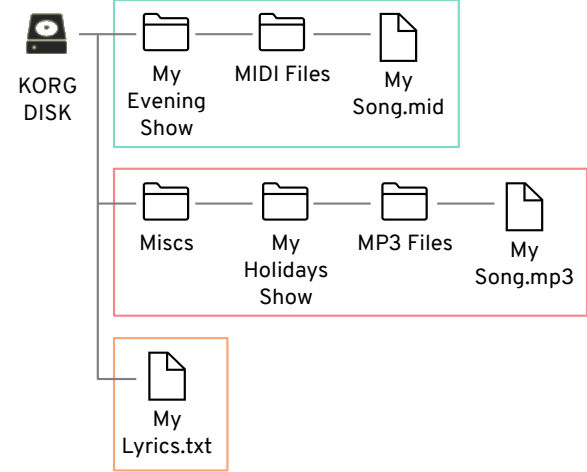
Please choose this position carefully, since moving the data it contains after the conversion will break the links inside the SongBook Entries.

For example, you can move everything into the root of the internal drive, as in the following example.

Pa4X

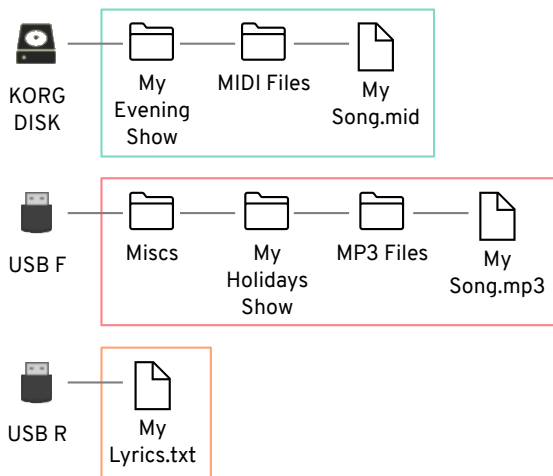


Pa5X

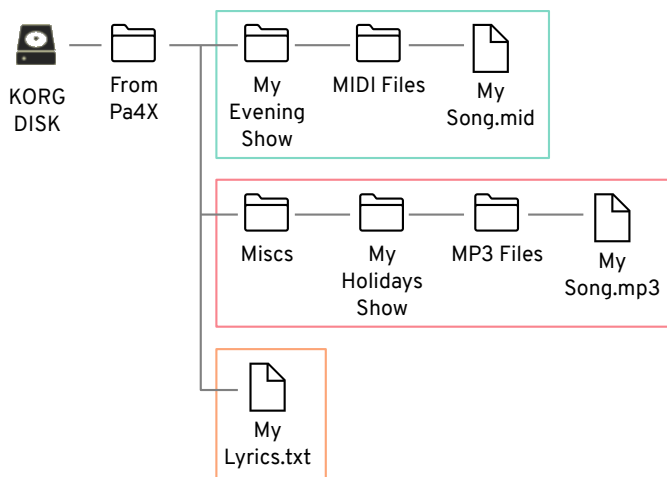


Or, to leave the root cleaner, create a folder in the root ('From Pa4X' in this example), and move everything into it – still preserving the original paths.

Pa4X



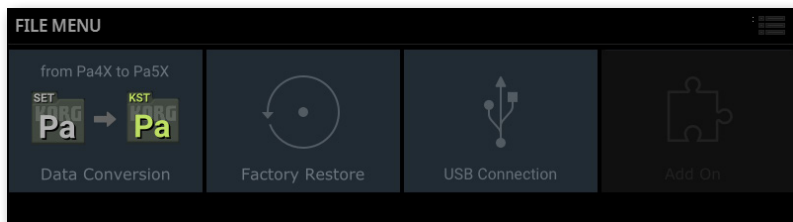
Pa5X



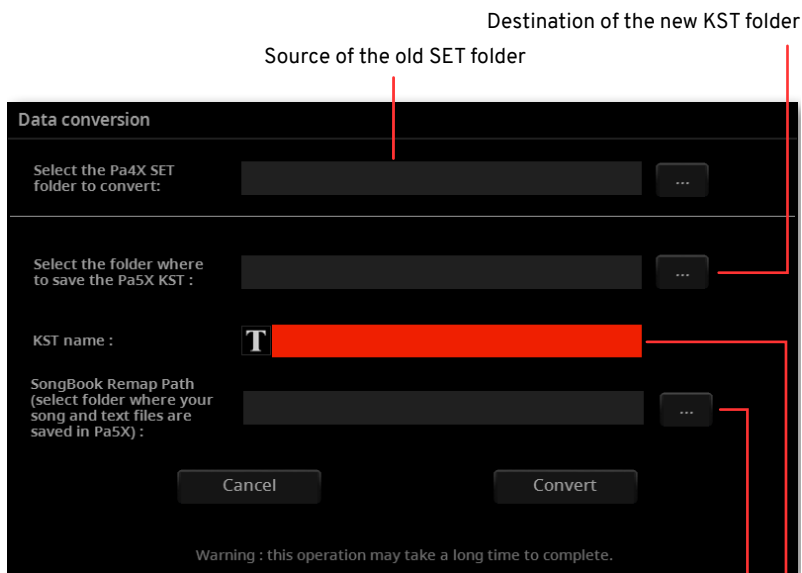
■ Convert the data

When you have the older data ready, connect the USB storage device(s) in which they are contained to Pa5X.

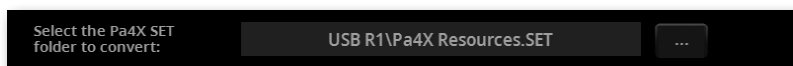
- 1 Press the **FILE**, then the **MENU** button to open the **File > Menu** page.



- 2 Touch the **Data Conversion** button to open the **Data Conversion** page.



- 3 Touch the **Source > Browse (...)** button to open the file browser and choose the source **SET folder** containing the Pa4X data.



- 4 Touch the **Destination > Browse (...)** button to open the file browser and choose a destination for the converted **KST folder**.

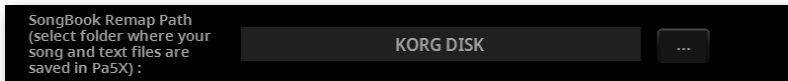


- 5 Touch the **Text Edit (T)** button to open the **virtual keyboard** and edit the name. When done editing the name, confirm by touching the **OK** button under the virtual keyboard.

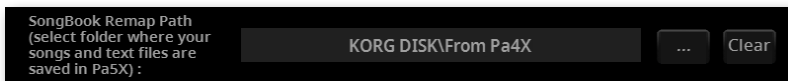


- 6 Choose the drive or folder where you collected the linked SongBook files (MID, MP3, TXT files) by touching the **SongBook Remap Path > Browse (...)** button and opening the file browser.

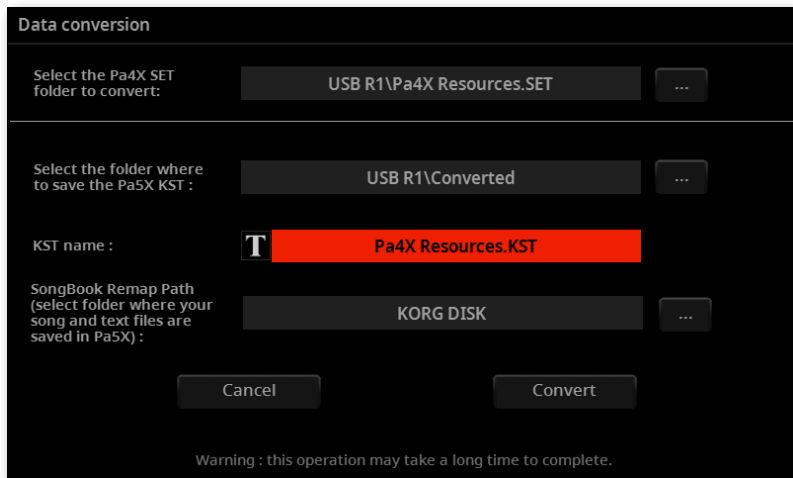
NOTE: This parameter will remain dimmed if no SongBook data is found inside the source **SET folder**.



With the root of the internal drive selected



With a folder ('From Pa4X') in the root of the internal drive selected

7 Be sure all the fields are filled.

The image shows a 'Data conversion' dialog box with a dark background. It contains four input fields with labels and buttons to the right of each field. The first field is labeled 'Select the Pa4X SET folder to convert:' and contains 'USB R1\Pa4X Resources.SET'. The second field is labeled 'Select the folder where to save the Pa5X KST :' and contains 'USB R1\Converted'. The third field is labeled 'KST name :' and contains 'Pa4X Resources.KST' with a red background. The fourth field is labeled 'SongBook Remap Path (select folder where your song and text files are saved in Pa5X) :' and contains 'KORG DISK'. At the bottom, there are 'Cancel' and 'Convert' buttons. A warning message at the very bottom states: 'Warning : this operation may take a long time to complete.'

Data conversion

Select the Pa4X SET folder to convert: USB R1\Pa4X Resources.SET ...

Select the folder where to save the Pa5X KST : USB R1\Converted ...

KST name : T Pa4X Resources.KST

SongBook Remap Path (select folder where your song and text files are saved in Pa5X) : KORG DISK ...

Cancel Convert

Warning : this operation may take a long time to complete.

8 Touch the **Convert** button, and wait for the files to be converted into the new format.

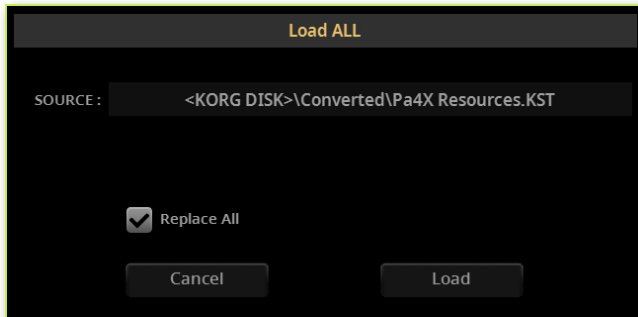
Loading the converted data

After having converted the Pa4X data, you can load them into Pa5X. Please check their integrity after loading.

■ Load the data

When done converting data from Pa4X, load the new KST folder.

- 1 Before loading the converted data, please make a backup of your existing User data. Save all of them into a new **KST folder**.
- 2 Then load the converted data. Go to the **File > Main** page and find the new **KST folder**.
- 3 Touch the folder to open it, and choose the **Load** command from the **page menu** (☰). The **Load All** dialog will appear.



- 4 Choose whether you want to Merge or Replace the data.
 - > If you **select** the **Replace All** checkbox, all the existing User files of the selected type (Style, Keyboard Set...) in the internal memory will be replaced by the ones you are loading.
 - > If the **Replace All** checkbox will remain **unselected**, the files you are loading will be merged with the ones already existing in the internal memory. Only the files with the same name will be replaced.

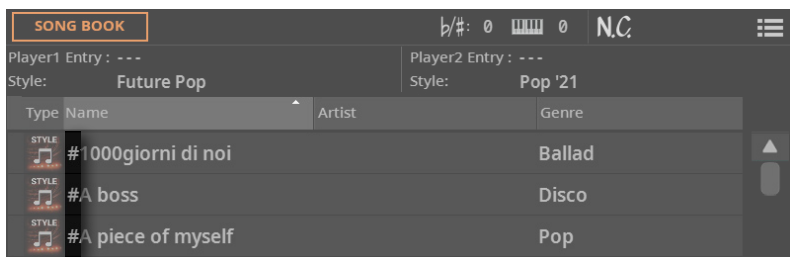
WARNING: Please note that replacing will delete all the data being replaced. Be sure to have a backup of the data you don't want to lose.

■ Check the converted data

While most data will be converted flawlessly, some might not. Some data may require further editing.

Check if all the Keyboard Sets, Sounds, Styles and Pads are working as expected. If not, edit them. In some case, you may prefer to replace the older data with the better ones offered by Pa5X.

In the SongBook, both the Book list and the Set Lists are converted. If a resource is missing from an Entry, a hashtag (#) is shown before the name.



If this happens, go to the **Entry Edit** page and relink the missing resource, or find a new one that can replace the older.

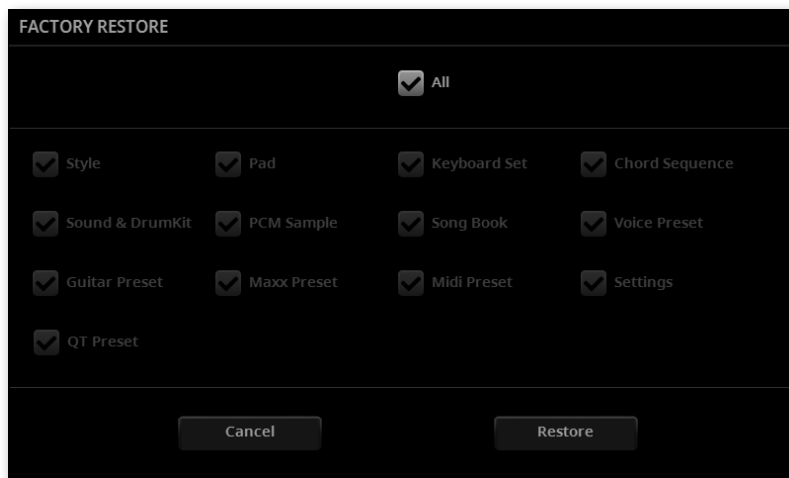
You can also see the missing resources by opening the **ConvertReport.txt** file that you can find inside the new **KST folder**.

■ Save the edited KST folder

If you have edited the converted data, save it as a KST folder. You can either overwrite the existing folder, or create a new one.

■ Clean the User memory

If you prefer to clean the User memory, after having checked the converted data, you can use the **File > Menu > Factory Restore** command. After restoring the data, turn the instrument off, then on again.



After the memory has been cleaned, you can reload the separate data from any KST folder, including the Pa5X data you previously backed-up, and portions of the converted Pa4X data.

Please note that the SongBook always needs the linked MID, MP3 and TXT files at the original position. If they are not reloaded, or are placed in a different way, they will not be found. If this happens, reload them at the original position, or relink them in the **SongBook > Entry Edit** pages.

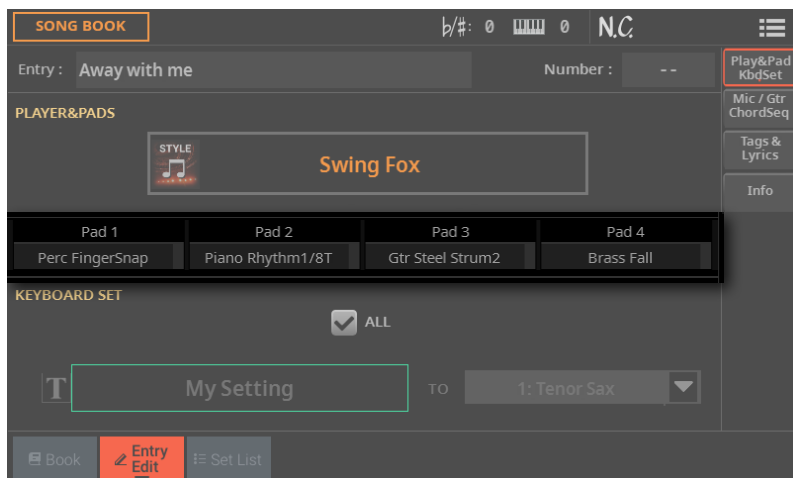
SongBook

Easier way to assign Pads to SongBook Entries

Pads can now be chosen from the **SongBook > Entry Edit** page.

With each SongBook Entry, four Pads are saved. When editing an Entry, or creating a new one, you can replace the Pads.

- 1 If you want to edit an existing **SongBook Entry**, choose it.
- 2 Go to the **SongBook > Entry Edit > Player/Pad/KbdSet** page.



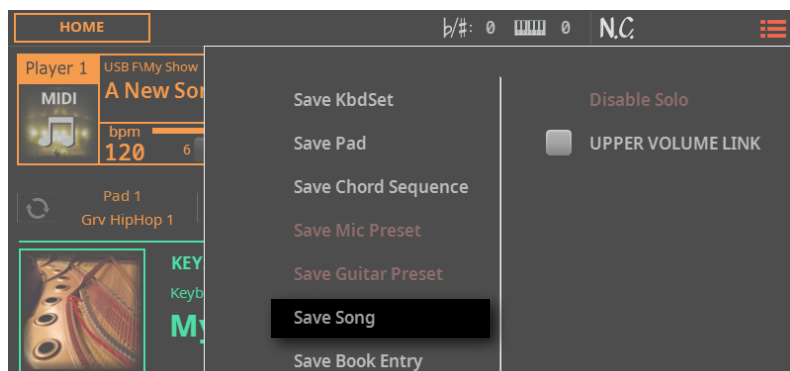
- 3 Touch the **Pad** you want to change, to open the **Select** window.
- 4 Choose a different Pad.

Saving Songs, Styles, Pads, and Chord Sequences

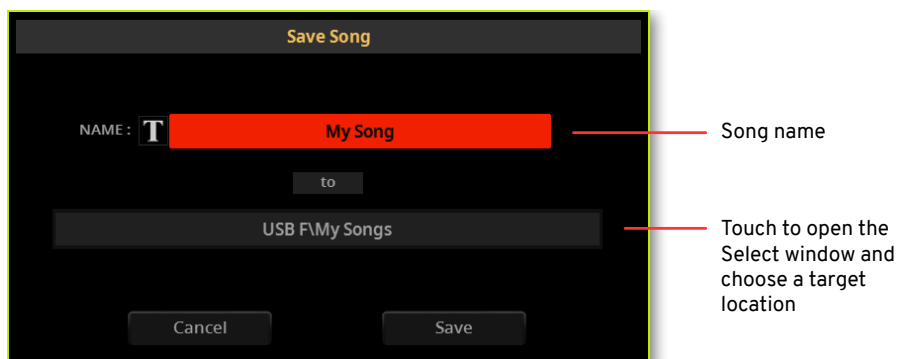
Menu command to save Songs everywhere from the Home page

Songs can now be saved everywhere from the **Home** page. You are no longer limited to overwriting them.

- > While a Song is selected, choose the **Save Song** command from the **page menu** (☰).



The **Save Song** dialog will appear.

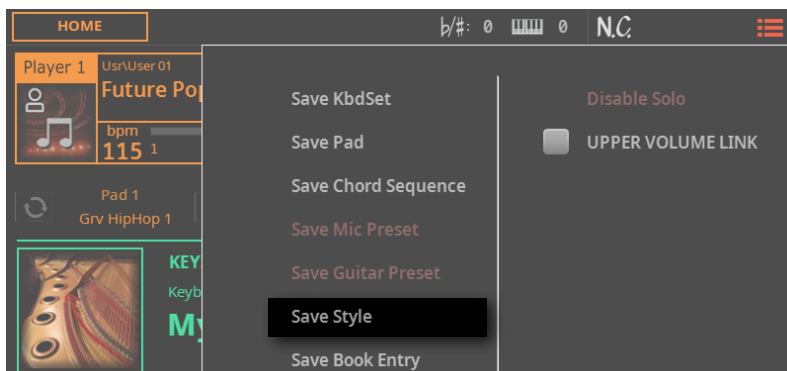


The procedure is the same already described at the end of the **Recording and editing the Songs** chapter in the User Manual.

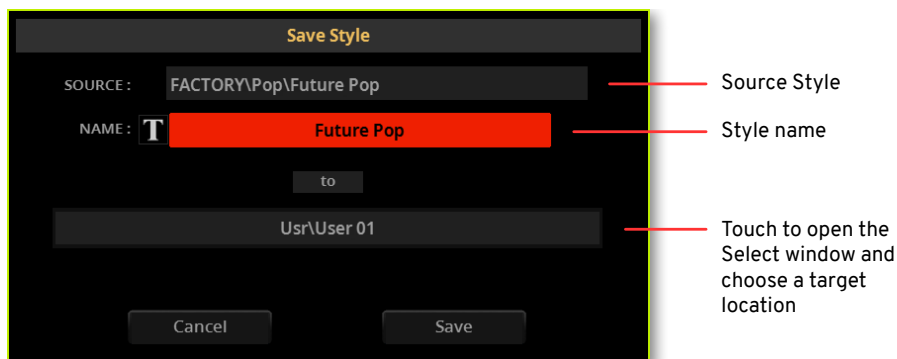
Menu command to save Styles everywhere from the Home page

Styles can now be saved everywhere from the **Home** page. You are no longer limited to overwriting them.

> While a Song is selected, choose the **Save Song** command from the **page menu** (☰).



The **Save Pad** dialog will appear.



The procedure is the same already described at the end of the **Recording and editing the Styles and Pads** chapter in the User Manual.

Menu command to save Pads into a Style

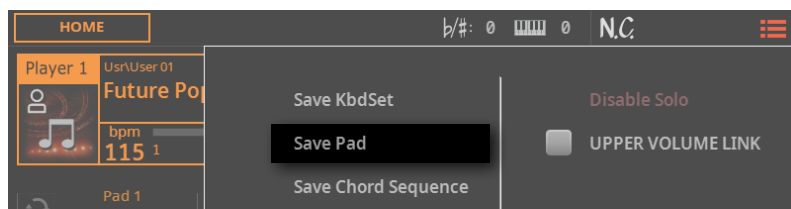
Pads can now be saved into the User Styles, as an alternative to their dedicated library, by choosing the dedicated **Save Pad** command. Please note that saving the Pads can be also done by saving a User Style.

Styles can contain four Pads. When choosing a Style, four Pads matching the selected Style are automatically selected.

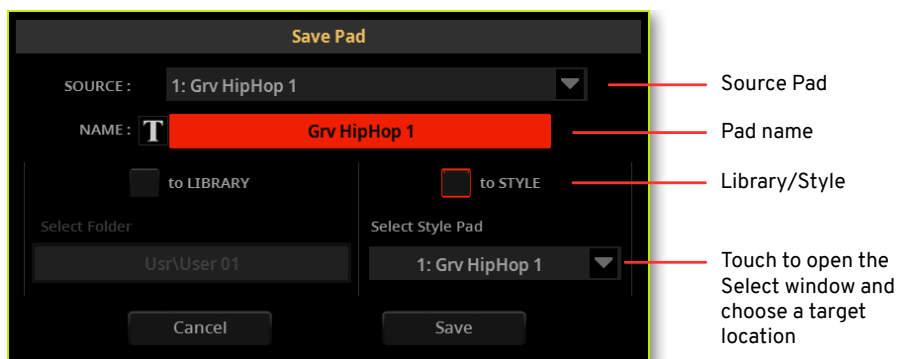
You can save the changes you made to the Pads into a User Style. Factory Styles can't be overwritten. If you want to edit and save a Factory Style, copy it into the User area.

■ Open the Save dialog from the display

> While a User Style is selected, choose the **Save Pad** command from the **page menu** (☰).



The **Save Pad** dialog will appear.



■ Rename the Pad

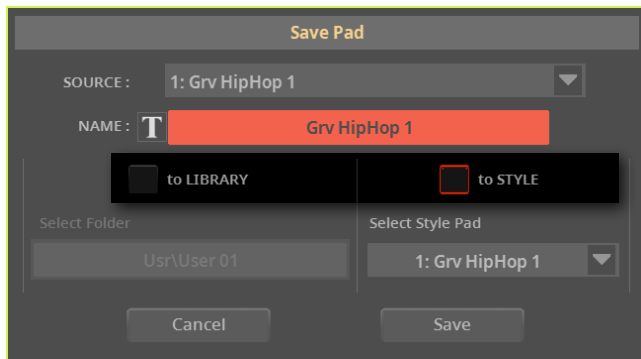
While in the **Save Pad** dialog, you may change the **name** of the Pad.

- 1 Touch the **Text Edit (T)** button to open the **virtual keyboard** and edit the name.
- 2 When done editing the name, confirm by touching the **OK** button under the virtual keyboard.

■ Choose between the Library and the Style

You can save the changes you made to the Pad into the Pad Library or the current User Style.

- > Use the **to Library / to Style** radio button to choose where to save the Pad.

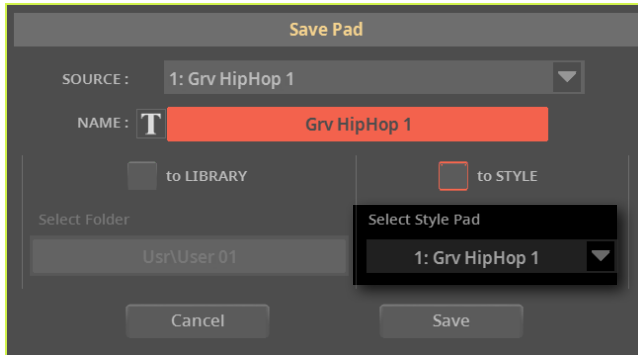


■ Save over Pad #1

- > If you decided to save into the current User Style, Pad #1 is already selected, so just touch the **Save** button.

■ Save to a different Pad location

1 If you want to save the Pad to a different location inside the same Style, touch the arrow next to the **Select Style Pad** parameter to open a pop-up menu and choose a different location.



2 Confirm the Save operation by touching the **Save** button.

WARNING: The Pad at the target location will be overwritten.

Menu command to save a Chord Sequence into a Style

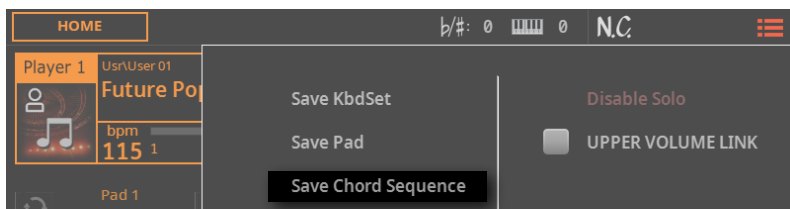
Chord Sequences can now be saved into the User Styles, as an alternative to their dedicated library, by choosing the dedicated **Save Chord Sequence** command. Please note that saving the Chord Sequence can be also done by saving a User Style.

Styles can contain a Chord Sequence. When choosing a Style, a Chord Sequence working well with the selected Style is automatically selected.

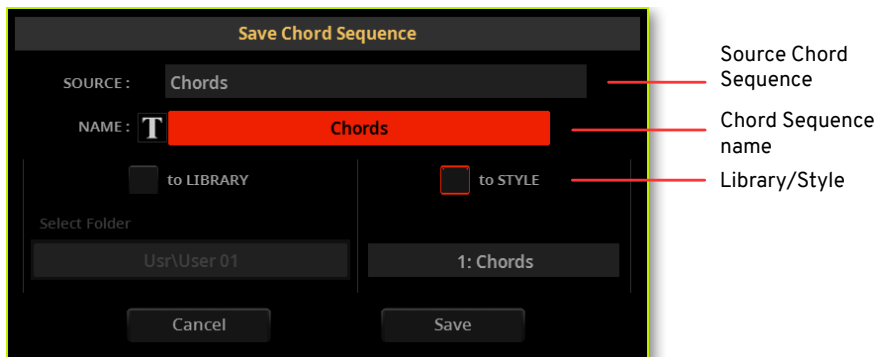
You can save the changes you made to the Chord Sequence into a User Style. Factory Styles can't be overwritten. If you want to edit and save a Factory Style, copy it into the User area.

■ Open the Save dialog from the display

> While a User Style is selected, choose the **Save Chord Sequence** command from the **page menu** (☰).



The **Save Chord Sequence** dialog will appear.



■ Rename the Chord Sequence

While in the **Save Chord Sequence** dialog, you may change the **name** of the Chord Sequence.

- 1** Touch the **Text Edit (T)** button to open the **virtual keyboard** and edit the name.
- 2** When done editing the name, confirm by touching the **OK** button under the virtual keyboard.

■ Save the Chord Sequence

- > There is a single Chord Sequence location in the Style, so just touch the **Save** button.

WARNING: The Chord Sequence at the target location will be overwritten.

Chord Sequences can then be assigned to Styles and SongBook Entries. A Chord Sequence can be saved together with a User Style or a SongBook Entry.

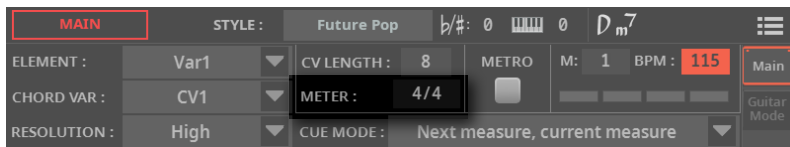
Style/Pad Edit > Main page

Support for multiple meters in Styles

Each Style Element can have a different **Meter/Time Signature**. The Meter can only be changed when the Style Element is empty, with nothing already recorded in it.

This doesn't apply to Pads, that are made of a single Element.

- 1 If you want to edit an existing Style, choose it.
- 2 Press the **REC/EDIT** button on the control panel to see the **Record/Edit** menu.
 - > If you want to edit the current Style, touch the **Style Edit** button in the menu. If you want to create a new Style, touch the **New Style** button in the menu, and confirm if you agree to lose any unsaved changes. In both cases, the **main page** of the **Style Edit** mode will appear.
- 3 Use the **Element** pop-up menu to choose a Style Element. As an alternative, press the corresponding button on the control panel to select one of the **Style Elements** (INTRO 1 ... ENDING 3).
- 4 Use the **Meter** parameter to set the meter (time signature) of the Style Element.



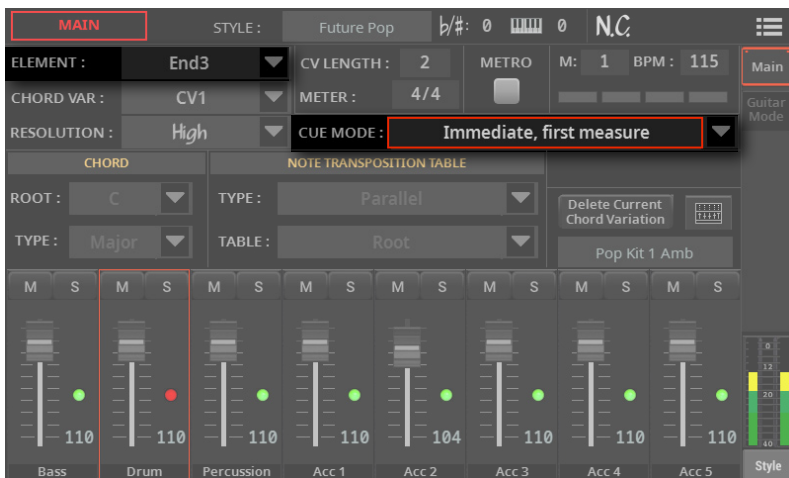
- 5 Start recording, and the meter will be recorded into the selected Style Element or the Pad.

If you want to change the Meter after having recorded something, you will have to delete all the Chord Variations in the current Style Element or Pad. You can do it either with the **Delete Current Chord Variation** command in the **Main** page of the **Style/Pad Edit** mode, or by using the **Style/Pad Edit > Menu > Style/Pad Edit > Cut Measure** function.

Editable cue mode for Ending 3 in Styles

Now, you can also choose a **Cue Mode** for the **Ending 3** Style Element.

- 1 If you want to edit an existing Style, choose it.
- 2 Press the **REC/EDIT** button on the control panel to see the **Record/Edit** menu.
- 3 If you want to edit the current Style, touch the **Style Edit** button in the menu. If you want to create a new Style, touch the **New Style** button in the menu, and confirm if you agree to lose any unsaved changes. In both cases, the **main page** of the **Style Edit** mode will appear.
- 4 Use the **Element** pop-up menu to choose a Style Element. As an alternative, press the corresponding button on the control panel to select one of the **Style Elements** (INTRO 1 ... ENDING 3).
- 5 Use the **Cue Mode** parameter to set the cue mode of the selected Style Element.



Style > Chords

Editable Chords track in Styles

A **Chords** track can now be accessed in the **Event Edit** page of the **Style Edit** mode, when an **Intro** or an **Ending** is selected. This track contains the pattern's Key Signature and the Chords.

> The **Key Signature** is the original key of the selected pattern. The first chord in that pattern doesn't always match the key signature (a pattern that is in the D minor key, for example, could start with an F Major chord, that is a chord played on the 3rd degree of the D minor scale).

When a chord is recognized on the keyboard, the recognized chord is linked to the original key signature, and the pattern is transposed accordingly.

> The **Chord** events are used to play chord progressions on the Guitar Mode tracks, all the other Style and Pad tracks (assuming they are not set with a No Transpose-type NTT), and the Keyboard Ensemble (if enabled). You can see these chords playing in the Chords area on top of each page.

In a Style, only the **Intro** and **Ending** Style Elements can contain a chord progression. Usually, only **Intro 1** and **Ending 1** are reserved to chord progressions.

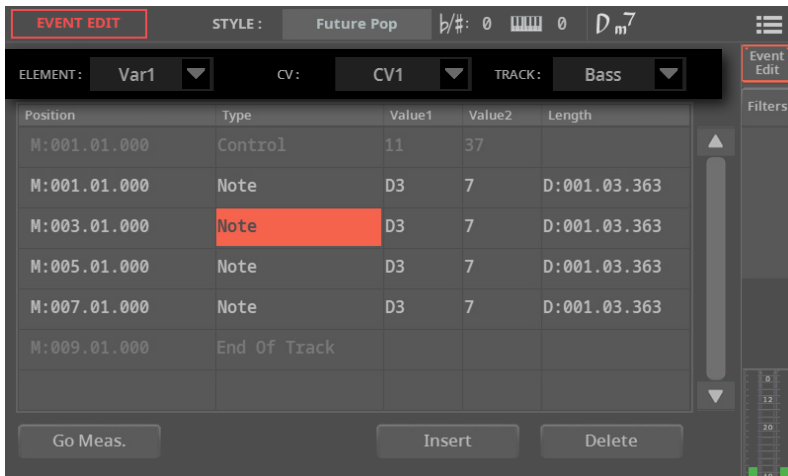
Additional chord types for the Chords track

Eighty-six new chord types have been added to the Chords track. Chords were previously only available for the Guitar Mode. You can find them in the table contained in the [Programming chord progressions for the Intros and Endings](#) on the Pa5X section below.

Editing the Chords track

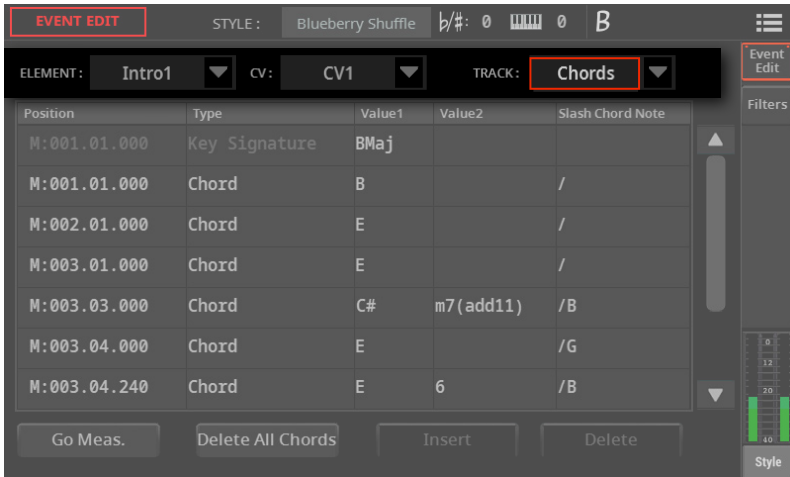
■ Go to the Style Edit > Event Edit page

- 1 If you want to edit an existing Style, choose it.
- 2 Press the **REC/EDIT** button on the control panel to see the **Record/Edit** menu.
- 3 If you want to edit the current Style, touch the **Style Edit** button in the menu. If you want to create a new Style, touch the **New Style** button in the menu, and confirm if you agree to lose any unsaved changes. In both cases, the **Main page** of the **Style Edit** mode will appear.
- 4 Press the **MENU** button on the control panel, and touch the **Event Edit** buttons to go to the **Event Edit** page.



- 5 Choose one of the **Style Elements** where you want to edit the **Chords** track. This track is available for the **Intro 1-3** and the **Ending 1-3** Style Elements.
- 6 Use the **Element** pop-up menu to choose a Style Element (between **Intro 1-3** and **Ending 1-3**). As an alternative, press the corresponding button on the control panel to select one of the **Style Elements** (**INTRO 1-3** or **ENDING 1-3**).
- 7 Use the **CV** pop-up menu to choose a **Chord Variation** inside the selected **Style Element**.

8 Use the **Track** pop-up menu to choose the **Chords** track.



■ Scroll the list

- Scroll through the various events by using the scrollbar.
- As an alternative, Touch the **Go Meas.** button to go to a different measure. The **Go To Measure** dialog will appear. Enter a target measure and touch **OK** to confirm. The first event available in the target measure will be selected.

■ Edit the Key Signature

- 1 Selects one of the Style Elements containing the Chords track (**Intro 1-3** or **Ending 1-3**).
- 2 Use the **Track** pop-up menu to choose the **Chords** track.
- 3 Use the **DIAL** or **UP/DOWN** buttons to change the key signature.

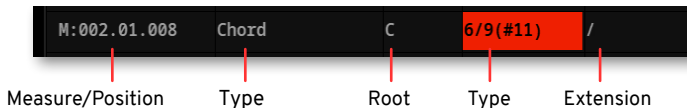
■ Insert Chords

- 1 Selects one of the Style Elements containing the Chords track (**Intro 1-3** or **Ending 1-3**).
- 2 Use the **Track** pop-up menu to choose the **Chords** track.
- 3 Insert a new chord.
 - > If the track contains no chords, touch the Key Signature line. A new chord will be inserted at the beginning of the pattern.
 - > If the track contains a chord, touch the one that is nearer to the position where you want to insert the new chord.
- 4 Touch the **Insert** button to add a new chord.

■ Edit the chord

You can change the position and chord type.

- > Touch the event to be edited, and edit it.



- > Select the **M (Measure)**, and use the **DIAL** or **UP/DOWN** buttons to change event's position. As an alternative, touch it a second time to open the **numeric keypad**.
- > Select the **Root** parameter, and use the use the **DIAL** or **UP/DOWN** buttons to change the chord's root.
- > Select the **Type** and **Extension** parameters, and use the use the **DIAL** or **UP/DOWN** buttons to edit them.

■ Delete a chord

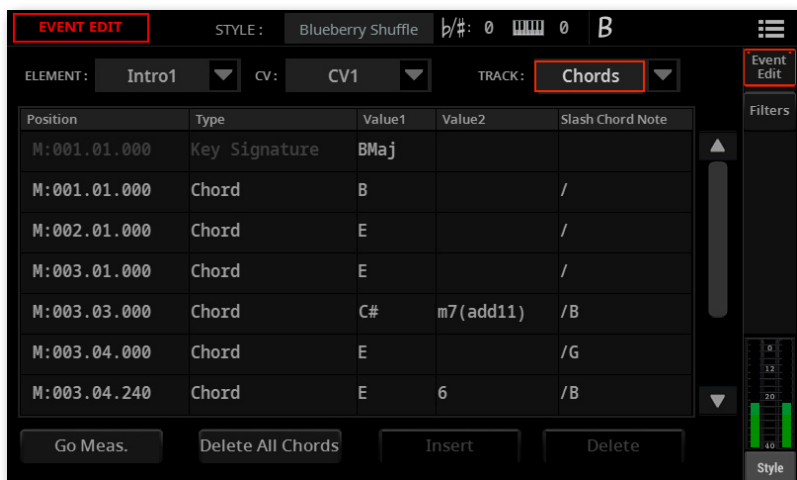
You can delete the Chord events.

- 1 Touch the Chord event to be deleted.
- 2 Touch the **Delete** button to delete the selected chord.

Programming chord progressions for the Intros and Endings on the Pa5X

When programming a Style in Style Edit mode, chords must be entered as **Chord** events (equivalent to MIDI Text Meta Events) into the **Chords** track.

- 1 Go to the **Style Edit > Menu > Event Edit** page.
- 2 Choose an **Intro** or **Ending** Style Element.
- 3 Choose the **Chords** track.
- 4 Insert a **Chord** event, and use the **DIAL** or **UP/DOWN** buttons to edit it or its position. Use **Value 1** to choose the **chord root** (note names go from **C** to **B**). Use **Value 2** to choose the **chord type**. Use **Value 3** to choose the **bass note** in a slash chord.



Please see the chord type abbreviations in the table contained in the [Abbreviations](#) and [Velocity](#) values corresponding to the chord types section below.

Programming chord progressions for the Intros and Endings on an external sequencer

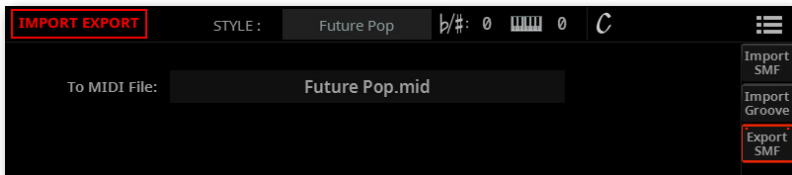
■ Connect Pa5X to an external sequencer

If you want to listen the Style you are editing on the external sequencer with the Sounds of Pa5X, connect Pa5X to a personal computer via **MIDI**, or through the **USB DEVICE** port.

■ Create a Style template in Pa5X

You can start editing a Style from scratch, or by using an existing Style as a template. Here is how to do.

- 1 In Pa5X, choose a Style similar to the one you want to create. This will be a good start point for your work in the external sequencer.
- 2 Export the Style as a Standard MIDI File, by going to the **Style Edit > Menu > Import/Export > Export SMF** page.

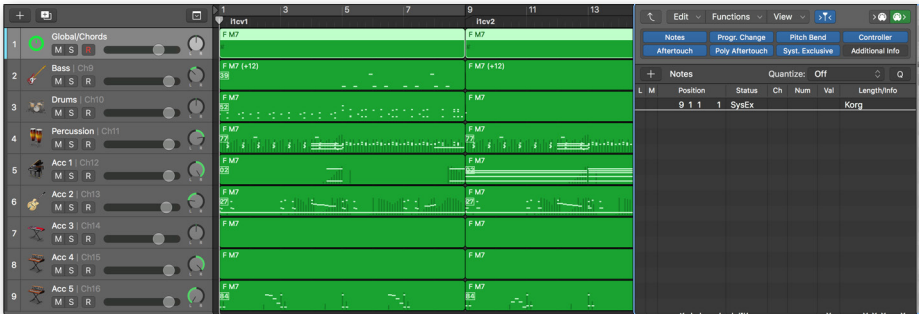


The exported Standard MIDI File will contain the structure of the Style, and the SysEx messages used to automatically select a Chord Variation when editing it on the external sequencer.

- 3 Leave Pa5X connected to the external sequencer, and in **Style Edit** mode, with the original Style selected.
- 4 Be sure the **Clock Source** is set to Internal (in the **Settings > Menu > MIDI > General Controls** page).

■ Edit the Style on the external sequencer

- 1 Load the Standard MIDI File into your preferred sequencer.



- 2 Edit the various patterns of the new Style.

■ Edit the chords on the external sequencer

Edit the chord progression for the **Intro 1** and/or **Ending 1** Style Elements (or any other Intro or Ending).

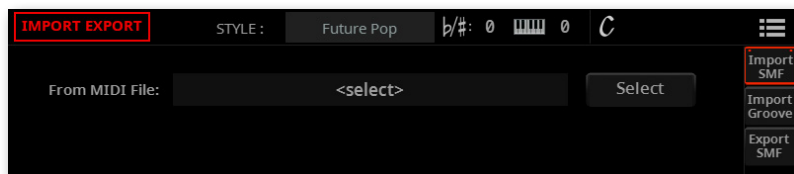
You can enter the chords as **Text Meta Events** into the **Chords/Global** track (with an All or Omni MIDI channel assigned). These chords can also be seen in the score page of the external sequencer, and will be seen in Pa5X's **Lyrics** and **Score** pages.

Since Meta Events are not transmitted via MIDI, if you want to listen your edits on the connected Pa5X, you have to enter the chords in the track(s) that will have to play them.

Input chords as **Note** events ranging from **C-1 to B-1** as the chord root, and their **Velocity** value to choose the corresponding chord type, as shown in the table contained in the **Abbreviations** and **Velocity** values corresponding to the chord types section below.

■ Import the Style into Pa5X

1 Import the Style saved as a Standard MIDI File from the external sequencer, by going to the **Style Edit > Menu > Import/Export > Import SMF** page.



2 Refine the Style in Pa5X's **Style Edit** mode.

Abbreviations and Velocity values corresponding to the chord types

This table shows the following types of data, to be used for chord progressions in **Intro 1** and **Ending 1** (or any other Intro or Ending):

- **Chord Types**, describing the chord.
- Equivalent **Chord** event in the **Chords** track, as shown in Pa5X's **Event Edit** page. This is also the **Text Meta Event** shown in the Chord/Global track in a sequencer.
- Equivalent **Velocity** value assigned to the **root note**, as shown in an individual track in a sequencer.

Chord Type	Chord / Text Meta Event	Velocity value
Major	(leave blank)	1
Major 7th	M7	2
Suspended 4th	sus	3
Major 7th suspended 4th	M7sus	4
Minor 6th	m6	5
Minor 7th flat 5th	m7(b5)	6
Dominant 7th	7	7
7th suspended 4th	7sus	8
Diminished major 7th	dim(M7)	9
Augmented 7th	7(#5)	10
Major w/o 3rd	(1+5)	11
Flat 5th	b5	12
Major 6th	6	13
Major 7th flat 5th	M7(b5)	14
Suspended 2nd	sus2	15
Minor	m	16
Minor 7th	m7	17
Minor major 7th	m(M7	18
7th flat 5th	7(b5)	19
Diminished	dim	20
Augmented	#5	21
Augmented major 7th	M7(#5)	22
Major w/o 3rd and 5th	(1+8)	23
Diminished 7th	dim7	24

Chord Type	Chord / Text Meta Event	Velocity value
Added 9th	(add9)	25
Augmented added sharp 9th	(add#9)	26
Added flat 9th	(addb9)	27
Added flat 9th sharp 11th	(addb9/#11)	28
Added 9th sharp 11th	(add9/#11)	29
Added sharp 9th sharp 11th	(add#9/#11)	30
Added 11th	(add11)	31
Added sharp 11th	(add#11)	32
6th 9th	6/9	33
6th 9th sharp 11th	6/9(#11)	34
6th sharp 11th	6(#11)	35
Major 9th	M9	36
Major 9th sharp 11th	M9(#11)	37
Major 7th sharp 11th	M7(#11)	38
Major 13th	M13	39
Major 13th sharp 11th	M13(#11)	40
Major 9th flat 5th	M9(b5)	41
Major 13th flat 5th	M13(b5)	42
Suspended added 9th	sus(add9)	43
Suspended added flat 9th	sus(addb9)	44
Major 9th suspended	M9sus	45
Major 7th suspended added 13th	M7sus(add13)	46
Major 13th suspended	M13sus	47
Minor added 9th	m(add9)	48
Minor added 9th 11th	m(add9/11)	49
Minor added 11th	m(add11)	50
Minor 6th 9th	m6/9	51
Minor 6th added 11th	m6(add11)	52
Minor 6th 9th added 11th	m6/9(add11)	53
Minor 9th	m9	54
Minor 7th added 11th	m7(add11)	55
Minor 11th	m11	56
Minor 7th added 13th	m7(add13)	57
Minor 9th added 13th	m9(add13)	58

Chord Type	Chord / Text Meta Event	Velocity value
Minor 13th	m13	59
Minor 7th added 11th 13th	m7(add11/13)	60
Minor 9th flat 5th	m9(b5)	61
Minor 11th flat 5	m11(b5)	62
Minor 7th flat 5 11th	m7(b5/11)	63
Minor 9th Major 7th	m9(M7)	64
Minor Major 7th added 13th	mM7(add13)	65
Minor 6th 9th Major 7th	m6/9(M7)	66
9th	9	67
9th sharp 11th	9(#11)	68
7th sharp 9th sharp 11th	7(#9/#11)	69
7th sharp 11th	7(#11)	70
13th	13	71
13th sharp 9th	13(#9)	72
7th flat 9th	7(b9)	73
7th flat 9th sharp 11th	7(b9/#11)	74
7th sharp 9th	7(#9)	75
13th sharp 11th	13(#11)	76
7th sharp 11th 13th	7(#11/13)	77
13th sharp 9th sharp 11th	13(#9/#11)	78
13th flat 9th sharp 11th	13(b9/#11)	79
13th flat 9th	13(b9)	80
7th added 13th	7(add13)	81
7th added flat 13th	7(addb13)	82
7th flat 5th 13th	7(b5/13)	83
9th flat 5th	9(b5)	84
7th flat 5th flat 9th	7(b5/b9)	85
7th flat 5th sharp 9th	7(b5/#9)	86
13th flat 5th	13(b5)	87
13th flat 5th flat 9th	13(b5/b9)	88
13th flat 5th sharp 9th	13(b5/#9)	89
9th suspended	9sus	90
7th suspended flat 9th	7sus(b9)	91
Diminished added 9th	dim(add9)	92

Chord Type	Chord / Text Meta Event	Velocity value
Diminished added flat 9th	dim(addb9)	93
Diminished Major 7th 9th	dim(M7/9)	94
Diminished Major 7th 9th 11th	dim(M7/9/11)	95
Diminished Major 7th 11th	dim(M7/11)	96
Sharp 5th added 9th	#5(add9)	97
Sharp 5th added 9th	#5(add#9)	98
Sharp 5th added 11th	#5(add#11)	99
7th sharp 5th sharp 11th	7(#5/#11)	100
9th sharp 5th	9(#5)	101
7th sharp 5th sharp 9th	7(#5/#9)	102
7th sharp 5th flat 9th	7(#5/b9)	103
7th altered flat 9th	7(alt b9)	104
7th altered sharp 9th	7(alt #9)	105
9th sharp 5th sharp 11th	9(#5/#11)	106
Major 9th sharp 5th	M9(#5)	107
Major 7th sharp 5th sharp 9th	M7(#5/#9)	108
Major 7th sharp 5th sharp 11th	M7(#5/#11)	109
Major 9th sharp 5th sharp 11th	M9(#5/#11)	110

As an example, a typical C Major progression will be entered as follows in Pa5x's **Event Edit** page and in a sequencer on a personal computer:

Chord	Text Meta Event content	Note / Velocity
C Major	C	C-1 / 001
A Minor 7th	A m7	A-1 / 002
D Minor	D m	D-1 / 016
G Dominant 7th	G 7	G-1 / 007

Importing and exporting the Chords track

As explained in the User Manual (see the [Importing and exporting the Styles](#) section in the [Recording and editing the Styles and Pads](#) chapter), you can import or export a Style, for editing on an external sequencer, as a Standard MIDI File.

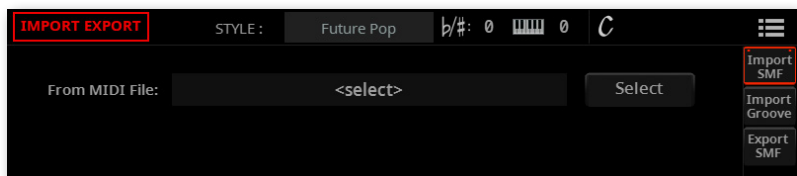
The Standard MIDI File may include notes or chords intended to create a chord progression in the Intro and Ending Style Elements (usually, Intro 1 and Ending 1).

■ Importing a Style

When importing a Style created with an external sequencer as a Standard MIDI File (in the **Style Edit > Import/Export > Import SMF** page), **Text Meta Events** found in the Chords/Global track will be converted into Chord events into the Style's Chords track.

If **Note** events in the C-1 to B-1 range are found in the MIDI channel corresponding to the track(s) to be driven by the chords, they will be converted to Chord events into the Style's Chords track, and Text Meta Events will be ignored.

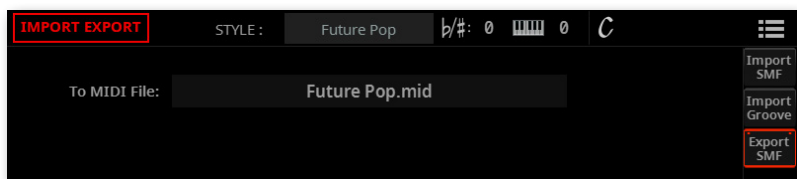
If different notes are found in different tracks, the more recent one will be the chord for all the tracks, so that they will always be aligned.



■ Exporting a Style

As explained in the same section, you can export a Style as a Standard MIDI File (in the **Style Edit > Import/Export > Export SMF** page), to be edited with an external sequencer. The Chord events in the Style's Chords track will be converted into **Text Meta Events** in the Chords/Global channel, and into **Note** events in the MIDI channel corresponding to the Style track(s).

With the external sequencer connected to Pa5X, you will be able to edit the Style (as a Standard MIDI File) from a personal computer, while listening your edits with the Sounds of Pa5X.



Style/Pad Edit > Edit

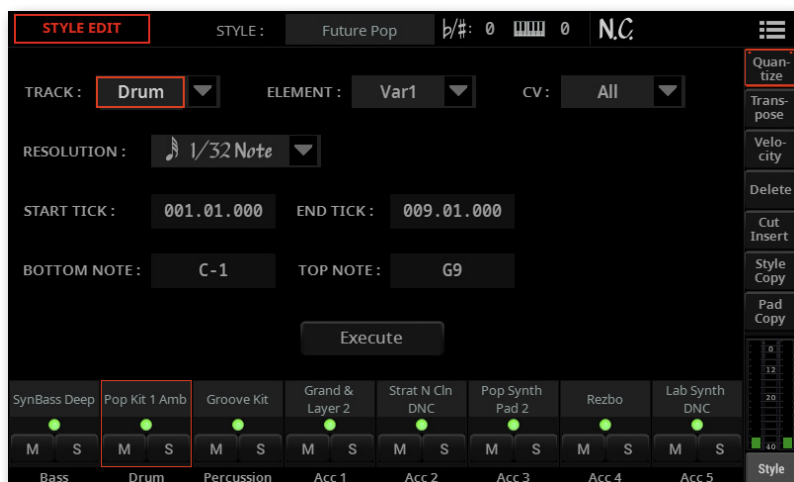
Editing the Style/Pad patterns

You can edit the Style/Pad pattern data in the **Style/Pad Edit > Style/Pad Edit** section. With Pads, there are only a single track and Pad Element.

Quantizing

The quantize function may be used to correct any timing mistake after recording, or to give the pattern a 'groovy' feeling.

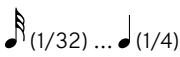
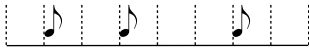
- 1 Go to the **Style/Pad Edit > Style/Pad Edit > Quantize** page.



- 2 Select the **Track**, Style Element (**E**) and Chord Variation (**CV**) to edit.

Track	Meaning
All	All tracks selected
Bass ... Acc5	Selected track

3 Use the **Resolution** pop-up menu to choose the quantize resolution.

Resolution	Meaning
	Grid resolution after recording, in musical values. For example, when you select 1/16, all notes are moved to the nearest 1/16 division. When you select 1/8, all notes are moved to the nearest 1/8 division. A 'b...f' character added after the value means swing-quantization. The 1/6, 1/12 and 1/24 values are triplets.
No quantization	
1/16	
1/8	

4 Use the **Start Tick** and **End Tick** parameters to set the beginning and ending of the passage to be quantized.

If a Chord Variation is four measures long, and you want to select it all, the Start will be positioned at 001.01.000, and the End at 005.01.000.

5 Use the **Bottom Note** and **Top Note** parameters to set key range to edit.

These parameters are only available when a Drum or Percussion track is selected. If you select the same note as the Bottom and Top parameters, you can select a single percussive instrument in a Drum Kit.

6 After having set the various parameters, touch **Execute**.

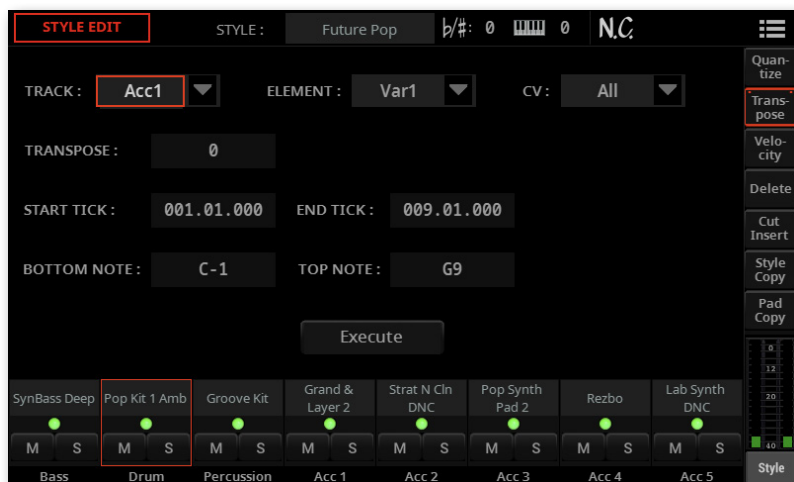
7 Press the **PLAY/STOP** (▶◻) button to check how it works. Press the **PLAY/STOP** (▶◻) button again to stop playback.

Transposing

The transpose function may be used to transpose the selected track(s).

After transposing, please don't forget to readjust the **Key/Chord** parameter in the main page of the **Style/Pad Record** mode.

- 1 Go to the **Style/Pad Edit > Style/Pad Edit > Transpose** page.



- 2 Select the **Track**, **Style Element (E)** and **Chord Variation (CV)** to edit.

Track	Meaning
All	All tracks selected, apart for the tracks set in Drum mode (like the Drum and Percussion tracks). The whole selected Chord Variation will be transposed.
Bass ... Acc5	Selected track.

- 3 Use the **Value** parameter to choose the transpose value.

Value	Meaning
-127 ... 127	Transpose value (in semitones)

- 4 Use the **Start Tick** and **End Tick** parameters to set the beginning and ending of the passage to be transposed.

If a Chord Variation is four measures long, and you want to select it all, the Start will be positioned at 001.01.000, and the End at 005.01.000.

- 5 Use the **Bottom Note** and **Top Note** parameters to set key range to edit.

6 If you select the same note as the Bottom and Top parameters, you can select a single percussive instrument in a Drum Kit. Since in a Drum Kit each instrument is assigned to a different note of the scale, transposing a percussive instrument means assigning the part to a different instrument.

7 Selective transpose can also be used to avoid transposing RX Noises (transposing only notes under C7).

8 After having set the various parameters, touch **Execute**.

9 Press the **PLAY/STOP** (▷◻) button to check how it works. Press the **PLAY/STOP** (▷◻) button again to stop playback.

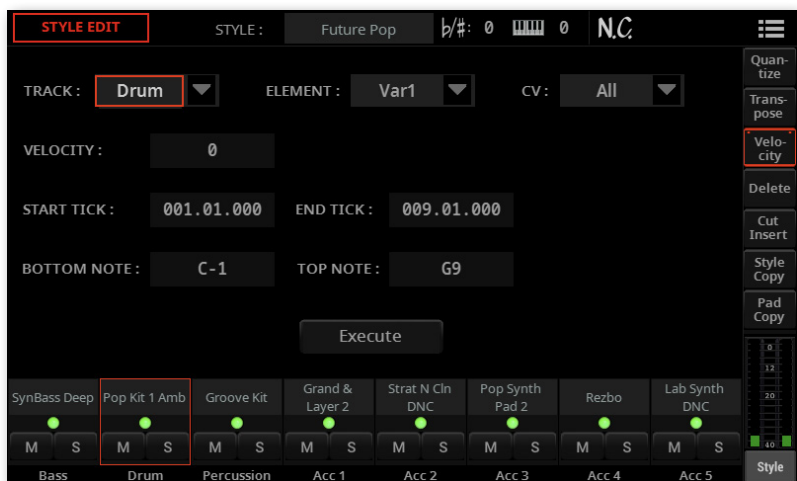
Editing Velocity data

You can change the velocity (dynamics) value of notes in the selected track.

When an RX Sound is assigned to the track being edited, the resulting sound may change, since this kind of Sounds is made of several different layers triggered by different velocity values.

Also, a fade-out may result in the level 'jumping' up next to the zero, since a higher-level layer may be selected by low velocity values.

1 Go to the **Style/Pad Edit > Style/Pad Edit > Velocity** page.



- 2** Select the **Track**, Style Element (**E**) and Chord Variation (**CV**) to edit.

Track	Meaning
All	All tracks selected. The velocity for all notes of the whole selected Chord Variation will be changed.
Bass ... Acc5	Selected track.

- 3** Use the **Velocity** parameter to choose the transpose value.

Value	Meaning
-127 ... 127	Velocity change value (in MIDI value)

- 4** Use the **Start Tick** and **End Tick** parameters to set the beginning and ending of the passage to be edited.

If a Chord Variation is four measures long, and you want to select it all, the Start will be positioned at 001.01.000, and the End at 005.01.000.

- 5** Use the **Bottom Note** and **Top Note** parameters to set key range to edit.

If you select the same note as the Bottom and Top parameters, you can select a single percussive instrument in a Drum Kit. Selecting a range can also be used to only edit RX Noises (from C7) or ordinary notes (under C7).

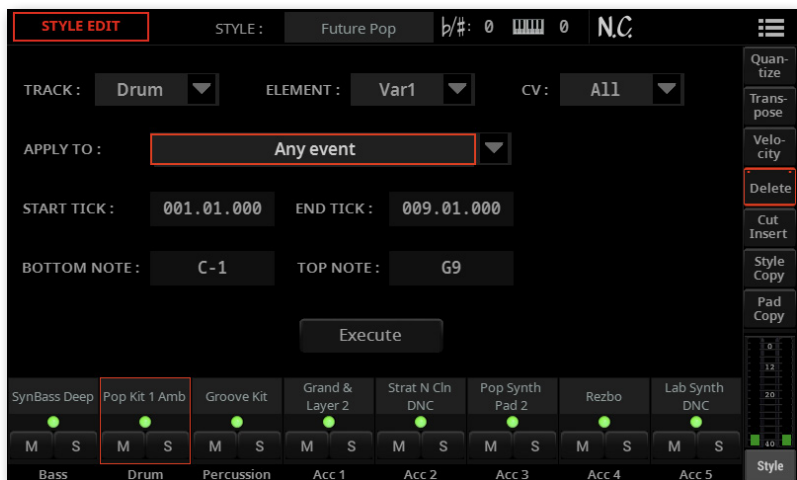
- 6** After having set the various parameters, touch **Execute**.

- 7** Press the **PLAY/STOP** (▶□) button to check how it works. Press the **PLAY/STOP** (▶□) button again to stop playback.

Deleting data from measures

The **Delete** page is where you delete MIDI events out of the Style or Pad. This function does not remove measures from the pattern. To remove whole measures, use the Cut function instead.

- 1 Go to the **Style/Pad Edit > Style/Pad Edit > Delete** page.



- 2 Select the **Track**, **Style Element (E)** and **Chord Variation (CV)** to edit.

Track	Meaning
All	All tracks selected. After deletion, the selected Chord Variation will remain empty.
Bass ... Acc5	Selected track.

3 Use the **Event** pop-up menu to choose the type of event to delete.

Event	Meaning
Any Event	All events. The measures are not removed from the Chord Variation.
Note & RX Noise	All notes in the selected range.
Duplicate Notes & RX Noise	All duplicate notes. When two notes with the same pitch are encountered on the same tick, the one with the lowest velocity is deleted.
After Touch (Mono/Poly)	After Touch events.
Pitch Bend	Pitch Bend events.
Program Change	Program Change events, excluding the bundled Control Change #00 (Bank Select MSB) and #32 (Bank Select LSB). This kind of data is automatically removed during recording.
Any Control Change	All Control Change events, for example Bank Select, Modulation, Damper, Soft Pedal...
CC0/32 ... CC127	Single Control Change events. Double Control Change numbers (like 00/32) are MSB/LSB bundles. Some CC data are automatically removed during recording.

4 Use the **Start Tick** and **End Tick** parameters to set the beginning and ending of the passage to be deleted.

If a Chord Variation is four measures long, and you want to select it all, the Start will be positioned at 001.01.000, and the End at 005.01.000.

5 Use the **Bottom Note** and **Top Note** parameters to set key range to edit.

These parameters are available only when the **All** or **Note** option is selected. If you select the same note as the Bottom and Top parameters, you can select a single percussive instrument in a Drum Kit. Selecting a range can also be used to only edit RX Noises (from C7) or ordinary notes (under C7).

6 After having set the various parameters, touch **Execute**.

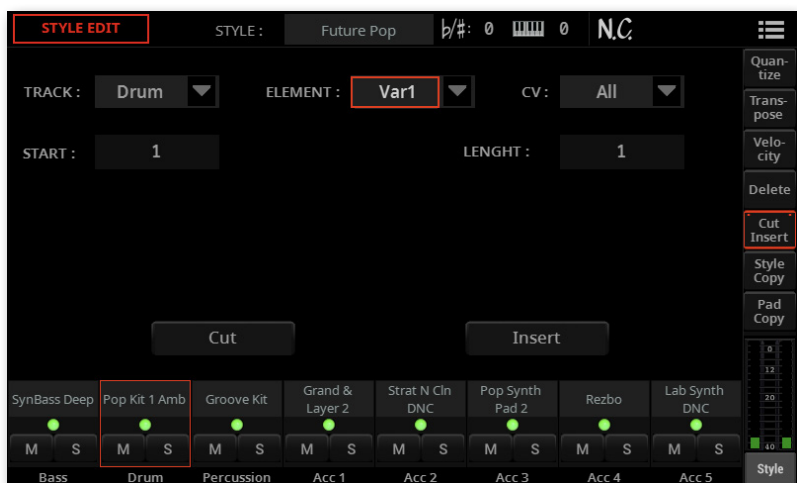
7 Press the **PLAY/STOP** (▷□) button to check how it works. Press the **PLAY/STOP** (▷□) button again to stop playback.

Cutting out existing measures, or inserting empty measures

You can delete a selected measure (or a series of measures) from the selected Chord Variation. All the following events will be moved back, to replace the cut measure(s).

Or, you can insert empty measures, starting at the chosen position. All the following events will be moved forward, to make room for the inserted measures.

- 1 Go to the **Style/Pad Edit > Style/Pad Edit > Cut/Insert** page.



- 2 Select the **Track**, **Style Element (E)** and **Chord Variation (CV)** to edit.

Track	Meaning
All	All tracks selected
Bass ... Acc5	Selected track

■ Cut existing measures

- 1 Use the **Start** parameter to select the first measure to be cut.
- 2 Use the **Length** parameter to choose the number of measures to be cut.
- 3 After having set the various parameters, touch **Execute**.

■ Insert empty measures

- 1 Use the **Start** parameter to select the measure from which to start inserting empty measures.
- 2 Use the **Length** parameter to choose the number of measures to insert.
- 3 After having set the various parameters, touch **Execute**.

■ Listen to the result

- > Press the **PLAY/STOP** (▶□) button to check how it works. Press the **PLAY/STOP** (▶□) button again to stop playback.

Sample Edit > Time Slicing

Revised Time Slice procedure

Time Slicing, in Sample Edit mode, has been improved.

More room for sliced samples

Individual samples generated from slicing the audio groove are now assigned to the following keys, while in **Sample Edit** mode. To access the lower notes, you may want to use the **UPPER OCTAVE** buttons to transpose the keyboard.

When saving, after editing is complete, only the sliced samples are preserved. The notes from C0 to C1 are deleted.

Key	Assigned sample/pattern	Speed %
C0	Full pattern cycling at half the speed	50%
C#0	Full pattern cycling at various speeds	53%
D0		56%
D#0		60%
E0		63%
F0		67%
F#0		71%
G0		75%
G#0		80%
A0		84%
A#0		89%
B0		94%
C1	Full pattern cycling at the original speed	100%
C#1 and above	Separate sliced samples	-

Saving the Audio Groove Slices as a Sound or Drum Kit

Once the Time Slicing procedure is completed, you can save the sliced samples as a new Sound or Drum Kit, together with a series of separate percussive samples, and a multisample or a drumkit arranging them on the keyboard.

In addition, a MIDI Groove containing the original sequence converted to MIDI events will also be created. The MIDI Groove is in Standard MIDI File (SMF) format.

1 While in the **Sample Edit > Time Slice** page, choose the **Save** command from the **page menu** () to open the **Save Time Slice** dialog.



2 You may change the **name** of the Sound or Drum Kit. Touch the **Text Edit (T)** button to open the **virtual keyboard** and edit the name. When done editing the name, confirm by touching the **OK** button under the virtual keyboard.

3 When back at the **Save Sound** dialog, choose the type of target by using the **Sound Type** pop-up menu.

Sound Type	Meaning
Drum Kit	The data will be saved into a Drum Kit. You can use Drum Families to send each sample to a separate group of Insert FXs, and separately control the send to the Master FXs.
Program	The data will be saved into an ordinary Sound. This format is more compact, with a single multisample. It can't send each sample to a separate group of FXs.

4 Choose where to save the Sound or Drum Kit by touching the **Sound > Select** button. This will open the **Sound Select** window. Empty locations are shown as a series of dashes ('---').

5 When back at the **Save Time Slice** dialog, choose where to save the generated MIDI Groove by touching the **Groove SMF > Select** button. This will open the **File** window, and you will be able to choose a folder in the drives where to save the file.

6 When back at the **Save Time Slice** dialog, confirm the Save operation by touching the **OK** button.

After generating the new Sound or Drum Kit and the MIDI Groove, import the MIDI Groove (as described below).

Importing the MIDI Groove to a Style or Pad track

After generating the MIDI Groove from an Audio Groove, you can use it in a Style's or Pad's track.

- 1 Exit from the **Sample Edit** mode.
- 2 Access **Style/Pad Edit** mode, either creating a new Style/Pad or editing an existing one.
- 3 Go to the **Style/Pad Edit > Menu > Import/Export > Import Groove** page.



- 4 Touch the **From MIDI File > Select** button to choose the MIDI Groove.
- 5 Use the **To Track** pop-up menu to choose a target track. We suggest the Percussion track, since the Drum track is better left free for standard Drum Kit sounds (for count-ins, breaks, etc.).

If you saved the Audio Groove Slices as a Drum Kit, be sure the track is set to Drum mode.

- 6 Use the **Element** and **CV** pop-up menus to choose a target Style Element and Chord Variation.
- 7 Touch the **Execute** button to confirm.

Using the Audio Groove Slices in other Sounds or Drum Kits

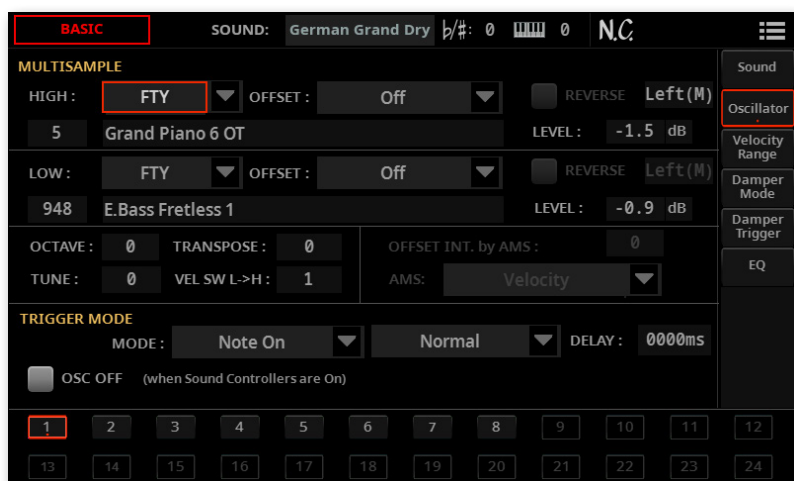
You can use the multisample or drum kits and the samples generated by a Time Slicing operation in other Sounds or Drum Kits.

Creating a new Sound based on the Audio Groove Slices

1 Go to the **Sound Edit** mode, and choose a Sound similar to the one to which you want to assign the multisample to.

If you prefer to start from blank programming, choose the **Initialize Sound** command from the **page menu** (☰).

2 Go to the **Sound Edit > Menu > Basic > Oscillator** page, and select one of the oscillators.



3 Choose the new **multisample** from the **USR** area, and assign it to one of the two layers (**High** or **Low**).

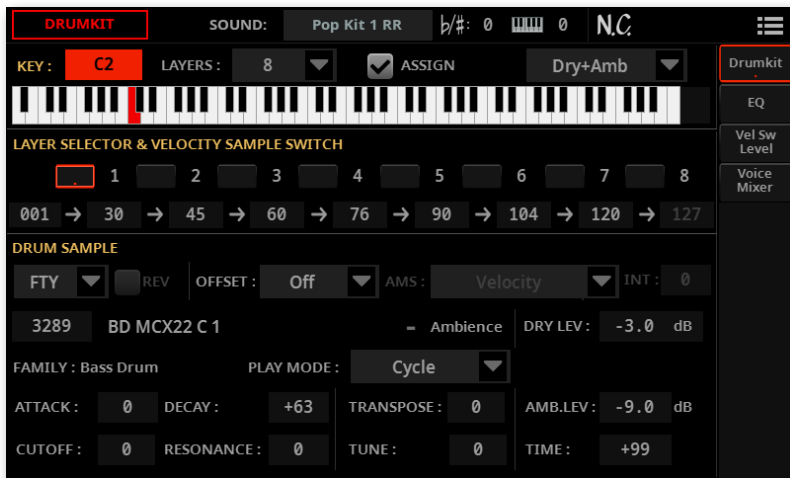
4 Choose the **Save Sound** command from the **page menu** (☰), and save the Sound to an empty User location.

Creating a new Drum Kit based on the Audio Groove Slices

1 Go to the **Sound Edit** mode, and choose a Drum Kit Sound similar to the one to which you want to assign the drum kit to.

If you prefer to start from blank programming, choose the **Initialize Sound** command from the **page menu** (☰).

2 Go to the **Sound Edit > Menu > Drumkit > Drumkit** page, and use the **Key** parameter to choose a note in the Drum Kit. Each note corresponds to one of the slices you want to use.



3 Choose one of the layers, and assign it a **sample** from the **USR** area.

4 Choose the **Save Sound** command from the **page menu** (☰), and save the Sound to an empty User location.

Effects

‘Use IFX/MFX’ parameters automatically saved

The on/off status of the **Use IFX** and **Use MFX** commands, in the **page menu** (☰) of the **Sound Select** window, is now global. It is preserved when turning the instrument off.

Controllers

Quarter Tone Presets selectable with the Assignable Switches

Quarter Tone Presets can now be assigned to the Assignable Switches. To do it, go to the **Settings > Menu > Controllers > Hand** page.

New Musical Resources

Keyboard Sets

Twenty-three Keyboard Sets have been added.

Synth

Arp Banks
Arp Solo
Arp Summer
Huge Analog
Jump
Lyle Solo
Mini AquaT
Mini Beginning

Mini Chord
Mini Classic 1
Mini Classic 2
Mini Classic 3
Mini Classic 4
Mini Classic 5
Mini Lucky
Mini Shine
Mini Solo

Mini Temple
There Mine
Classic Pad 1
Classic Pad 2
Classic Pad 3
Air Pad

Sounds

Twenty-three Sounds have been added.

Sound	CC00	CC32	PC
Factory/Electric Piano			
MK I Stage 2	121	18	2
Factory/Synth Pad			
OB Pad	121	22	89
Air Pad 1	121	23	89
Air Pad 2	121	24	89
Factory/Synth Lead			
Lyle Solo	121	29	80
Mini 3Rect	121	30	80
Jump	121	55	81
Arp Summer	121	56	81
Arp Banks	121	57	81
Mini Shine	121	58	81
Huge Analog	121	59	81

Sound	CC00	CC32	PC
Mini 3Saw	121	60	81
Mini Saw Aragon	121	61	81
Mini Beginning	121	62	81
Mini Lucky	121	63	81
Mini Temple	121	2	83
Mini AquaT	121	2	86
Mini Chord	121	3	86
Mini Classic 1	121	26	87
Mini Classic 2	121	27	87
Mini Classic 3	121	28	87
Mini Classic 4	121	29	87
Mini Classic 5	121	30	87

Styles

Thirty-four Styles have been added.

Pop

Forget Me Pop
Switch Groove
Shivering Groove
Ain't Worry Pop
On the Loose
Loser Pop
Shark Pop
Habit Groove
She Wanna Groove
Mileys Pop Groove
Lemon Drop Pop
Love Eyes Pop

Ballad

Snap Ballad
Perfect Ballad 4/4

Dance

Pretty Dance
Neonlight Dance
Breaking Dance
Feel Good Dance
Soul Seekers Dance
Damn Time Groove
Cold Heart Remix
Dancing Arms
Summer Feeling Dance
Modern Dance Groove
Heartbreaker

Missing Love Groove
Rely Dance
Stay Dancing
Modern Bat Dance
Grooving Around

Country

Soft Country Groove

Funk & Blues

Fool Funky Love
Fly Me Soul
Missing Love Soul

Pads

One hundred twelve Pads have been added, three have been remade.

Percussion

Tamb 8th Onbeat
Tamb 8th Backbeat
Tamb 8th Onbeat Shuffle*
Tamb 8th Backbeat Shuffle
Tamb 16th Onbeat*
Tamb 16th Backbeat*
Tamb 16th Onbeat Shuffle
Tamb 16th Backbeat Shuffle
Tamb 16th Note 4th
Tamb 16th Note Backbeat

Piano

Piano Acc Legato 1
Piano Acc Legato 2
Piano Acc Staccato Hi
Piano Acc Staccato Low
Piano Bossa
Piano Acc 1
Piano Acc 2
Piano Acc 3
Piano Acc 4
Piano Gospel
Piano Ballad King
Piano 6/8

Acoustic Guitar

Beat Strum 1
Beat Strum 2
Beat Strum 3
Beat Strum 4
Contemporary Strum
Ballad Arpeggio 1
Ballad Arpeggio 2
Ballad Strum 1
Ballad Strum 2
Latin Strum

Country Strum 1
Country Strum 2
Country Strum 3
Country Strum 4
Country Strum 16 Beat
Country Strum Shuffle
Country Arpeggio 3/4 1
Country Arpeggio 3/4 2
Ballroom Arpeggio 3/4
Ballroom Strum 3/4

Cinematic

Atmos Melody 3
Atmos Melody 4
Atmos Melody 5
Atmos Melody 6
Atmos Melody 7
Atmos Melody 8
Atmos Melody 9
Atmos Melody 10
Atom Seq 2
Atom Seq 3
Atom Seq 4
Atom Seq 5
Atom Seq 6
Atom Seq 7
Cinematic Bang 01
Cinematic Bang 02
Cinematic Bang 03
Cinematic Bang 04
Cinematic Bang 05
Cinematic Bang 06
Cinematic Bang 07
Cinematic Bang 08
Cinematic Bang 09
Cinematic Bang 10
Cinematic Impact 04

Cinematic Impact 05
Cinematic Impact 06
Cinematic Impact 07
Cinematic Impact 08
Cinematic Impact 09
Cinematic Impact 10
Dreaming 100 BPM
Flying Saucer

Synth

BigSweep
DarkStack
DistGhost
DoubleSynth
Leadspace
Modulead
NextDance
RudeOct
SquarePulse
StrumPluck
SummitPulse
SynthPianoid
ThinPulSeq
TranceFilter
TriangleNoise
Sq Synth 1
Sq Synth 2
Sq Synth 3
Sq Synth 4
Sq Synth 5
Synth PAD 1
Synth PAD 2
Synth PAD 3
Synth PAD 4
Synth PAD 5
Synth PAD 6
Synth PAD 7

Arpeggio Triangle 1	Bass One Note UpBeat	S&H Chords 1
Arpeggio Triangle 2	Bass One Note Massive 1 Bar	S&H Chords 2
One Note Arpeggiator	Percussive Chords 1	Chord Dance Syn
Bass Arpeggiator 1	Vintage 1	
Bass Arpeggiator 2	Vintage 2	

***) Note:** These Pads replace the older Tambourine 8th, Tambourine 16th, Tambourine Shuffle Pads.

Improvements and bug fixes in OS 1.2.0

Improvements

User interface improvements

The commands in some page menus have been rearranged.

Some dialogs have been redesigned to host the new features.

Bug fixes

Data conversion

Styles converted from Pa4X could play the wrong chords during the Intros and Endings. Please convert the Pa4X SET folder again to fix this issue.

Time Slicing

The MIDI file generated by the **Time Slicing** feature was not handled correctly in memory.

SongBook

Some Track parameters were not correctly handled in the SongBook.

Lower and Memory

The Lower Sound was always playing during the Intros and Endings, when the **Chord + Lower** option was assigned to the **Memory Mode** parameter in the **Settings > Preferences > Style** page.

General improvements

Various minor bug fixes, improving speed and stability.

Improvements and bug fixes in OS 1.2.1

Improvements

New QT Preset/Scale options

The **Assign QT Preset/Scale to** parameter in the **Settings > Menu > Tuning > Scale/Tune** page was revised to include a new option. You can now choose between the following options:

Assign to	Meaning
KbdSet Tracks	The alternative scale tuning will affect all the Keyboard Sounds
Upper Tracks	The alternative scale tuning will only affect the Upper 1-3 Keyboard Sounds
All Tracks – KbdSet Priority	The alternative scale tuning will affect the Keyboard Sounds and the Style Sounds. It will not affect the MIDI Song Sounds.
All Tracks – Style Tracks Priority	The alternative scale tuning will affect the Keyboard Sounds and the Sounds of the Style Elements not including their own scale tuning (as programmed in the Style Edit > Element Track Control > Scale Tuning page). Selected Sounds of the Style Elements having their own scale tuning will not be affected. MIDI Song Sounds will not be affected.

For more information, please check the **Tuning and Scale** chapter in the User Manual.

Importing data from Pa4X

Importing user data from Pa4X has been further improved.

General improvements

The system should now be more stable and faster. Several minor improvements have been made to the software.

Bug fixes

Freeze with No Style

When a startup resource (set in the **Settings > Menu > General Controls > Startup** page) is not found, the 'no Style' indication appears when turning the instrument on. In this condition, the system could occasionally freeze.

Drum tracks and chords

With some User Styles, Drum-type tracks containing notes or chords intended to change with the harmony could ignore the recognized chords.

SongBook Entries not playing

In particular cases, some SongBook Entries created with OS v1.1.0 could not play with OS v1.2.0.

Reset

Pressing the **RESET/TAP** button while selecting a new Style could prevent the new Style from playing. It could also stop the Keyboard and Style Sounds.

Chord Follow and transpose

The **Chord Follow** option could not work correctly with transpose.

Crash while renaming MP3 Songs

In some cases, Pa5X could restart while renaming an MP3 file.

Samples damaged when saving

In particular cases, Samples could be damaged on save.

Wrong data saved with MIDI Songs

Settings for the Effects could sometimes not be saved correctly in a MIDI Song.

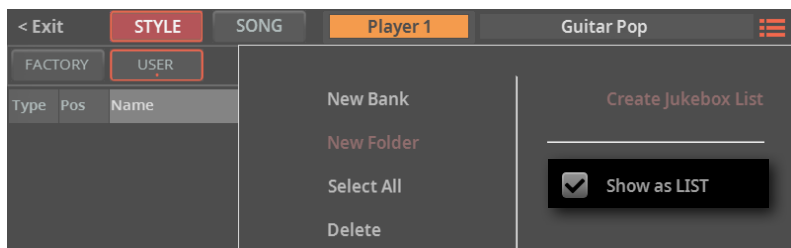
Pa5X Operating System Version 1.1

New features

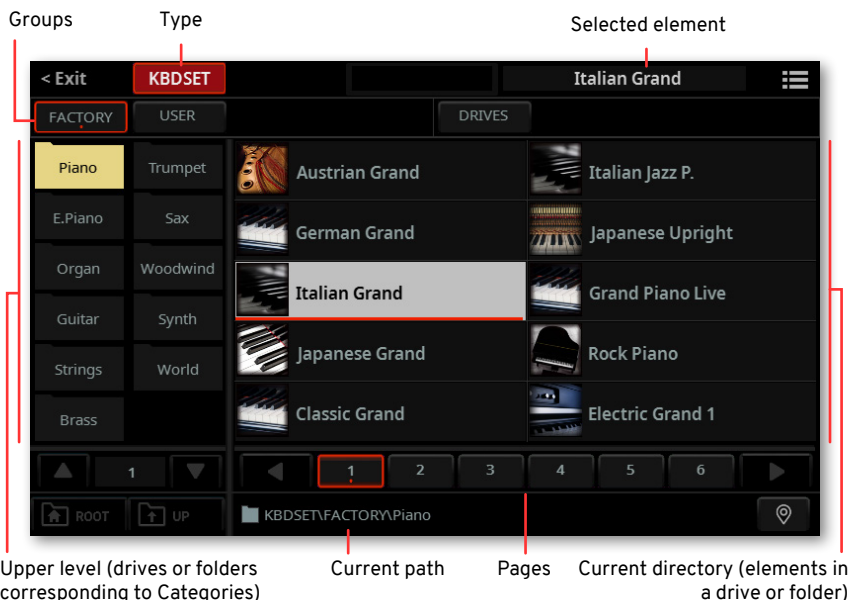
User Interface

List view added to the Select windows and File pages

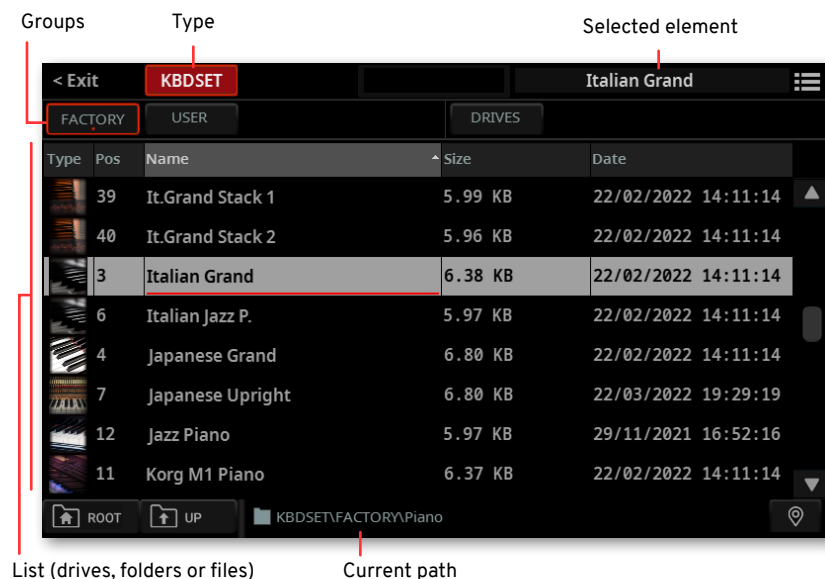
You can now see the content of a **Select** window as Tiles or as a List. To choose the View mode, select or deselect the **Show as List** option in the **page menu** (☰).



- > In **Tile View** mode (the default one) you see the musical resources as big tiles, easier to select.



- > In **List View** mode you see the musical resources as a list.

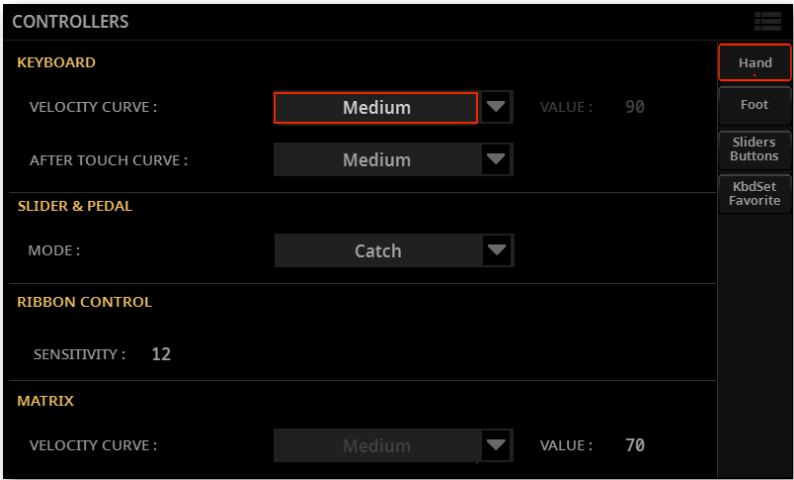


Controls

Catch vs. Jump slider and pedal behavior

When moving a slider or a pedal, the value of the controlled parameter can immediately jump to the current slider/pedal value, or wait for it to reach the current parameter value, and catch it only at that point.

- 1 Go to the **Settings > Menu > Controllers > Hand** page.



- 2 Use the **Slider&Pedal > Mode** pop-up menu to choose between the **Catch** and the **Jump** mode.

Mode	Meaning
Catch	The parameter value will not be updated until the slider or pedal has reached the current value. This allows for a smoother action.
Jump	The parameter value will immediately jump to the current value of the slider or pedal. This allows for a more immediate response.

Changed some Control > Main functions

Some different controls are now assigned to the **Main** mode of the **Control** section.

- > The **Harmony** slider is now **Harmony/Double**, and controls both levels.
- > The **Harmony** and **Double On/Off** buttons have now a different name, while preserving the same function.

Mic	Harm/Dbl	MicFx	Guitar	Line	Pads	Player1	Player2	Keys
On/Off	Harmony	Double	On/Off	On/Off	Bs&LwBck	Drum&Bass	Mel Mute	Man.Bass

Separate controls for the Mic Processor's Delay and Reverb Level parameters

The Mic Processor's **Delay** and **Reverb Level** parameters are now separate, and can be assigned to different controllers. They were formerly a single parameter ("Mic Delay/Reverb Level").

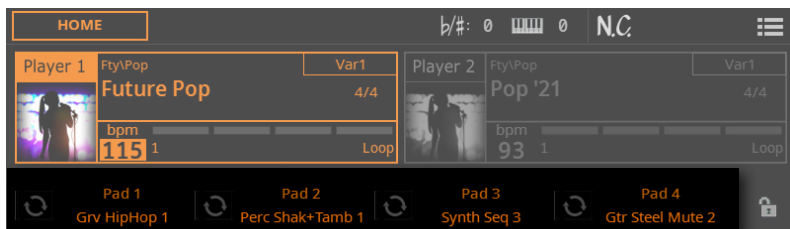
Added MP3 Volume control

The **MP3 Volume** parameter has been added to the list of parameters assignable to the **Control** sliders and the pedals.

Main page

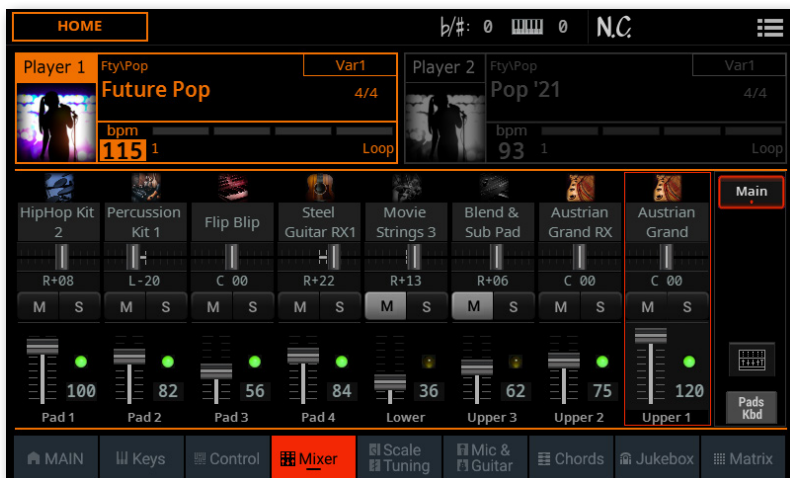
Pads selected from the Home > Main page

Touching the name of the Pads in the **Home > Main** page no longer triggers them. You can now touch them to open the **Pad Select** window, and choose different Pads.



Added Mixer pane in the Home page

A **Mixer** pane has been added to the **Home** page.



The **Mixer** button, allowing to jump to the full **Mixer** page, is no longer available in the **Home > Control** pane, and has been moved here.



Players

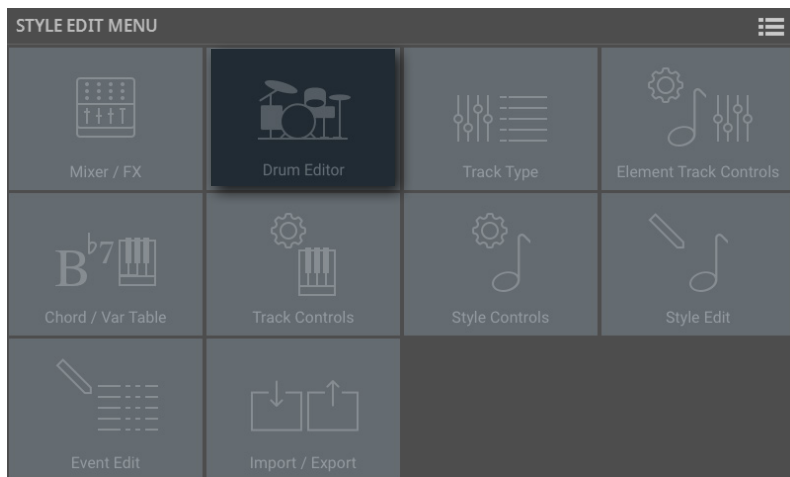
Second Player starting in sync with the first one

If you want to synchronize both Player's Tempo to the Tempo of the current Player, turn the **TEMPO > LOCK** on. You can start one Player after the other one, and they will play at the same Tempo.

Drum Edit

Drum Edit moved to a separate section

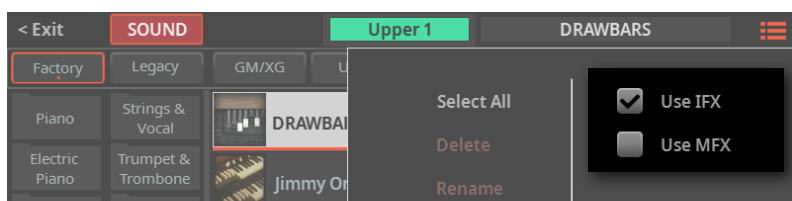
The **Drum Edit** page has now been moved to its own edit section, inside the **Drum Editor**.



Effects

Insert and Master FX automatically selected by the Upper 1 Sound

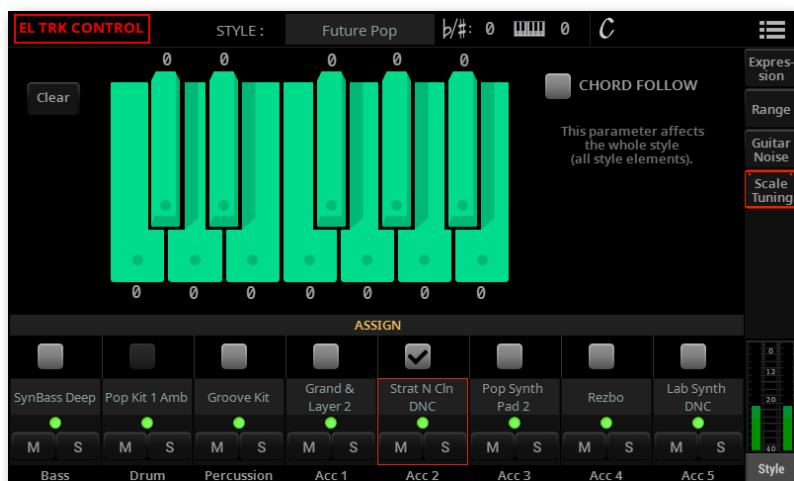
You can now have the Insert and/or Master FXs, saved with a Sound, be automatically assigned to the FX processors. To do this, select the **Use IFX** and/or **Use MFX** options in the **page menu** (☰) of the **Sound Select** window before choosing a Sound.



Style Edit

Scale/Tuning page added to Style Edit mode

The **Scale/Tuning** page has been added to the **Style Edit > Element Track Controls** edit section. You can now program a sub-scale for each Style Element, and enable the sub-scale on each track of the Style Element.



The scale's root is usually C. With **Chord Follow** activated, it will change depending on the recognized chord.

File management

Formatting of microSD cards

You can now format and use microSD cards of up to 1TB of capacity.

New Musical Resources

Pads

A new category of Pads has been added, with a whole new bank of Pads.

Synth

Synth Rhythm 1
Synth Rhythm 2
Synth Rhythm 3
Synth Rhythm 4
Lead Arpeggio
Solo Arpeggio 1

Solo Arpeggio 2
Synth Filter 1
Synth Filter 2
Sine Arpeggiator
Fat UpBeat
Pad UpBeat

Reso UpBeat
Synth UpBeat
Dark Pad
Bass DigiFilter 1
Bass DigiFilter 2
Panned Synth

Reso Rhythm
Matrix Pad
80's Sequence
5/16 Synth
Electro Sequence
Vintage Sweep

Improvements and bug fixes in OS 1.1.0

Improvements

Speed improvements

Selecting Styles and Songs is now faster.

Saving musical resources is now faster.

Drum Editor

The Drum Editor has been improved.

Importing from Pa4X

Importing data from Pa4X has been improved, and it is now faster and more accurate. After importing data from Pa4X, the 'ImportResultReport.txt' file containing a list of import errors will appear inside the new KST folder.

Page menus redesigned

Some page menus have been redesigned, to include the new features.

User Interface refinements

There have been several user interface refinements, to make it even easier to use.

Bug fixes

Various bugs

Various bug fixes, improving speed and stability.

**Address**

KORG ITALY SpA
Via Cagiata, 85
60027 Osimo (AN)
Italy

Web

www.korg.com