

Introduction

Thank you for purchasing the Korg **volca bass**.

The **volca bass** is an analog bassline groovebox. Detuning the three oscillators (VCOs) achieves the deep, modulating characteristics of analog sound. Furthermore, the combination of the envelope generator (EG) with the traditional 12 dB/oct low-pass filter (LPF) used on the miniKORG 700S allows you to create hard acid house sounds with tones similar to those of a bass guitar. In addition, separately playing the three oscillators of the sequencer allows you to create sequences that combine the bass and lead parts as well as chord-like loops.

Power switch


This switch turns the power on/off. To turn the power off, press and hold the switch for approximately one second.

Auto power-off

The **volca bass** has an auto power-off function. This function automatically turns off the **volca bass** after approximately four hours have passed since it last produced a sound. If desired, you can disable the auto power-off function. (See Specifying global parameter settings)

DC 9V jack

Connect the optional AC adapter here.

 Only use the specified AC adapter. Using any AC adapter other than the specified model will cause malfunctions.

VCF (Voltage-controlled low-pass filter)

This filter modifies the timbre (tonal character) by boosting or cutting specific frequency regions of the sound that's produced by the oscillator.

CUTOFF knob: This adjusts the cutoff frequency of the VCF. Turning the knob toward the left will darken the sound, and turning the knob toward the right will brighten the sound.

PEAK knob: This emphasizes the harmonic component of the cutoff frequency. The more that the knob is turned toward the right, the more of an emphasis will be applied to the harmonic component.

OCTAVE knob

This knob specifies the octave of the notes that will be produced by playing the keyboard.

Display

This displays the values selected by using the knobs and buttons.

Step buttons 1 to 16

These function as step buttons for the sequencer and the keyboard.

MEMORY button

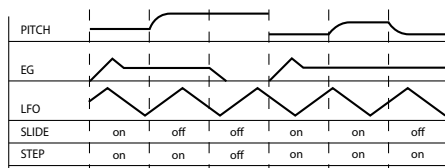
The **volca bass** is equipped with 8 memory locations that are used to save sequences. Press the MEMORY button, and then press a step button between 1 and 8 to load the saved sequence. By pressing the FUNC button and MEMORY button, and then pressing a step button between 1 and 8 will save the current sequence into the memory.

STEP MODE button

Press this button to enter step mode (the STEP MODE button will light up). Step buttons 1 to 16 will function as step buttons for the sequence. Pressing a step button turns that step for the selected oscillator on or off. Steps that have been turned on will be played. However, steps with nothing recorded cannot be turned on. Pressing this button again returns the unit to keyboard mode.


Slide editing

While holding down the FUNC button, press the STEP MODE button to enter slide editing mode. Sliding can be turned on/off for each step. EG and LFO will not be triggered with the step after the step where sliding has been turned on. This further achieves the effect of connecting steps for a smooth change of the pitch.



Battery level indication



When the **volca bass** is turned on, the LEDs below the step buttons indicate the remaining amount of battery power. If all LEDs are lit, the batteries are completely full. Fewer lit LEDs mean that the battery level is correspondingly lower.

 If an AC adapter is connected, the remaining battery level will not be indicated correctly.

Either alkaline or nickel-metal hydride batteries can be used. In order for the remaining battery level to be detected and indicated correctly, the type of batteries being used must be specified in the global parameters of the **volca bass**. If the batteries are running low during usage of the **volca bass**, it warns you by blinking "bt.Lo" in the display. If the batteries run down completely, the **volca bass** automatically turns off.

NOTE: It's not possible to stop the low battery warning; however, you will be able to continue using the **volca bass** until the batteries have run down completely.

Main Specifications

● **Keyboard:** Multi-touch keyboard ● **Sound generators:** Analog synthesis, 3 VCOs (saw, square), 1 EG, 1 VCF (12dB/oct LPF), 1 VCA, 1 LFO ● **Connectors:** Headphone jack (ø3.5mm stereo mini-phone jack), SYNC IN jack (ø3.5mm monaural mini-phone jack, 20V maximum input level), SYNC OUT jack (ø3.5mm monaural mini-phone jack, 5V output level) ● **Power supply:** AA/LR6 alkaline battery ×6 or AA nickel-metal hydride battery ×6, DC 9V () AC adapter ● **Battery life:** Approximately 10 hours (when using alkaline batteries) ● **Dimensions (W × D × H):** 193 × 115 × 46 mm/7.60" × 4.53" × 1.81" ● **Weight:** 370 g/13.05 oz. (excluding batteries) ● **Included items:** Six AA alkaline batteries, Cable, Owner's manual ● **Options:** AC adapter (DC 9V )

* Specifications and appearance are subject to change without notice for improvement.

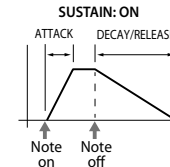
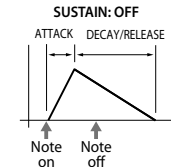
EG (Envelope Generator)

The VCA level (volume) and VCF cutoff frequency are modulated over time.

ATTACK knob: This knob sets the speed of the rise when a note is sounded.

DECAY/RELEASE knob: This knob sets the speed of the fall. The timing for starting the fall changes according to the SUSTAIN ON setting (FUNC+STEP 11).

CUTOFF EG INT knob: This knob sets the intensity where the VCF cutoff is changed according to the EG.



TEMPO knob

This knob sets the playback tempo for the sequencer.

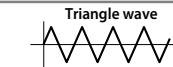
LFO (Low Frequency Oscillator)

LFO is the low-frequency oscillator. With cyclical changes, modulation can be applied to the various parameters. In addition, since the LFO is triggered when a note is sounded, it can be used as a part of the rhythm for instance, as a wobble bass commonly used in Dubstep.

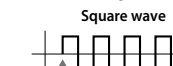
RATE knob: This knob sets the LFO speed.

INT knob: This knob sets the depth (intensity) of LFO modulation.

The LFO waveform is selected with FUNC+STEP 7.



The LFO will not re-trigger at note on for triangular wave.



OCTAVE knob

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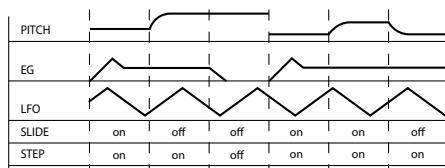
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

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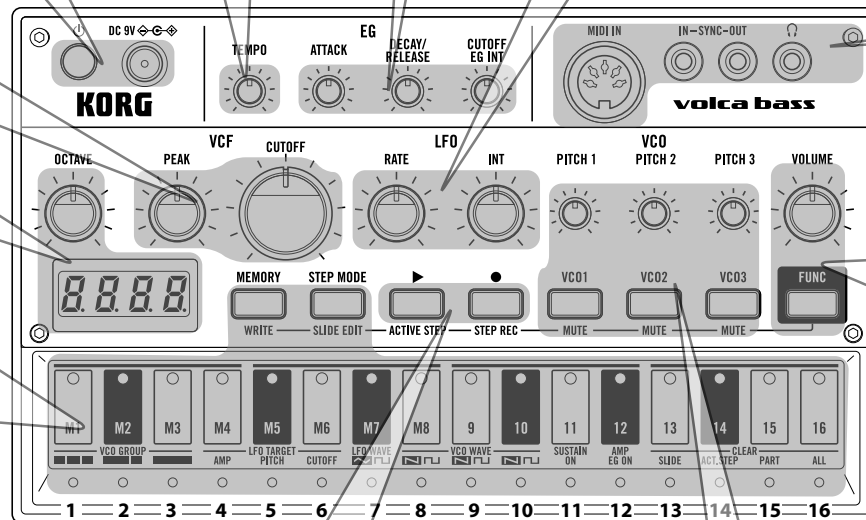
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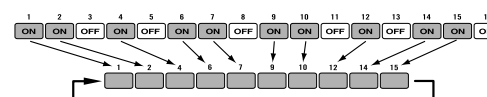


► (PLAY) button

Press this button to play the sequence. Playback always starts from the beginning of the sequence. The ► (PLAY) button will be lit up during playback. Pressing this button again stops playback.

Active step mode

While holding down the FUNC button, press the ► button (ACTIVE STEP) to enter active step mode (the ► button will blink). Each step of the current sequence can be turned on/off. Steps that are turned off are disabled and will be skipped during playback and recording. The button for steps that have been turned on will light up. When you have finished specifying the settings, press the FUNC button to exit active step mode.



● (REC) button

The performances in step buttons 1 to 16 are recorded as a sequence. Press the ● (REC) button while stopped to enter record-ready mode (the button will blink), and then press the ► (PLAY) button to start recording (the button will light up). Pressing the ● (REC) button during playback will begin recording from the point where the button was pressed. Pressing the ● (REC) button while recording will stop recording.

Step recording

While holding down the FUNC button, press the ● button (STEP REC) to enter step recording mode. You can sequentially input the notes for each step of the sequence.

The LEDs below the step buttons indicate the current step.

Press step button 1 to 16 to specify the note. Removing your finger from the keyboard stops the input and continues to the next step. The following operations can be performed, except while playing the keyboard.

► (PLAY) button: Pressing this button plays back the sequence being recorded, then continues to the next step.

● (REC) button: Pressing this button deletes the current step being recorded, then continues to the next step.

FUNC button: Pressing this button exits step recording mode.

VCO (Voltage-controlled oscillator)

This oscillator generates the waveform that is the basis of the sound: a sawtooth wave or square wave. The **volca bass** is equipped with the three oscillators VCO1 to VCO3.

PITCH 1 to PITCH 3 knobs: These knobs set the pitch for the corresponding oscillator within the range of ±1 octave.

VCO1 to VCO3 buttons: Use these buttons to select the oscillators desired to produce sounds or to be edited. The button for the selected oscillators will light up.

VCO muting

While holding down the FUNC button, press any of the VCO1 to VCO3 buttons to mute the corresponding VCO. If this operation is performed with a VCO that is already muted, it will be unmuted. When the FUNC button is pressed, the buttons of unmuted VCOs will light up.

Specifying global parameter settings

Setting the MIDI channel

- While holding down the MEMORY button, turn on the **volca bass**.
- Step buttons 1 to 16 correspond to the MIDI channels 1 to 16. Press the button that corresponds to the desired channel, and the LED below the step button will light up.

Other parameters

- While holding down the FUNC button, turn on the **volca bass**.
- Press a step button to specify the setting for the global parameter. (Refer to the table.)

When you have finished specifying the settings, press the ● (REC) button. The settings will be saved, and the **volca bass** will be restarted. If you decide to cancel the settings, press the ► (PLAY) button.

MIDI IN jack

This jack is where you can connect an external MIDI device to control the sound generator of the **volca bass**.

SYNC IN/OUT jacks

Use these jacks with the included cable to connect the **volca bass** to a monotron or other compatible equipment, such as an analog sequencer, and synchronize them. The SYNC OUT jack sends a 5 V pulse of 15 ms at the beginning of each step. If the SYNC IN jack is connected, the internal step clock will be ignored and the **volca bass** sequencer will proceed through its steps according to the pulses that are input to this jack. You can use this jack to synchronize the **volca bass**'s steps with pulses that are being output from the audio output of a monotron, another analog sequencer or a DAW.

Headphone jack

Connect your headphones (stereo mini-plug) here. If nothing is connected, the sound will be output from the internal speaker.

VOLUME knob

This knob sets the output volume.

FUNC (function) button

The setting for various functions can be specified by holding down the FUNC button and pressing the corresponding step button. The LED below the step button will light up or turn off to indicate the setting.

VCO grouping

While holding down the FUNC button, press a step button between 1 and 3 to set the VCO grouping to one of the following. VCOs grouped together are activated by the same sequence data, and produce sound, play back and are edited together.

By grouping multiple VCOs, the thick bass of a unison or a chord sequence at a fixed interval (fifth degrees, etc.) can be created.

FUNC+STEP 1: Each VCO will be in a separate group and operated by separate sequences.

FUNC+STEP 2: VCO1 and VCO2 will be in the same group, and VCO3 will be operated by a separate sequence.

FUNC+STEP 3: All VCOs will be in the same group.

LFO settings

You can specify which of the three parameters (TARGET) will change with LFO modulation. Multiple parameters can be selected simultaneously. In addition, you can select one of two LFO waveforms.

FUNC+STEP 4: Amp modulation—The volume will change cyclically.

FUNC+STEP 5: Pitch modulation—The pitch will change cyclically.

FUNC+STEP 6: Cutoff modulation—The VCF cutoff will change cyclically.

FUNC+STEP 7: This sets the LFO waveform. LED unlit: Triangle wave; LED lit: Square wave.

FUNC+STEP 8 to STEP 10: These set the waveform for each oscillator. (LED unlit: Sawtooth wave; LED lit: Square wave)

EG settings

FUNC+STEP 11: When turned on (LED lit), SUSTAIN for the EG is enabled.

FUNC+STEP 12: When turned on (LED lit), the EG changes the volume (amp).

Clearing functions

FUNC+STEP 13: Sliding for all steps of the currently selected VCO will be turned off.

FUNC+STEP 14: All active steps for the currently selected VCO will be turned off.

FUNC+STEP 15: All sequence data for the currently selected VCO will be erased.

FUNC+STEP 16: All sequence data for all parts will be erased.

Note: If a sequence cannot be edited after a clearing function was performed, you can return to the state before clearing by performing the same operation again.

Returning all sequence data to the factory defaults

- While holding down the FUNC and MEMORY buttons, turn on the **volca bass**. "LdPr" will appear on the display, and the ● (REC) and ► (PLAY) buttons will blink.
- Press the ● (REC) button to return the sequences to the factory defaults and start **volca bass**. Press the ► (PLAY) button to cancel the reset operation and simply start **volca bass**.

Button	Parameter	LED lit		LED unlit	
		Status	Display indication	Status	Display indication
Step 1	Auto power-off function	*Enabled	AP.on	Disabled	AP.oF
Step 2	Battery type selection	Nickel-metal hydride	bt.nH	*Alkaline	bt.AL
Step 3	Sync Out polarity	Fall	So.Lo	*Rise	So.Hi
Step 4	Sync In polarity	Fall	Sl.Lo	*Rise	Sl.Hi
Step 5	Tempo range settings	Full (10...600)	TP.FL	*Narrow (56...240)	TP.nr
Step 6	MIDI Clock Src	*Auto	CL.At	Internal	CL.In
Step 7	MIDI RX ShortMessage	*On	St.on	Off	St.oF

*: Factory default setting