KORG

Pa300

professional arranger

Operating System Version 2.0

KORG Pa300 – Operating System release 2.0

New functions of OS Version 2.0

The following functions are added by upgrading to Operating System Version 2.0.

Sound Edit, Media	See page
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Sound Edit	
You can now choose between ROM, RAM and LOC Multisamples	3
You can get information on the content of the Sample memory, and delete unused User Samples from memory	3
Global	
A final Limiter has been added to the Global > Audio & EQ section, allowing for increased loudness	5
Musical Resources	
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If new, your instrument might already include the new Operating System. To check, please go to the Media > Utility page, and read the version number in the lower area of the display.

To load the new Operating System, please read the instructions supplied with the installation file in our web site (www.korg.com).

After having loaded the operating system, please use the Media > Utility > Factory Restore command to load the new global settings. To avoid overwriting the other resources, you may only leave the Global option selected when the Restore dialog appears.

Functions added by previous OS versions

Version 1.6

The following functions are added by upgrading to Operating System Version 1.6.

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Version 1.5

The following functions are added by upgrading to Operating System Version 1.5.

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Sound Edit added	3
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Style/Pad Record

Style/Pad Record added [1.5]

The Style/Pad Record mode has been added, to allow for full editing of Styles and Pads. To access it, go to the Style Play mode, and press the RECORD button.

For information on the extensive set of tools supplied by the Style/Pad Record mode, please read the updated User Manual for OS 1.5, that you can download from our web site (www.korg.com).

Sound Edit

Sound Edit added [1.5]

The Sound Edit mode has been added, to allow for full editing of Sounds and Drum Kits. To access it, press the SOUND button in the SELECTION section of the control panel, or touch the name of a Sound or Drum Kit in the display, to open the Sound Select window. Then, choose the Edit Sound command from the page menu.

For information on the extensive set of tools supplied by the Sound Edit mode, please read the updated User Manual for OS 1.5, that you can download from our web site (www.korg.com).

## Loading User Sounds based on User Samples [2.0]

Pa300 includes a 32 MB User Sample memory, allowing to load User Sounds and Drum Kits based on User Samples in the KORG Pa-Series format. Compressed Samples are loaded, but will not sound. Please check the User Sounds after loading.

You can load all the Samples contained in a SET folder. In case not all the Samples can fit in memory, just load single Sounds with their associated Samples.

User Samples are automatically reloaded when turning the instrument on. As a consequence, startup times will increase slightly.

Choosing User Multisamples while in Sound Edit [2.0]

While in the Sound Edit > Basic > OSC Basic page, or the Sound Edit > Drum Kit > Sample Setup page, you can choose the User Multisamples from the RAM bank, that is now added to the ROM and LOC banks.
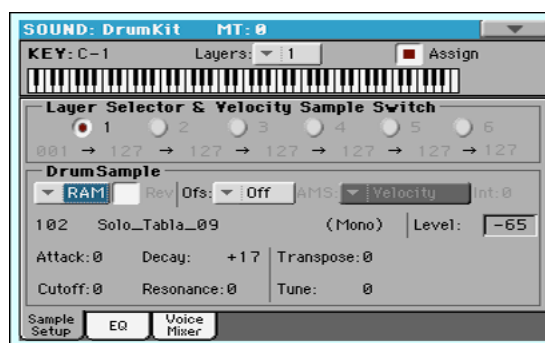
Getting information and deleting the User Samples [2.0]

Getting information on the User Sample memory. While in Sound Edit, press the MENU button and choose the User PCM Sample section. This will open the User Samples page.
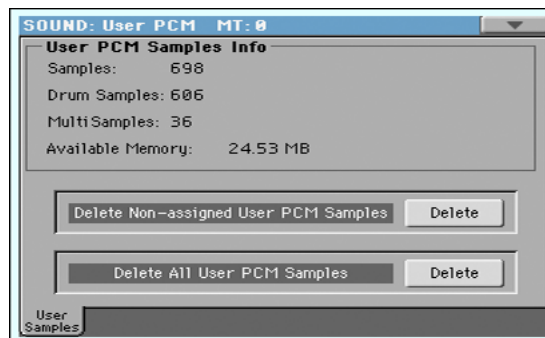
In this page, you can see the amount of Samples loaded in memory, and purge them in case you want to load new Samples, and the instrument reports there is no more space available.

Object in memory	Meaning
Samples	Number of User Samples in memory.
Drum Samples	Number of User Drum Samples in memory.
Multisamples	Number of User Multisamples in memory.
Available Memory	Pa300 includes 32 MB of RAM already installed; this is the maximum amount of non-compressed User Samples that can be loaded. This parameter shows the remaining memory for the User Samples (in Bytes).

Deleting User Samples. While in the Sound Edit > User Samples page, you can delete some or all the User Samples in memory, to make room for other User Samples to be loaded.

In case you don't have a copy of these Samples, it is advisable to save or backup the Samples you want to preserve for future use, before deleting them from the instrument's memory.

• Touch the Delete button next to the Delete Non-assigned User PCM Samples command to delete non-assigned User Samples.

This will delete all the User Samples, Drum Samples and Multisamples that are not used by any Sound or Drum Kit. Unused Samples can remain in memory when you delete Sounds or Drum Kits making use of them. They are not deleted automatically, since you may still want to use them for other User Sounds or Drum Kits.

• Touch the Delete button next to the Delete All User PCM Samples command to delete all the User Samples.

All the User Samples contained in memory will be removed. Do not use this command if there are User Sounds or Drum Kits making use of these Samples. Only use this command when you want to completely wipe-out the Sample memory.

Global Mode

Fingered (3 Notes) Chord Recognition mode added. Fingered mode renamed [1.6]

The new "Fingered (3 Notes)" Chord Recognition mode has been added. The former "Fingered" Chord Recognition mode has been renamed to "Fingered (1 Note)".

This is how the Global > Mode Preference >Style > Chord Recognition parameter changes.

Chord Recognition

This parameter defines how chords are recognized by the auto-accompaniment engine.

Depending on the status of the SPLIT LED, the Chord Recognition mode is automatically set as in the following table:

Chord Recognition Mode	
SPLIT LED On	*SPLIT LED Off*
One Finger	Fingered (3 Notes)
Fingered (1 Note)	Fingered (3 Notes)
Fingered (3 Notes)	Fingered (3 Notes)
Expert	Expert

One Finger You can compose a chord using a simplified chord playing technique:

> • Play a single note for a Major chord to be recognized.

> • Play the root note, plus a white key on the left, for a 7th. For example, play C3 + B2 for a C7.

> • Play the root note, plus a black key on the left, for a Minor chord. For example, play C3 + Bb2 for a C minor.

> • Play the root note, plus a white and a black key on the left, for a Minor 7th. For example, play C3 + B2 + Bb2 for a C min 7.

Fingered (1 Note)

> When in Split mode, play one or more notes to compose a chord. A full Major chord will be recognized when a single note is played.

> When in Full Keyboard mode, play at least three notes to compose a chord.

Fingered (3 Notes)

> Always play three or more notes for a chord to be recognized.

Expert When in Split mode, play two or more notes for a chord to be recognized. When in Full Keyboard mode, play at least three notes.

> If you play just one note, a unison will be played. If you play a fifth, a "root+5th" chord will be played.

> With this mode, you can play rootless and slashed chords, often used in jazz, fusion, modern pop and light music. This type of chord recognition is very useful to play piano chords typical of jazz piano players. You don't always need to play the root note, doubling the note already played by the bass track.

Control Channel on MIDI OUT [1.5]

The Control channel option has been added to the Global > MIDI > MIDI OUT Channels page. When this special channel is assigned to one of the MIDI OUT channels, MIDI messages are sent on this channel when choosing a SongBook Entry.

The messages sent when selecting a SongBook Entry are the following:

• An initialization strings, made of the NRPN Control Change messages #99 (MSB, with value 2) and #98 (LSB, with value 64) in fast succession.

• A selection string, made of the two Control Change messages CC#06 (Data Entry MSB) for the thousands and hundreds, and CC#38 (Data Entry LSB) for the tens and units. The range of the Data Entry controls, in this case, is 0~99 (instead of the typical 0~127).

This type of data can be used by external editors to receive informations from the SongBook.

For detailed information about remote selection of SongBook Entries, please refer to the User Manual.

Fixed velocity curve added [1.6]

The "Fixed" velocity curve has been added to the Velocity Curve parameter in the Global > Controllers > Hand Controllers page. This option will replace the existing "Fix" curve.

Velocity Curve

Fixed   No dynamic control available. Dynamic values are fixed, as in classic organs. When this option is chosen, you can set the fixed velocity value:


Tablet MIDI Preset added [1.6]

A "Tablet" MIDI Preset ha been added. This Preset, that allows for synchronizing the SongBook to a software running on a tablet, or any other function that will be implemented in the future, has the special Control channel assigned to MIDI IN/MIDI OUT Channel #16.

Limiter [2.0]

The Limiter allows for an increased loudness of the Sounds (Keyboard, Styles and MIDI Songs), by compressing the signal exceeding a defined threshold. MP3 files are not affected by the Limiter (since they are usually already 'produced', and do not need to pass through the Limiter again).

Accessing the Limiter. Go to the Global > Audio & EQ > Limiter page.
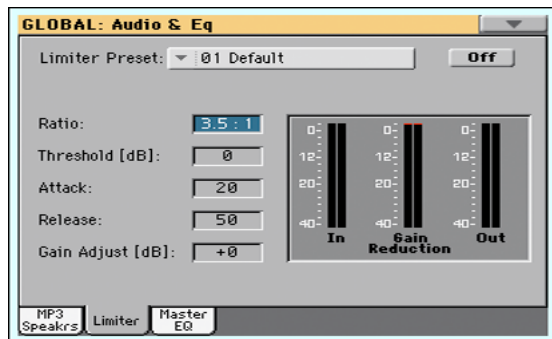
Choosing a Limiter Preset. Use the Limiter Preset pop-up menu to choose one of the available Limiter Presets, and automatically reconfigure the parameters.

Turning the Limiter on or off. Use the On/Off switch to turn the Limiter on or off.

Programming the Limiter. You can edit the Limiter parameters, to adapt to your own style of playing.

| Limiter Parameter	Meaning	Value
Ratio	Sets the signal compression ratio. Compression is applied only when the signal level exceeds the Threshold value. 1.0:1 means no compression.	Inf:1 … 1.0:1
Threshold	Sets the level above which compression is ap- plied. 0dB means no signal processed.	-40 … 0
Attack	Sets the attack time. A higher attack time will cause the compres- sion to be applied more slow- ly, and not react fast enough for notes with faster transients.	1 … 100
Release	Sets the release time. A higher release time will cause the com- pression to be released more slowly; this may help sustaining longer notes.	1 … 100
Gain Adjust	Sets the output gain. Use it to compensate for the gain loss caused by compression.	-Inf … +24

Checking the Limiter action. You can use the bargraph meters to check the level of the audio entering and going out of the Limiter.

• If the input level is too high, decrease the level of the Sounds, Styles and/or Songs that are playing.

• If the output level is too high, decrease the level of the Gain Adjust control.

Look at the gain reduction indicator, to understand the amount of limiting going on. Excessive limiting may dramatically change the quality of the musical program.

Saving a Limiter Preset. Open the Write Limiter Preset dialog

1. While in the Limiter page, choose the Write Limiter Preset command from the page menu to open the Write Limiter Preset dialog.
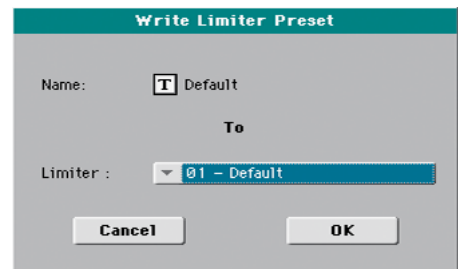
2. If you want to overwrite the current Preset, just touch the OK button.

3. If you want to choose a different location, use the Limiter pop-up menu.

4. If you want to change the name of the Preset, touch the Text Edit (T) icon to open the virtual keyboard and edit the name.

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

6. When back at the Write Limiter Preset dialog, confirm the Write operation by touching the OK button.

SongBook

Synchronizing the SongBook with external software [1.6]

Additional software has been created to work with the Song-Book. You can use Korg's own SongBook Editor to edit single entries, the SongBook database and the Custom Lists on a Windows PC. You can also use BauM Software's SongBook+ for iPad, or Zubersoft's MobileSheets for Android, to synchronize the SongBook entries with a tablet, and read lyrics and sheet music on the wider tablet display.

Other software is under development. Please check our web site regularly, for news about their release.

Shortcuts

A shortcut has been added. Please find it in the following table.

Shift functions

You can keep the SHIFT button pressed, and press another button on the control panel to directly jump to an edit page or dialog box.

Shift +	New Function
Style Record mode	
Tempo+/-	*When the Sound/Expression page is shown:* Proportionally adjusts the Expression level of the Style tracks

Musical Resources

After having loaded the Operating System, please use the Media > Utility > Factory Restore command to load the new Global settings. To avoid overwriting the other resources, you may only leave the Global option selected when the Restore dialog appears.

Warning: Before using the Factory Restore command, please save all your old data to a storage device, or they might be lost forever. To save the existing Musical Resources, use a Media > Save operation.

MIDI Preset added [1.6]

The "Tablet" MIDI Preset has been added.

Limiter Presets added [2.0]

The Limiter Presets have been added with the new Limiter functon.

Appendix

Improvements and bug fixes

Improvements in OS 1.6

Area	Improvement
Boot	The start-up procedure is now faster.
SongBook	When choosing a SongBook Entry, the STS #1 is auto-matically selected.

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