

Roland

Better Life with Music

GAIA

GAIA SYNTHESIZER SH-01

Software for SH-01

GAIA SYNTHESIZER SOUND DESIGNER



This unique combination includes a synthesizer — a hands-on instrument for learning how sounds are made — and a custom-made companion software program.

It's a fun, friendly, and educational system for learning the basics of synthesis and sound design.



GAIA SYNTHESIZER SH-01

GOSM **V-LINK** **BEAM** **USB AUDIO** **USB MEMORY** **BATTERY POWERED**



GAIA SYNTHESIZER SOUND DESIGNER Software for SH-01 <SD-SH01>

Windows

Mac OS X

This interactive learning system gives students unique and effective tools for learning synthesis, and helps build their knowledge base and skill set.

"GAIA SH-01" is the embodiment of the origin of synthesizers, giving you the tools to create new sounds by freely manipulating waveforms.

"GAIA Synthesizer Sound Designer" is a companion software program that lets students systematically learn how sounds are made on synthesizers by recording and playing back the entire process of sound creation with GAIA SH-01. This powerful hardware and software combination provides an engaging and effective environment for mastering the art of sound-design.



GAIA SYNTHESIZER SH-01

Experience the joy and creativity of synthesis with GAIA. The friendly, hands-on control panel makes sound-design fast and easy. It's an instant-gratification dream instrument that's easy enough for a student and powerful enough for a pro.

- State-of-the-art virtual analog synthesizer engine, faithful to the processes of creating sounds on an analog synth.
- Controls are logically arranged according to sound-flow; knobs and sliders provide direct interaction with the sound.
- User-friendly layout, with oscillators, filters, amps, and LFOs — the essential building blocks of sound.
- Triple-stacked sound engine enables astonishingly fat and diverse sounds; equivalent of having three synths in a single instrument.
- Five channels of effects give you powerful tools to process your sounds.
- Built-in phrase recorder lets you record and play back your performance; automatically create arpeggio performances.



GAIA SYNTHESIZER SH-01

COSM V-LINK D BEAM USB AUDIO USB MEMORY BATTERY POWERED DVD and guidebook included



Software for SH-01 GAIA SYNTHESIZER SOUND DESIGNER

Access all of GAIA's sound-design functions graphically on your PC or Mac. No hidden layers to navigate — it's all right in front of you!

Instantly access every controller on the navigation screen.

Connect your computer and GAIA via USB
Display GAIA's operation panel on your computer screen. Control GAIA with your mouse and keyboard as well as from GAIA's front panel.

View GAIA's functions on the navigation screen
This intuitive program provides graphical control of GAIA's functions, and lets you print out each step of your sound-design process.

Display all three sound engines simultaneously
You can view all parameters of GAIA's three internal synthesizer engines on a single screen. The sliders and knobs onscreen can be moved with the mouse; you can also enter numerical values for detailed editing.



USB connection supported



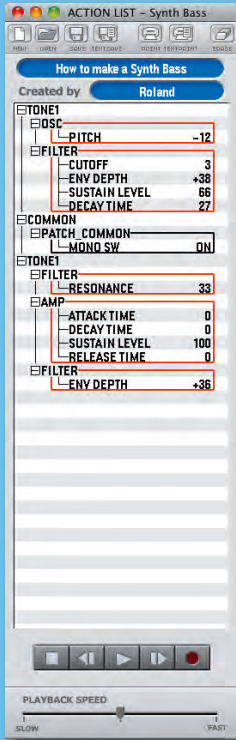
GAIA SYNTHESIZER SOUND DESIGNER Software for SH-01 <SD-SH01>

ASIO connect Windows Mac OS X

ACTION



Software for SH-01 GAIA SYNTHESIZER SOUND DESIGNER



The Action List records your sound-design process; play it back at any point you wish. Explore the synthesis process in depth, and expand your curiosity and creativity.

Record the entire sound-design process

Every move you make with the virtual onscreen controls (as well as with GAIA's physical controllers) can be recorded, played back, and even displayed as an Action List.

Begin playback at any point in the process

You can play back your recorded Action Lists to see and hear your panel settings and the changes you've made to the sound. You can also begin playback at any point on the List. The screen will show the panel setting you've made at that point, and will sync with the change in sound.

Learn from experts

You can explore the library of preset Action Lists (created by pro artists) to analyze how sounds are made. Through this, you can learn advanced techniques for creating impactful sounds.



The waveform display lets you see your sounds.

You can display, in a separate window, the evolving expressions of waveforms in a graphical format, giving you a new dimension and concept of sound.



Comes with sound-making guidebook.

Learn to create your own GAIA sounds with this helpful, easy-to-read guidebook.



PRINT



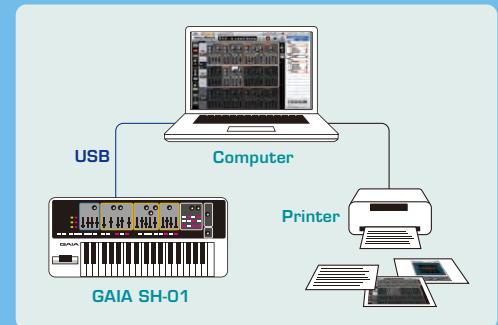
You can print out your panel settings and Action Lists, a handy way to save and distribute your GAIA settings as hardcopy.

Print your screen settings

Connect a printer to your computer to print out your panel settings and Action Lists. You can also print your Action Lists as text.

Use your print-outs in a variety of situations

Since the entire sound-making process can be printed, teachers can distribute hardcopy as summaries of what was taught in class, or as a tool for teaching new methods. Teachers can also ask students to hand in print-outs of their creations.



* Use commercially available printer.

The combination of Roland's GAIA SH-01 synthesizer and companion Mac/PC software is a fun and unique solution for educators and students.

It inspires creativity by allowing GAIA users to interactively explore every tone parameter on their large computer monitors. The software can also record and play back the entire sound-creation process, step by step, with its unique Action List function; the Wave Viewer function can display each waveform as a graph for visual reference. Beginners of synthesizer programming and pros alike will appreciate this powerful and inspiring approach to synthesis, as well as teachers of synthesizer programming.

Teaching examples

1 Create sounds that your students can use, and distribute the steps as learning samples.

2 Students can hear and see the sounds; print out Action Lists as text for classroom hand-outs.

3 Students can begin to create their own sounds by referring to the Lists.

4 This process helps students understand and learn, step by step, the teacher's sound-making process!

Examples of use



The GAIA Educational System currently in use at the world-renowned Musicians Institute in Hollywood, California.

Visit our website for
in-depth information on GAIA.
www.roland.com



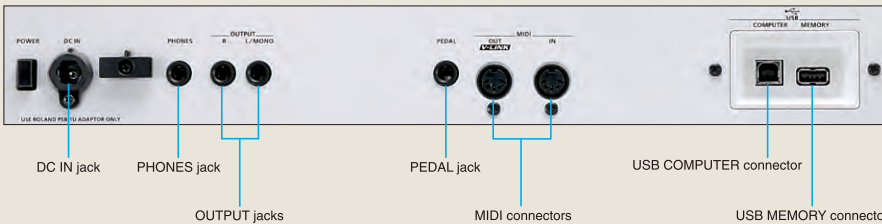
GAIA SH-01 Synthesizer



Specifications

Keyboard	37 keys (velocity sensitive)	Effects				
Maximum Polyphony	64 voices	DIST	Distortion, Fuzz, Bit Crash			
Sound Generator Section	Virtual analog synthesizer sound generator (Number of part: 1) (Oscillator + Filter + Amp + Envelopes for each section + LFO) x 3 PCM sound generator (Number of parts: 15)	FLANGER	Flanger, Phaser, Pitch Shifter			
		DELAY	Delay, Panning Delay (with tempo sync function)			
		REVERB	Reverb			
Patch Memory	Preset: 64, User: 64	LOW BOOST	Low Boost			
OSC Section	Oscillator waveform	Knobs	CONTROL 1, LEVEL			
		Knobs/Sliders	PITCH, DETUNE, Pulse Width, Pulse Width Modulation			
Envelope	Attack, Decay, Envelope Depth	Controllers	Pitch Bend/Modulation lever, D BEAM Controller			
Modulation	Oscillator Sync, Ring Modulation (Tone 2's OSC is applied as modulation to Tone 1's OSC.)	Arpeggiator	Preset pattern: 64			
FILTER Section	Filter Type	Phrase Recorder	User: 8, Number of Track: 1			
		Knobs	CUTOFF, RESONANCE, KEY FOLLOW			
		Envelope	Attack, Decay, Sustain, Release, Envelope Depth			
AMP Section	Knob	Connectors	OUTPUT jacks (L/MONO, R) (1/4-inch phone type), Headphone jack (Stereo 1/4-inch phone type), PEDAL jack (TRS phone type), MIDI connectors (IN, OUT), USB COMPUTER connector (Supports Hi-Speed USB : Audio/MIDI) (Use a USB cable and a computer with a USB connector that support Hi-Speed USB), USB MEMORY connector (Supports Hi-Speed USB flash memory), EXT IN jack (Stereo miniature phone type), DC IN jack			
			Envelope	Attack, Decay, Sustain, Release		
LFO Section	LFO Shape		Power Supply	DC 9 V (AC Adaptor or rechargeable nickel-metal hydride AA batteries (sold separately) x 8)		
			Knobs/Sliders	RATE, FADE TIME, PITCH DEPTH, FILTER DEPTH, AMP DEPTH		
Tempo Sync	ON/OFF		Current Draw	600 mA		
Rear Panel	POWER		Battery life for continuous use	Rechargeable nickel metal hydride batteries: Approximately 5 hours (approximately 4 hours if USB memory is connected) * Zinc-carbon batteries or alkaline batteries cannot be used * These figures will vary depending on the actual conditions of use.		
				DC IN jack	Dimensions	mm: 689 (W) x 317 (D) x 100 (H) mm inches: 27-3/16 (W) x 12-1/2 (D) x 3-15/16 (H)
				PHONES jack	Weight	4.2 kg / 9 lbs 5 oz (excluding AC Adaptor)
OUTPUT jacks			Accessories	Owner's Manual, Guide Book, CD-ROM (USB Driver), DVD Video, AC Adaptor, Power Cord		
PEDAL jack						
MIDI connectors						
USB COMPUTER connector						
USB MEMORY connector						

Rear Panel



GAIA SYNTHESIZER SOUND DESIGNER Software for SH-01 <SD-SHO1>



Screens

- Tones Edit screen, Effects Edit screen
Full editing of GAIA's sound parameters.
- Action List screen
Record and replay the entire sound-creation process.
- Waveform Viewing screen
Waveform viewing software lets you see the synth waveform.

System Requirements

[Windows]

- Operating System: Microsoft® Windows® 7 (32-bit/64-bit)(Service Pack 1 or later)
Microsoft® Windows Vista® (32-bit/64-bit)(Service Pack 2 or later)
Microsoft® Windows® XP Home Edition/Professional (Service Pack 3 or later)
- CPU: Intel® Core™, Pentium® processor 2 GHz or higher
- RAM: 2 GB or more
- Hard Disk: 100 MB or more of free space
- Display/Colors: 1,440 x 900 dots or higher/24-bit Full Color or more
- Others: CD-ROM Drive
A computer with a USB connector that supports USB Specification Revision 2.0 or higher
* Use a USB cable and a computer with a USB connector that support Hi-Speed USB.
* Intel chipset is recommended.
* GAIA SH-01 may not perform to its full specs when used with an added USB 2.0 interface card.
* This driver cannot be used in a virtual Windows environment, such as Windows XP Mode (Virtual Windows XP) or Virtual PC.
* Apple Mac computers running Microsoft Windows are not supported.

[Mac OS]

- Operating System: Mac OS X v10.5.8 or later
- CPU: Intel® processor
- RAM: 2 GB or more
- Hard Disk: 100 MB or more of free space
- Display/Colors: 1,440 x 900 dots or higher/16.7 million colors or more
- Other: CD-ROM Drive, Apple Mac computer with on-board Hi-Speed USB
* Use a USB cable and a computer with a USB connector that support Hi-Speed USB.

* Although Roland has tested numerous configurations, and has determined that on average, a computer system similar to that described above will permit normal operation of the GAIA SH-01 Applications, Roland cannot guarantee that a given computer can be used satisfactorily with the GAIA SH-01 Applications based solely on the fact that it meets the above requirements. This is because there are too many other variables that may influence the processing environment, including differences in motherboard design and the particular combination of other devices involved.

* Before using this product, you may need to update your GAIA SH-01 to the latest version. In order to perform the update, you will need a separately available USB memory device.

* The GAIA SH-01 is required in order to use this software.



Once a musical instrument generates sound vibrations, it reaches the human ear through various mediating objects, each of which significantly affects the sound. The material and configuration of the instrument, the electric/magnetic amplifying system, the air and the reverberation of the room all affect the final sound. Sound modeling, an advanced DSP technology, "virtually" reconstructs these objects. Roland's breakthrough Composite Object Sound Modeling (COSM) uses the advantages of multiple modeling methods and succeeds in accurately emulating existing sounds, as well as producing sounds that have never before been created.



Using V-LINK, musicians can "play" video from their electronic instrument — or even control a live video camera — when used with Roland/EDIROL video products. With V-LINK, musicians have a powerful interface for realtime audio and video integration.



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