Roland
JU-06 SOUND MODULE   Owner's Manual

English   In order to use this device correctly, please carefully read "USING THE UNIT SAFELY" and "IMPORTANT NOTES" (the "USING THE UNIT SAFELY" leaflet) before use.

After reading, keep these instructions at hand for immediate reference.

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Introduction

The JU-06 is a sound module that can be used in conjunction with the K-25m keyboard unit (sold separately). The sound can be heard through the built-in speakers.

* The JU-06 can operate on batteries or on USB bus power. If you are using batteries, insert four AA batteries, making sure that they are oriented correctly.
* When turning the unit over, be careful so as to protect the buttons and knobs from damage. Also, handle the unit carefully; do not drop it.
* **When the batteries run low, the LED above the Ribbon Controller C1 (②) blinks.** Install new batteries.

Using the JU-06 in conjunction with the K-25m keyboard unit (sold separately)

➡ For installation, refer to the K-25m's Owner's Manual.

Playing the JU-06 via MIDI or USB

You can also play the JU-06 via MIDI or USB. For details, refer to "Connecting Your Equipment."

Connecting Your Equipment

* To prevent malfunction and equipment failure, always turn down the volume, and turn off all the units before making any connections.

A Micro USB (⋅⋅⋅) port
Use a commercially available USB 2.0 cable (A-microB) to connect this port to your computer. It can be used to transfer USB MIDI and USB audio data. **You must install the USB driver when connecting the JU-06 to your computer.** Download the USB driver from the Roland website. For details, refer to Readme.htm which is included in the download.
➡ http://www.roland.com/support/

B [VOLUME] knob
Adjusts the volume.

C PHONES jack
Connect headphones (sold separately) here.

D OUTPUT jack
Connect this jack to your amp or monitor speakers.

E INPUT jack
This is the audio input jack. Sound from the connected device is output from the OUTPUT jack and PHONES jack.

F MIDI connectors
You can play the JU-06 by connecting a MIDI device via a commercially available MIDI cable.

MIDI keyboard   JU-06

Turning the Power On

G [POWER] switch
This turns the power on/off.
* After you've made connections correctly, be sure to **turn on the power in the order of the JU-06 first, and then the connected system.** Powering-on in the incorrect order may cause malfunctions or damage. When turning the power off, **power-off the connected system first, and then the JU-06.**
* This unit is equipped with a protection circuit. A brief interval (a few seconds) after turning the unit on is required before it will operate normally.
* Before turning the unit on/off, always be sure to turn the volume down. Even with the volume turned down, you might hear some sound when switching the unit on/off. However, this is normal and does not indicate a malfunction.

Restoring the Factory Settings (Factory Reset)

Here's how to return the JU-06 to its factory-set state.
1. While holding down the BANK [1] button, turn on the power.
   The [MANUAL] button blinks.
   If you decide to cancel the factory reset, turn off the power.
2. Press the [MANUAL] button to execute the factory reset.
3. When all buttons blink, turn the JU-06's power off, then on again.

Data Backup/Restore

Backup
1. While holding down the BANK [2] button, turn on the power.
2. Connect your computer to the JU-06's USB port via USB cable.
3. Open the "JU-06" drive on your computer.
   The backup files are located in the "BACKUP" folder of the "JU-06" drive.
4. Copy the backup files into your computer.
5. After copying is completed, eject the USB drive and then disconnect the USB cable.

Windows 8/7
Right-click on the "JU-06" icon in "My Computer" and execute "Eject."

Mac OS
Drag the "JU-06" icon to the Trash icon in the Dock.
6. Turn the JU-06 power off.

Restore
1. As described in the procedure for "Backup" Step 1–3, open the "JU-06" drive on your computer.
2. Copy the JU-06 backup files into the "RESTORE" folder of the "JU-06" drive.
3. After copying is completed, eject the USB drive and then **press the [MANUAL] button.**
4. After the LEDs have completely stopped blinking, turn off the power.

Panel Descriptions
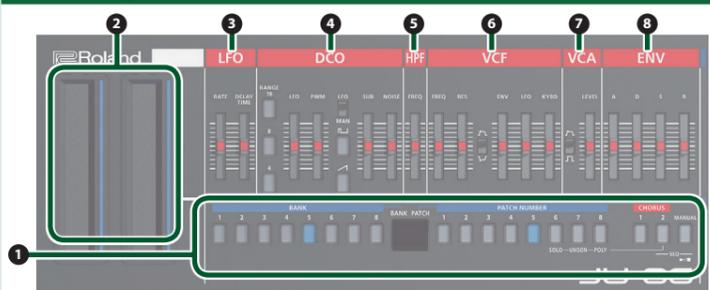
① Common section
Here you can switch the sound (patch/bank).

Controller	Explanation
BANK [1]–[8] buttons	**What is "Patch/Bank"?** You can store/recall up to 64 sets (8 patches x 8 banks) of sound settings. **To switch the bank/patch** 1. Press the BANK [1]–[8] buttons to switch the bank. 2. Press the PATCH NUMBER [1]–[8] buttons to switch the patch. * For each sound, refer to "JU-06 Sound List" (PDF). ➡ http://www.roland.com/manuals/
PATCH NUMBER [1]–[8] buttons	**To store the patch** * When you edit a patch, a dot appears in the display. 1. Press the save-destination BANK [1]–[8] button. 2. Long-press the save-destination PATCH NUMBER [1]–[8] button.
[CHORUS 1] button [CHORUS 2] button	Turns the chorus effect-1/2 On/Off.
[MANUAL] button	Causes sound to be produced according to the current settings of the sliders.

② Ribbon controller (C1/C2)
These are touch-type ribbon controllers. C1 (left) is pitch bend, and C2 (right) is modulation.
* If a K-25m keyboard unit, USB, or MIDI are not connected, touching the C1 controller plays a preview sound.

③ LFO
Here you can create cyclic change (modulation) in the sound.

Controller	Explanation
[RATE] slider	Determines the speed of the LFO.
[DELAY TIME] slider	Specifies the time from when the tone sounds until the LFO reaches its maximum amplitude.

④ DCO
Here you can select the waveform that determines the character of the sound, and specify its pitch.

Controller	Explanation
RANGE [16] [8] [4] buttons	Specifies the octave of the oscillator.
[LFO] slider	Allows the LFO to modulate the pitch, producing a vibrato effect.
[PWM] slider	**When the [LFO/MAN] switch is "MAN" (MANUAL):** Adjusts the value of the pulse width. **When the [LFO/MAN] switch is "LFO":** Adjusts the modulation depth. **What is "Pulse Width"?** Pulse width is the amount of the upper portion of the pulse wave, expressed as a percentage of the overall wavelength. If the upper and lower widths are not the same, the waveform is called an asymmetric pulse wave.
[LFO/MAN] switch	Selects whether the pulse width value is a fixed value specified manually by the [PWM] slider (MAN) or is varied by the ③ LFO (LFO).
[⊓] button	Selects the waveform that is the basis of the sound.
[⋀] button	⊓ (Square wave/Asymmetrical pulse wave), ⋀ (Sawtooth wave)
[SUB] slider	Adjusts the volume of the sub oscillator.
[NOISE] slider	Adjusts the volume of the noise.

⑤ HPF
This is a high-pass filter that passes the high frequencies and cuts the low frequencies.

Controller	Explanation
[FREQ] slider	Specifies the cutoff frequency of the high-pass filter. Frequency components below the cutoff frequency are cut.

⑥ VCF
This is a low-pass filter that passes the low frequencies and cuts the high frequencies.

Controller	Explanation
[FREQ] slider	Specifies the cutoff frequency of the low-pass filter. Frequency components above the cutoff frequency are cut, making the sound mellower.
[RES] slider	Resonance boosts the sound in the region of the filter's cutoff frequency. Higher settings produce stronger emphasis, creating a distinctively "synthesizer-like" sound.
[⊓/\/] switch	Selects the polarity (direction) of the envelope.
[ENV] slider	Adjusts the depth by which the ⑧ ENV (envelope) controls the cutoff frequency.
[LFO] slider	Uses the ③ LFO to vary the cutoff frequency.
[KYBD] slider	Adjusts the way in which the pitch of the note affects the cutoff frequency (key follow) when using the keyboard to control cutoff frequency. Moving the slider downward causes the cutoff frequency to fall as you play higher on the keyboard.

⑦ VCA
Here you can adjust the amount of time-varying change (envelope) for the volume.

Controller	Explanation
[⊓/⊓] switch	Selects whether the volume is controlled by ⑧ ENV (envelope) (⊓) or by the gate signal (⊓).
[LEVEL] slider	Adjusts the volume of the patch.

⑧ ENV
Here you can create time-varying change (envelope).

Controller	Explanation
[A] slider	Attack time
[D] slider	Decay time
[S] slider	Sustain level
[R] slider	Release time
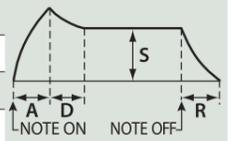
Step Sequencer

The step sequencer lets you input a note at each of up to 16 steps, and play back the notes as a loop.
You can change the number of steps between 1 and 16. Up to 16 patterns can be stored.
1. Press the [CHORUS 2] and [MANUAL] buttons (SEQ) simultaneously to enter the Step Sequencer mode.
   The [▶/■] button blinks.
   * To exit the Step Sequencer mode, press again [CHORUS 2] and [MANUAL] buttons simultaneously.

Step buttons [1]–[16]
In Step Sequencer mode, the 16 numeric buttons shown in the illustration are called [1]–[16] (Step buttons).

Function	Controller
Play start/stop	[MANUAL] [▶/■]
Tempo	[CHORUS 2] + C1
On/off status of each step	[1]–[16]
Enter a note	[1]–[16] + C1 (or keyboard)
Enter a tie	Step button + Next step button (e.g.: [1] + [2])
Enter a gate time	[1]–[16] + C2
Set the gate time of all steps	[CHORUS 2] + C2
Select a pattern (1–16)	[CHORUS 2] + [1]–[16]
Write the pattern (1–16)	[CHORUS 2] + [1]–[16] (long-press)
Pattern settings	
Number of steps (1–16)	[MANUAL] + [1] ➡ [1]–[16]
Shuffle	[MANUAL] + [2] ➡ [4]–[12] (default: [8])
Scale	[MANUAL] + [3] ➡ (see diagram) (default: [2])
Sequencer settings *1	
Step order type	[MANUAL] + [15] ➡ [1] Normal (default), [2] Even/Odd reverse, [3] Odd only, [4] Even only, [5] Odd only → Even only, [6] Even only → Odd only, [7] Random
Off step mode	[MANUAL] + [16] ➡ [1] Rest (default), [2] Skip

*1 Sequencer settings return to the default setting when the power is turned off.

Inputting steps

1. Hold down the step button ([1]–[16] buttons) at which you want to enter a note.
2. While holding down the step button, play the keyboard. Alternatively, use the C1 ribbon controller to specify the note.
3. Release the step button.
4. Press the [▶/■] button to play back.

* To delete the note at a step, turn off a step button ([1]–[16]) that contains a note (making the button go dark).

Settings

SOLO/UNISON/POLY/Octave Shift/Portamento

1. While holding down the [CHORUS 2] button, specify the value by using the numeric buttons shown in the following table or the C1/C2 ribbon controller.

Parameter	Value setting	Explanation
SOLO/ UNISON/ POLY mode	[14]	Plays monophonically (SOLO).
	[15]	Plays all sounds in unison (UNISON).
	[16]	Plays polyphonically (POLY).
Octave Shift *1	[4]–[13]	Shifts the keyboard range in steps of one octave.
	(-4–+5)	For the ±0 (default) setting, [8] is lit.
Portamento Switch	C1 (OFF/ON)	Creates a smooth change in pitch between one key and the next key played.
Portamento Time	C2 (0–100)	Adjusts the time required for the pitch change.

System Settings

1. While holding down the [MANUAL] button, press one of the numeric buttons shown in the following table to select the parameter.
   * Keep holding down the [MANUAL] button.
2. Press a numeric button to select the value, and release the [MANUAL] button to confirm the value.

Parameter	Select	Value setting	Explanation
Master Tune	[MANUAL] + [1]	[1]–[16] (433–448 Hz)	Specifies the master tuning. For the 440 Hz (default) setting, [8] is lit.
MIDI Channel	[MANUAL] + [2]	[1]–[16]	Specifies the MIDI transmit/receive channel (1–16).
MIDI Clock Source	[MANUAL] + [3]	[1] (AUTO)	If MIDI clock is being input to the MIDI IN connector or the USB port, the JU-06's tempo will automatically synchronize to MIDI clock (default).
		[2] (INTERNAL)	The JU-06 operates at the tempo specified on the unit itself. Choose the "INTERNAL" setting if you don't want to synchronize to an external device.
Transpose *1	[MANUAL] + [4]	[2]–[13] (-6–+5)	Transposes the keyboard range in semitones. For the ±0 (default) setting, [8] is lit.
Key Velocity *1	[MANUAL] + [5]	[1] (TOUCH)	Adjusts the velocity value that will be transmitted when you play the keyboard. Actual keyboard velocity will be transmitted.
		[2] (64)	A fixed velocity value (64 or 127) will be transmitted regardless of how you play.
		[3] (127)	
Velocity Curve *1	[MANUAL] + [6]	[1] (LIGHT)	Sets the keyboard's touch. Sets the keyboard to a light touch.
		[2] (MEDIUM)	Sets the keyboard to the standard touch.
		[3] (HEAVY)	Sets the keyboard to a heavy touch.
Auto Off	[MANUAL] + [7]	[1] (OFF)	The power does not turn off automatically.
		[2] (30 min)	The power turns off automatically after 30 minutes. * Auto Off does not occur while USB-connected.
LED Demo	[MANUAL] + [8]	[1] (OFF)	Specifies the time until the LED DEMO is shown.
		[2] (1 min)	
		[3] (3 min)	
		[4] (10 min)	
Chain Mode	[MANUAL] + [9]	[1] (OFF)	Although the JU-06 is four-note polyphonic, you can increase the polyphony by using a MIDI cable to connect two or more JU-06 units and turning Chain mode on.
		[2] (ON)	If Chain mode is on, the fifth voice and subsequent notes are passed "thru" via MIDI OUT.
Ribbon Controller Note Scale	[MANUAL] + [10]	[1]–[16]	Sets the note scale type of the ribbon controller (default: [1]). For details, refer to "JU-06 Sound List" (PDF). ➡ http://www.roland.com/manuals/
C2 Modulation Hold	[MANUAL] + [11]	[1] (HOLD OFF) (default)	
		[2] (HOLD ON)	
Chorus Noise	[MANUAL] + [12]	[1] (NOISE OFF)	
		[2] (HALF)	
		[3] (ORIGINAL JUNO CHORUS) (default)	
Patch settings			
Bend Range	[MANUAL] + [13]	[1]–[12], [13] (2 oct), [16] (OFF)	Specifies the Pitch Bend Range in semitones. (default: [2])
Delay Level	[MANUAL] + [14]	[1]–[16]	Adjusts the volume of delay sound. (OFF=[1])
Delay Time	[MANUAL] + [15]		Adjusts the delay time (the time by which the sound is delayed).
Delay Feedback	[MANUAL] + [16]		Adjusts the delay feedback. (OFF=[1])

*1 Only when using the K-25m keyboard unit (sold separately)

Main Specifications   Roland JU-06: SOUND MODULE

Maximum Polyphony	4 voices
Power Supply	Rechargeable Ni-MH battery (AA, HR6) x 4, Alkaline battery (AA, LR6) x 4, USB bus power
Current Draw	500 mA (USB bus power)
Dimensions	300 (W) x 128 (D) x 45 (H) mm / 11-13/16 (W) x 5-1/16 (D) x 1-3/4 (H) inches
Weight (including batteries)	940 g / 2 lbs 2 oz
Accessories	Owner's Manual, Leaflet "USING THE UNIT SAFELY," Alkaline battery (AA, LR6) x 4
Options (sold separately)	Keyboard unit: K-25m

* In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.