

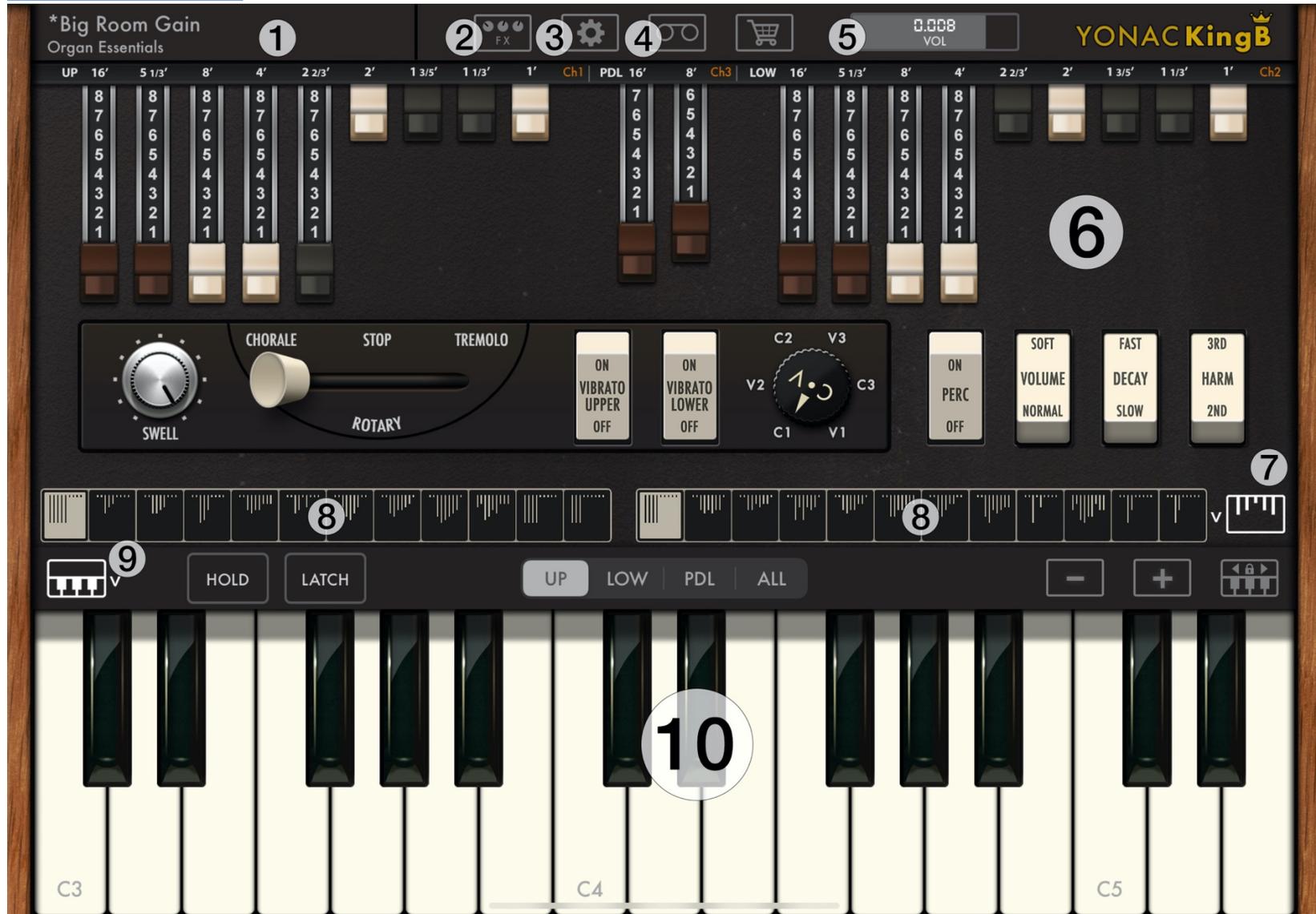
Owner's Manual



Table of Contents

| | |
|------------------------|----|
| The Basics..... | 3 |
| Organ..... | 5 |
| Rotary Cabinet..... | 11 |
| Guitar Amp..... | 14 |
| Pre FX..... | 15 |
| Post FX..... | 17 |
| Onscreen Keyboard..... | 18 |
| Presets..... | 19 |
| MIDI..... | 22 |
| AUv3..... | 26 |

The Basics



1. Preset Manager Access / Textual Display
2. Amps/FX panel access (automatically shown when screen is too small to simultaneously display the FX panel)
3. Organ, MIDI & System Preferences
4. Built-in recorder/playback/looper (standalone app only)
5. Output Volume
6. Organ Controls
7. Show/Hide Drawbar Registrations
8. Drawbar Registrations
9. Show/Hide Onscreen Keyboards
10. Onscreen Keyboard
11. Amps / FX Panel Select



Organ

Basic Organ Controls

KingB features three independent manuals: upper (also called Swell), lower (Great) and pedal. Each manual has its own set of drawbars with which to adjust its output tone. A drawbar adjusts the loudness of the signal at the frequency it is associated with. The output levels range, in discrete steps, from 0 (silence) to 8.

The frequency range of the drawbars relative to the root note are as follows,

| | |
|--------|-------------|
| 16' | Suboctave |
| 5 1/3' | Fifth |
| 8' | Fundamental |
| 4' | Octave |
| 2 2/3' | 12th |
| 2' | 15th |
| 1 3/5' | 17th |
| 1 1/3' | 19th |
| 1' | 22nd |

Drawbar settings are retained in "Drawbar Registrations." Drawbar registrations allow one to switch among different drawbar configurations on-the-fly without having to switch sound presets. This feature

corresponds to the “inverted keys” found on the far left of tonewheel organs. In addition, drawbar registrations retain Chorus/Vibrato switch and Percussion switch states for that manual.

Upper and lower manuals each have 12 drawbar registrations. To show or hide the registrations, touch the [|||] button on the lower right of the screen (or if the on-screen keyboard is visible, just above it to the right). Touch one of the 12 register buttons to change the drawbars on the associated manual. Any changes you make to the drawbars will be recorded into the selected registration.

The two Vibrato switches activate the scanner chorus / vibrato effect for the corresponding manual. The intensity and type of the effect is selected via the CV knob.

The upper manual is equipped with a special “Percussion” feature. This works by adding a bell-like attack to notes when the first key for the upper manual is depressed. Percussion is activated via the PERC switch. The VOLUME switch specifies the level of the effect, whereas the DECAY switch sets the length of the effect before fading into silence. The HARM switches the tone between the 2nd or 3rd overtones (i.e., output of the 4’ or 2 2/3’ drawbars).

KingB provides enhanced parameters for percussion that can be found under Organ Settings screen. These enable you to change percussion loudness and length for each mode, as well as alternate between monophonic (the default behavior) or polyphonic percussion, among other parameters.

If the rotary cabinet is turned on, the ROTARY sliding switch is used to control the motor state. CHORALE is when the speakers are rotating at their slow speed; TREMOLO is when they are rotating fast; STOP is when they are stationary.

Enhanced Modeling Parameters



KingB provides a collection of special parameters to alter the tonality, general characteristic, and response of the organ. These parameters can be found on the ORGAN SETTINGS screen.

ORGAN PARAMETERS

TONALITY: Adjust the master tonal response of the organ across all the keys. Values between 0 and 50 will cover most console organs in good working condition.

BRIGHTNESS: Adjust the overall brightness of the organ

CROSSTALK: Adjust the amount of spillage among tonewheels in close proximity

DRAWBAR LEAK: Specify the amount of leakage from key contacts

ASYMMETRY: Adjust the amount of irregularity in the tonewheels' shape and rotation, thus altering their tonality. Increasing the parameter will also increase the irregularities.

INTERFERENCE: Adjust the amount of signal spillage among organ's electronic components.

WIRING BLEED: Specify the amount of signal leakage from the wiring harnesses.

COMPONENT AGE: Alter the overall "feel" of the organ by emulating the effect of aging or mismatched circuit components.

WOBBLE: Specify the amount of axial instability in the tonewheels' rotation

CHORUS BOOST: Specify the amount of "air" or presence when one of the scanner chorus modes is activated (i.e., C1, C2, or C3).

BASS FOLD: Activate bass foldback (on by default). When enabled, the tones assigned to the 16' drawbar for the upper and lower manuals at their lowest octave are at the same frequency as that for the 8'. When disabled, 16' drawbar now blends in the complex tonewheels, which are a whole octave below in their fundamental, instead.

96 WHEELS: Introduces 5 additional tonewheels to cover the highest frequencies. Traditional console organs have 91 tonewheels, so this parameter is off by default.

SPINET: Enable emulation of spinet type organs, such as the M or T types. These organs had their own unique tone profile as compared to console organs. TIP: enabling SPINET and setting tonality to 50-100, and BRIGHTNESS to 50 is a good start for emulating spinet organs.

PERCUSSION PARAMETERS

SOFT VOL: Relative gain of the percussion signal when SOFT position is selected on the VOLUME switch.

NORMAL VOL: Same, but for the NORMAL position.

SHORT DCY: The decay time for the percussion signal when the FAST position is selected on the DECAY switch.

LONG DCY: Same, but for the SLOW position.

POLY: Enable polyphonic percussion (i.e., percussion is sounded for every key press, as opposed to the first – latter being the default behavior for console organs).

-3 dB: Activate automatic gain reduction for the drawbars whenever percussion is turned on. By default, this switch is ON

APPLY CV: If enabled, the scanner chorus / vibrato effect will also be applied to the percussion signal. Default is OFF.

Cancel 1': If enabled, turning the percussion on will cause the output from the 1' drawbar to be silenced. Default is ON.

KEY CLICK

ON VOL: Gain for the key click effect on note onset

OFF VOL: Gain on note release

TONE: Tonality of the keyclick. Higher values emphasize the click more.

PEDAL

TONE: Specify the tonality of the pedal manual

NOTE ATTK: The amount of time for a note to reach full loudness. Default is 0

NOTE REL: The amount of time before a note fades out after key release. Default is 0.

LEVELS

Individually set the loudness of each manual

TUNING

Specify the master tuning for the instrument.

ROTARY CABINET



KingB features a collection of carefully-modeled rotary cabinet and amp simulations. Each cabinet and amp has its unique tonality and response. The cabinet simulation is enhanced by controls pertaining to microphone placement, as well as parameters that alter the speed and acceleration of the two component speakers. In addition, the amps and cabinets have their own EQ stages.

POWER: Activate the rotary and cabinet.

TREMOLO / CHORALE: Switch between fast and slow running modes for the speakers. This is an additional parameter to the 3-way switch found on the main organ panel, so as to allow pairing with MIDI switches.

STOP / RUN: Activate the rotor brake for the speakers. This is an additional parameter to the 3-way switch found on the main organ panel, so as to allow pairing with MIDI switches.

AMP: Select the amp type feeding into the cabinet. In the OFF position, the organ output is fed directly into the cabinet.

GAIN: Specify the gain for the selected amp (not applicable if AMP knob is in the OFF position). Increasing the gain will allow the amplifier to distort more easily via its “Virtual Tube” technology.

BASS, MID, TREBLE: The EQ controls for the amp (not applicable if AMP knob is in the OFF position).

CAB: Select the cabinet model.

ACCEL / DECEL: Specify the amount of acceleration (when the cab is switched from Chorale to Tremolo, or when its brake is disabled), and deceleration (when switched from Tremolo to Chorale).

HORN SLOW / FAST: Specify the spin rate for the horn in the Chorale and Tremolo modes, respectively.

DRUM SLOW / FAST: Specify the spin rate for the drum in the Chorale and Tremolo modes, respectively. When set to the lowest value, the drum will stay fixed (i.e., it will not rotate) in the corresponding mode. This enables one to replicate a reasonably common modification made to rotary cabinet.

MICS

VOL: Output gain for the cabinet

BALANCE: Gain balance among the horn and drum microphones

DISTANCE: Distance of microphones from the speakers. Close micing will emphasize amplitude modulation, and produce a drier, more focused sound. Increasing the distance will introduce room artifacts and alter the modulation characteristics.

ANGLE: Angle between microphones. Increasing the angle will increase the stereo effect of the cabinet, with 90 degrees being the most common placement.

HORN / DRUM PANS: Allows panning each of the two drum and horn microphones.

HORN / DRUM MIC 2 ON/OFF: Enables switching between a single (mono) mic and two (stereo) mics individually for horn and drum.

CAB EQ: Allows fine tuning of the cabinet output.

GUITAR AMP

The guitar amp module runs parallel to the rotary cabinet. The guitar amp output can be used on its own or blended with that of the rotary for additional tonal opportunities. Each amp model is built-in with its matching cabinet simulation.

Select the amp model via the dropdown menu located above the amp head. Use the On/Off switch to enable the amp. In addition to Gain and EQ controls, use the Volume and Pan controls to further affect the sound, or help blend it with the output from other modules.

DI

Direct Inject (i.e., the dry, unprocessed audio from the organ after passing through the Pre-FX) can be blended in with the rotary cabinet and guitar amp. When both the cabinet and the guitar amp are off, the DI signal will be heard. When either is on, the DI signal can be blended in via the DI and DI Pan knobs located on the Rotary panel.

PRE FX

The Pre FX panel contains audio effects that sit between the organ and the rotary and guitar amp modules in the signal chain.

PREAMP: The preamp features tube emulation to provide warm overdrive sounds and can be used to provide an additional colored gain stage prior to the rotary and guitar amp modules. The **MID BOOST** switch activates a custom mode that increases gain while emphasizing certain frequencies to deliver a more cutting tone. The **LOWS** and **HIGHS** knobs help dial in the desired amount of bass and treble response.

10-Band EQ: 10-band wide-range graphic EQ allows precision sculpting of the audio by cutting and boosting the frequencies in each band. It also functions as a clean boost into the amps via the **OUT** parameter, which changes the output gain without affecting the signal characteristics.

Wah / Autowah: The wah unit can be used manually via onscreen wah pedal or MIDI assignment. The **AUTO** feature allows setting the time for the wah effect to rise or fall upon audio onset. In the **+** range, the wah effect will start at the level actually specified by the pedal, and finish at the pedal-down level. In the **-** range, the effect will start at the pedal-down position and open up to the level actually specified by the pedal.

Chorus / Flanger: The dual-mode modulation effect offers adjustable rate and modulation depth parameters.

Tape Delay: The tape delay emulation features adjustable time, feedback, and mix. It is capable of self-oscillation when the feedback control is near max and can be used to obtain trippy effects by manipulating the time parameter, which jogs the virtual tape loop.

Spring Reverb: The spring reverb replicates the unique "boingy" tones of the old-school reverb tanks and features adjustable DWELL and MIX parameters.

POST FX

The post FX panel feature audio effects that are applied after the rotary and guitar modules in the signal chain.

COMPRESSOR: The multi-parameter compressor features adjustable compression threshold, compression ratio, attack and release times, as well as make up gain. The VU meter displays the amount of compression in real time.

STUDIO EQ: 15-band wide-range graphic EQ allows precision sculpting of the audio by cutting and boosting the frequencies in each band.

REVERB: Parametric reverb offers 7 unique algorithms, including different rooms, larger spaces, and a plate reverb emulation. Parameters include pre-delay, decay for the reverb tail, reverb tonality, and effect mix.

ONSCREEN KEYBOARD

The onscreen keyboard can be shown and hidden via the KEYBOARD button, located either in the lower left of the screen, or on the left hand of the keyboard taskbar if the keyboard is already visible.

The keyboard corresponding to each manual can be chosen via the UP/LOW/PDL selector. When ALL is selected, the three manuals are displayed simultaneously.

The - and + buttons are used to shrink or expand the width of the keys, respectively. The SCROLL button on the far right of the navigation bar is the scroll lock: when enabled, it allows one to reposition a keyboard by dragging it left or right.

The HOLD button activates key hold. The LATCH button activates the key latch mode, where only the last input key or simultaneous keys will be held.

PRESETS

The Preset Manager is accessed by touching the right area of the main taskbar, where selected preset and bank name is usually displayed.

What is saved in a preset?

All the organ parameters, including drawbar registrations, and advanced preferences located in the Organ Preferences panel; all the FX, amp, and rotary settings; a link to the MIDI CC Map loaded at the time of the preset save or most recent save-as.

Note that LOCK switches are provided in both the ORGAN and MIDI preferences panels. When activated, these locks preserve the current settings on those panels even while presets are changed.

Managing Presets

The app's built-in preset management system is a powerful way to organize, access, and share banks and presets. Here is the function of the buttons found in the preset manager's taskbar, left to right:

Bank Taskbar

- PLUS: Create an empty bank.
- RENAME: Rename the selected bank.
- EDIT: Enable to reorder or delete banks. When finished, touch again to exit editing mode.
- SHARE: Display bank export/import options. See below for more information.

Presets Taskbar

- **SAVE:** Save as a new preset.
- **OVERWRITE:** Overwrites the currently selected preset.
- **[INIT]:** Loads a basic “initial” preset, useful when writing a new patch from scratch.
- **RENAME:** Rename the selected preset.
- **MOVE:** Move selected preset to a different bank.
- **EDIT:** Enable to reorder or delete presets. When finished, touch again to exit editing mode.
- **SHARE:** Display preset export/import options. See below for more information.
- **JOKER:** Randomly load a preset from the file system.
- **SEARCH:** Search for a preset.
- **RESTORE FACTORY:** Reinstall factory presets that came packaged with KingB.

Favorites Bank

- You can “favorite” up to 256 presets by touching the STAR button located next to it. These presets are then displayed in the Favorites repository found at the very top of the banks list. To un-favorite a preset, simply touch the star button again.

Importing/Exporting Banks & Presets

You can export banks and presets to iOS Files or via email. Simply touch the bank or preset share task button and make a selection. The banks/presets exported to Files can be accessed through the iOS Files app (just navigate to the KingB root directory) and can also be accessed on your desktop computer via iTunes Filesharing.

You can import banks and presets in many different ways: you can add them to the KingB root folder (either within your iPhone or iPad, or using iTunes Filesharing), and then install them using YPAT3 >

Sharing > Import from Files. Or you can double tap any KingB bank/preset file, which will automatically launch the app, and install that asset. Similarly, you can touch an email attachment to install an asset.

MIDI



You can use standard MIDI controllers and commands to control performance elements and the majority of the parameters found in KingB.

Refer to your hardware or host software's instructions for setting up MIDI connections.

MIDI performance settings

UPPER / LOWER / PEDAL keyboard mapping

Use the selectors located in this area to specify keyboard mapping for the three manuals. This feature makes it possible to use a single MIDI keyboard to control more than one manual simultaneously by "splitting" or "mapping" the keys to a desired range on the organ.

IN CHANNEL: The MIDI channel on which the given manual receives note on/off command.

MIN MIDI INPUT: The MIDI number for the lowest key recognized by the manual. Default is 36 for all the manuals.

MAX MIDI INPUT: The MIDI number for the highest key recognized. Default is 96 for the upper and lower manuals, but 60 for the pedal manual.

MIN MIDI > ORGAN: The organ key that will correspond to the key on the controller as specified under MIN MIDI INPUT. Default is 36. You can use this parameter to basically transpose the manual.

MIDI > DB PST: Enables options for selecting drawbar registrations using MIDI keys. The drawbar registrations will be mapped to the specified keys. Default state for this feature is OFF.

SUSTAIN: Enables sustain pedals to be used by the given manual. If turned off, sustain pedal will be ignored by that manual.

VELOCITY Controls

Specify how much a given organ parameter is controlled by MIDI key velocity. Velocity control is available for voice amplitude, percussion amplitude and decay, as well as key click level. By default, keyclick is set to 50, whereas other parameters are set to 0.

PITCHWHEEL: Specifies the pitch bend radius (in semitones) for MIDI pitch wheels. Default is 2.

PROG CHANGE CH: Specifies the channel on which bank and program change messages are received. Default is OMNI.

MIDI Learn

MIDI CCs can be mapped onto the knobs and switches found on the organ and FX panels. The mapping can be saved to file and recalled for later use. The files can be shared. In addition, the loaded map is linked to the preset when the latter is saved, so that the map it contains is automatically loaded when the preset itself is loaded. Like some of the other settings panels, this one also contains a “lock.” If enabled, this preserves the already loaded CC map across preset changes, as well as the rest of the MIDI settings found on the panel.

To enter MIDI Learn mode, press the LEARN button. Touch the overlay on the desired parameter so that it is highlighted. Manipulate the control on your MIDI device until the CC/Channel pair is indicated on the overlay. Repeat with any number of parameters.

To make manual changes to a parameter, simply double tap on its overlay to reveal the data entry prompt. Select the desired field, use the number pad to enter the desired value, and confirm entry by pressing SET on the number pad.

When finished, go back to Prefs -> MIDI Learn and unselect the LEARN button. Save the changes to file using the SAVE or SAVE AS buttons.

To load a MIDI CC Map, touch the MIDI MAP display area and choose a file from the browser. Options for sharing are also provided by touching the IMPORT or EXPORT buttons on the lower taskbar found on the file browser.

To load the default MIDI map, press the DFLT button on the MIDI preferences panel.

App Audio / MIDI

These preferences are only available for the standalone deployment of the app. Use the HW or VIRTUAL MIDI In buttons to toggle MIDI In from hardware or virtual sources altogether.

To access the dialog for connecting with Bluetooth MIDI inputs, touch the BTOOTH button.

You can manage connections to currently online MIDI input devices via the MIDI Inputs list. To receive MIDI or MIDI clock data from a given source, make sure the associated button next to its listing is highlighted in green. To disable receiving either data, touch the button to un-highlight it.

Enable Audio Backgrounding by touching the BG AUDIO button. Set the buffer size using the BUFFER dropdown. Set the sampling rate using the SAMPLE RATE dropdown. Notice that access and ability to set buffer size and sample rate works in a first-in-last-out manner, so that if an app is already open and using the audio (including in the background), any app opened after it will not be able to change these settings to anything other than specified by the first app.

AUv3

KingB comes packaged with its iOS Audio Units version 3 plugin binary. You can use multiple instances of KingB in any iOS DAW or mixer capable of hosting AUv3 plugins.

The KingB AUv3 will be found with the MIDI Instrument plugins of your DAW. For more information about how to use AUv3 MIDI instruments, please refer to your DAW's user manual.

TIP: The onscreen MPE-style keyboard provided in the iOS versions of GarageBand "cycles" through channels on every successive press. This will give the false appearance that the organ is responding to keys only occasionally. To ensure compatibility with GarageBand on the iOS (and any MPE controller), we strongly suggest that you set the input MIDI channel for the desired manual to OMNI, and turn off MIDI input for the remaining manuals. Refer to the MIDI section of this manual for more information on these settings.