

# KORG

# Pa

# 300

professional arranger

# Operating System Version 2.1

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# KORG Pa300 – Operating System release 2.1

## New functions of OS Version 2.1

The following functions are added by upgrading to Operating System Version 2.1.

Sound Edit	See page
The User Samples page has been removed, due to the introduction of a new, complete Sample editing mode	
Sampling	
Sample editing added	3
Controllers	
Added compatibility with the VOX V860 volume pedal	4
Curve presets for the volume/expression pedal	4

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](http://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 2.0

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

Sound Edit, Media	See page
User Sounds based on User Samples can be loaded from other Pa-Series instruments (up to 32 MB; compressed Samples are loaded, but will not sound)	3
Sound Edit	
You can now choose between ROM, RAM and LOC Multisamples	3
In the User Samples page, you can get information on the content of the Sample memory, and delete unused User Samples from memory (This page has been removed with OS 2.1, due to the introduction of a new, complete Sample editing mode)	
Global	
A final Limiter has been added to the Global > Audio & EQ section, allowing for increased loudness	5
Musical Resources	
Limiter Preset added to the Global	7

### Version 1.6

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

Global	See page
Fingered (3 Notes) Chord Recognition mode added. Fingered mode renamed to Fingered (1 Note)	4
Fixed velocity curve added	5
Tablet MIDI Preset added	5
SongBook	
Using the SongBook with external software	6
Musical Resources	
MIDI Preset added to the Global	7

### Version 1.5

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

Style/Pad Record	See page
Style/Pad Record added	3
Sound Edit	
Sound Edit added	3
Global	
Control Channel on MIDI OUT	5
Shortcuts	
Shortcuts revised	6

## 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](http://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](http://www.korg.com)).

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

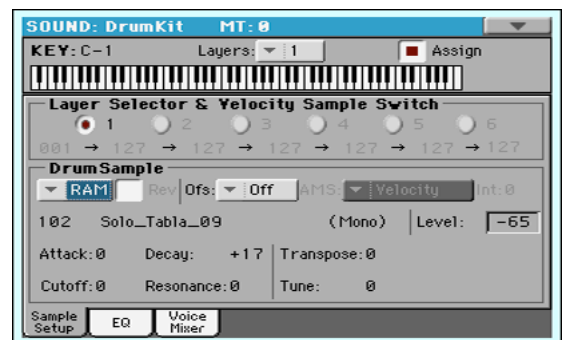
Pa300 includes a 32 MB User Sample memory, allowing to load User Sounds and Drum Kits based on User Samples in the KORG Pa-Series format. Compressed Samples are loaded, but will not sound. Please check the User Sounds after loading.

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.



## Sampling Mode

### Sample editing added [2.1]

Sampling allows you to create new Samples, new Multisamples and new synced Audio Grooves. You can now load and edit Samples, Multisamples, Sounds and banks of Sounds from various formats. For detailed information about the new Sampling mode, please read the User Manual for OS v2.1.

## 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.

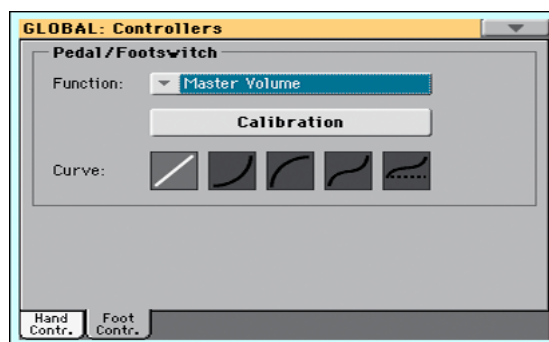
### Added compatibility with the VOX V860 volume pedal [2.1]

Pa300 is now compatible with the VOX V860 volume pedal.

### Curve presets for the volume/expression pedal [2.1]

**Note:** When installing OS v2.1, please recalibrate the volume/expression pedal and choose a curve. Older settings may no longer work.

With some functions assigned to a volume/expression pedal, you can choose a curve, shaping how the pedal will affect the function. When a curve can't be applied, the curve diagrams will appear dimmed.



1. Be sure to have connected an expression pedal, calibrated it, and selected a function. Curve presets can only be selected with some functions.
2. Touch one of the “Curve” buttons to select a curve preset.

Curve	Meaning
	Linear response.
	Exponential response. The function value will change faster toward the top of the pedal range.
	Logarithmic response. The function value will change slower toward the top of the pedal range.
	S-shaped response. The function value will change faster toward the bottom and the top of the pedal range, and will be smoother in the middle.
	S-shaped with offset response. As the previous one, but starting from a value higher than zero.

## 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.

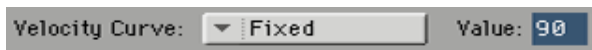
For detailed information about remote selection of SongBook Entries, please refer to the User Manual.

## 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:



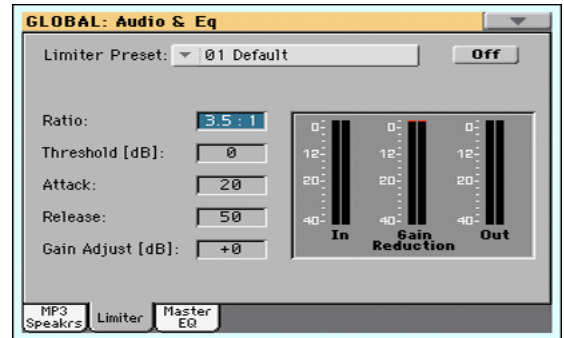
## Tablet MIDI Preset added [1.6]

A “Tablet” MIDI Preset has 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 applied. 0dB means no signal processed.	-40 ... 0
Attack	Sets the attack time. A higher attack time will cause the compression to be applied more slowly, and not react fast enough for notes with faster transients.	1 ... 100
Release	Sets the release time. A higher release time will cause the compression 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

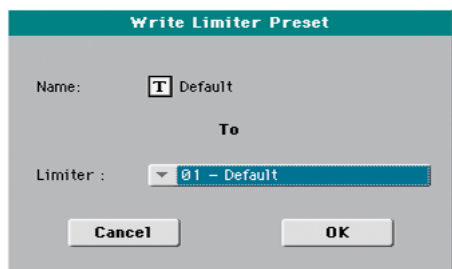
**Checking the Limiter action.** You can use the bargraph meters to check the level of the audio entering and going out of the Limiter.

- 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 SongBook. 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
<b>Style Record mode</b>	
Tempo+/-	<i>When the Sound/Expression page is shown: Proportionally adjusts the Expression level of the Style tracks</i>

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## Musical Resources

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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 function.

# Appendix

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## Improvements and bug fixes

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### 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 automatically selected.

### Improvements in OS 2.0

General improvements.

### Improvements in OS 2.1

General improvements.





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