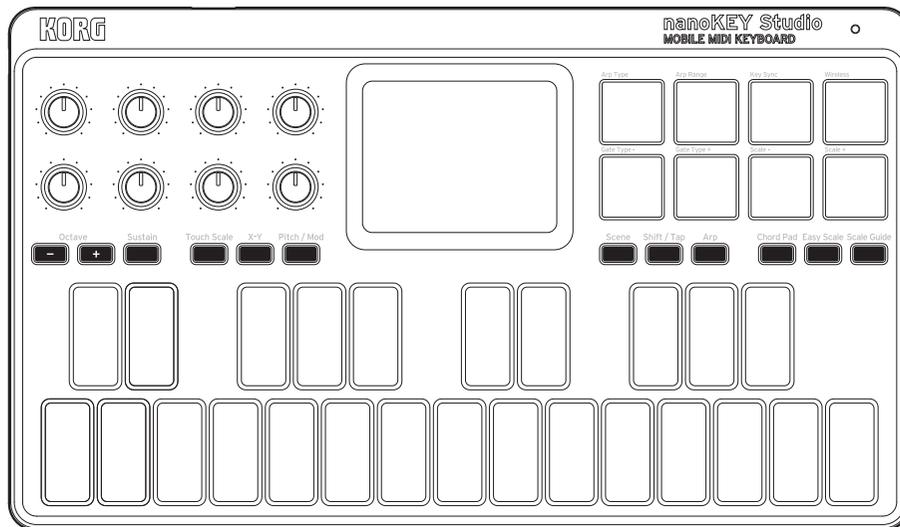


# KORG

# nanoKEY Studio

## MOBILE MIDI KEYBOARD



# Owner's Manual

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Thank you for purchasing the Korg nanoKEY Studio.

In order to use this product in a computer music environment, you'll need to adjust the MIDI settings of the host application. Please follow the directions in the host application's owner's manual to define these settings.

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# Main Features

## **25 Backlit Keys with Scale Guide and Easy Scale for an Error-Free Performance**

The nanoKEY Studio is equipped with 25 velocity-sensing keys. Octave Shift buttons (+, -) allow access to every note. Unique Scale Guide key lighting and Scale Guide features allow anyone—regardless of keyboard skill—to give a perfect performance, without ever playing an off-key note!

## **8 Dynamic Pads for Triggering Drums or Playing Perfect Chords**

In addition to the keys, the nanoKEY Studio also provides eight touch-sensitive pads. These pads can be used to play drum sounds and trigger samples. Combined with the Chord Pad feature, each pad can also play a distinct chord in key with the selected scale for fast audio production.

## **KAOSS-style Two-Axis Touchpad Provide Intuitive Fingertip Control**

Using the same style of two-axis touchpad as the renowned KORG Kaossilator, the nanoKEY Studio can intuitively control two parameters in real time using a single fingertip gesture. In addition to controlling Pitch and Modulation, the touchpad can be set to control any two MIDI parameters. The Touch Scale feature tunes the pad to the selected scale and key, allowing your free-form pad gestures to translate into a perfect musical performance.

## **8 Assignable Knobs Deliver Real-time Control of Your Musical Software**

Eight real-time performance knobs deliver immediate, hands-on control of your musical software. Each knob can be assigned to a specific MIDI Control Change (CC) message so you can tweak the settings as you play your software synthesizers or while you record to your DAW.

## **8 Programmable Scene Memories offer Instant Access to Your Favorite Settings**

Take control of your entire computer music system! The nanoKEY Studio allows you to create eight entirely different software-specific scenes and instantly switch between them. This one keyboard can control all of your favorite software synthesizers—and your DAW system—at the touch of a pad!

## **Convenient USB and wireless compatibility with both desktop computers and mobile devices**

Eliminate cable-clutter and create a wireless connection between your iPhone, iPad, and/or Mac/Windows computer. The built-in wireless system is easy to use and simple to set up.

# Preparation

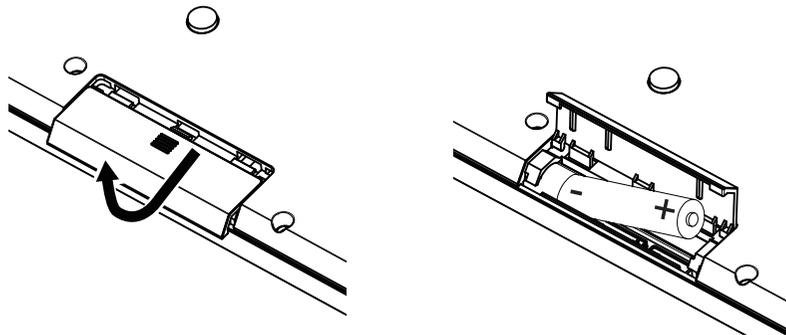
## Using a Wireless Connection

### Installing Batteries

Make sure that the mode switch is set to "Standby", and then slide out the battery cover on the rear to open it. Making sure to observe the correct polarity, insert the batteries, and then close the battery cover.

⚠ If a malfunction occurs that cannot be resolved no matter how many times the nanoKEY Studio is turned off, then on, remove the batteries, and then install them again.

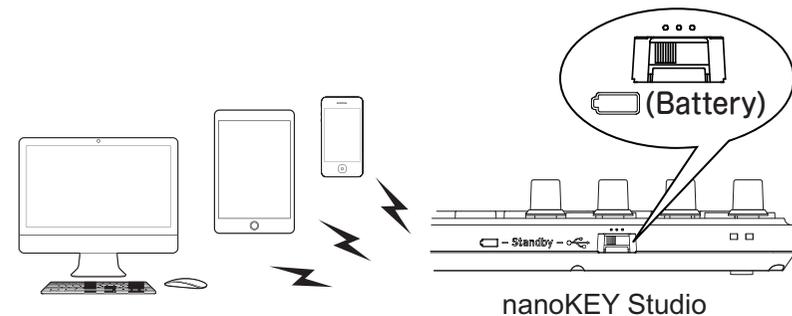
**TIP** Either alkaline or nickel-metal hydride batteries can be used. In order for the remaining battery level to be detected and indicated correctly, the type of batteries being used must be specified in the global parameters of the nanoKEY Studio. (→ page.19: Battery Type)



### Turning On the Power

Set the mode switch to "☐" (Battery). The nanoKEY Studio turns on (Battery mode).

⚠ When using the nanoKEY Studio with the mode switch set to "☐" (Battery), the batteries will become depleted, even with a USB connection. In addition, the nanoKEY Studio cannot be used as a USB-MIDI device, even if it is connected to a computer using a USB cable.



### Turning Off the Power

Set the mode switch to "Standby". The nanoKEY Studio and the power LED turn off.

### Auto Power-Off Function

In Battery mode, the nanoKEY Studio is automatically turned off if no operation is performed for an extended period of time. This function can be disabled in KORG KONTROL Editor.

(→ page.21: Auto Power Off)

## Wireless Connection Setup

In order to use the nanoKEY Studio wirelessly, a wireless connection must be established. Refer to “Using a wireless connection” in the Quick Start Guide to set up the wireless connection.

- 🔧 With an iPhone/iPad or Mac, a wireless connection must be established each time.

### Wireless Operation with USB Power

The wireless function of the nanoKEY Studio can be used in combination with a USB connection.

While power is supplied from the USB port of the computer, the wireless function of the nanoKEY Studio can be used to connect it to an iPhone/iPad, etc.

### Turning the Wireless Feature On and Off

While holding down the Shift/Tap button, press Trigger Pad 4 (Wireless) to turn the wireless feature On or Off.

**TIP** When the mode switch is set to “” (Battery), the wireless function cannot be turned off.

- 🔧 If the nanoKEY Studio is being used in an environment where radio waves cannot be transmitted, turn off the wireless function.

## Using a USB Connection

### Making Connections and Turning On the Power

1. Set the mode switch to “ (USB)”.
2. Use the included USB cable to connect the nanoKEY Studio to a USB port on your computer. The nanoKEY Studio turns on, and the power LED lights up.

- 🔧 The included USB cable must be used.
- 🔧 In order to use the nanoKEY Studio functions, settings must be specified to match your app. Refer to the Owner’s Manual and specify the settings.

**TIP** When you first connect the nanoKEY Studio to your Windows computer, a driver will be installed automatically.

**TIP** With the driver pre-installed with Windows, nanoKEY Studio cannot be used by multiple applications simultaneously. If you want to use the nanoKEY Studio with multiple applications simultaneously, you must install the KORG USB-MIDI driver. Download the KORG USB-MIDI driver from the Korg website. (<http://www.korg.com/>)

### Turning Off the Power

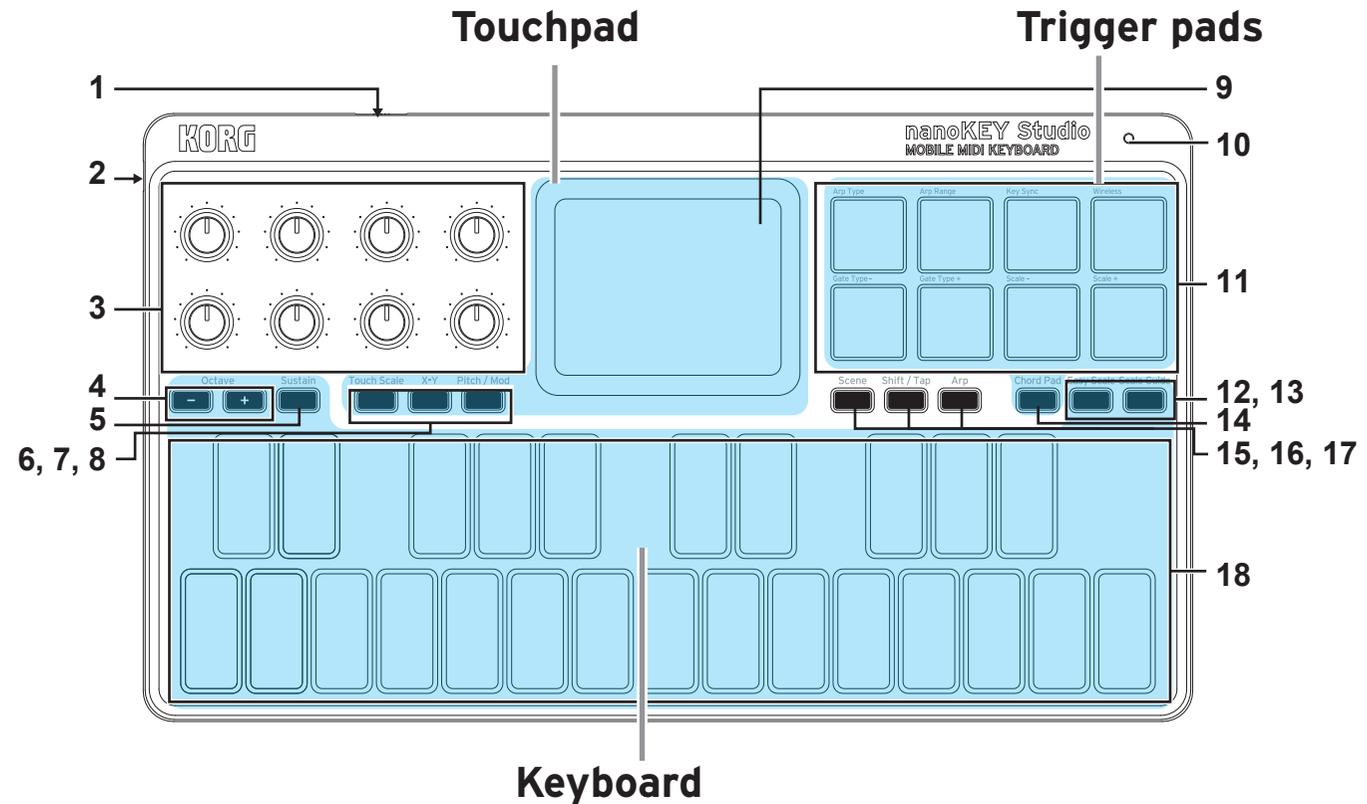
Set the mode switch to “Standby”. The nanoKEY Studio and the power LED turn off.

## Software setup

Before using the nanoKEY Studio, it may be necessary to first connect the nanoKEY Studio to your computer and specify the MIDI port settings, or to load any software synthesizers and to specify recording settings for individual tracks in your DAW software. For details, refer to your software's Owner's Manual.

# Functions and Operation of Controls

1. Mode switch
2. USB port
3. Knobs
4. Octave buttons
5. Sustain button
6. Touch Scale button
7. X-Y button
8. Pitch/Mod button
9. Touchpad
10. Power LED
11. Trigger Pads
12. Eazy Scale button
13. Scale Guide button
14. Chord Pad button
15. Scene button
16. Shift/Tap button
17. Arp button
18. Keyboard



# Keyboard

The keyboard features 25 velocity sensitive keys used to transmit note messages.

## Octave Shift

The range of the keyboard can be shifted up or down in octave steps.

Each press of the Octave + or Octave - button shifts the range one octave higher or lower. The amount of shift is indicated by the lighting in the Octave + and Octave - buttons:

Octave Shift	Button lighting
-1 / +1	White
-2 / +2	Pink
-3 / +3	Red
-4 / +4	Blinking red

**TIP** Simultaneously pressing the Octave + and Octave - buttons will reset the Octave Shift back to  $\pm 0$ .

## Transpose / Key

The pitch of the keyboard can be transposed in semitone steps. By transposing the keyboard, you can play a song in a new key—or play in tune with other transposing instruments using familiar fingering. In addition, this operation can also set the key for the Touch Scale and Chord Pad features.

While holding down the Shift/Tap button, press the Octave + or Octave - button to transpose the pitch of the keyboard in semitone steps. The range is -12 to +12. The key is indicated by the keyboard backlighting.

## Sustain

Pressing this button will send a sustain message.

Note being held when you press the Sustain button—and notes played while the Sustain button is pressed will be sustain, even after you remove your finger(s) from the keyboard.

## Easy Scale

The Easy Scale function allows you to easily play melodies or chords that are in tune with the selected scale and key. Use the Easy Scale button to turn this function on/off. For details on setting the scale and key, refer to “Setting the Scale and Key” on page 10.

 This function cannot be used together with the scale guide function.

## Scale Guide

The Scale Guide function uses the keyboard backlighting to indicate the notes of the specified scale and key.

Use the Scale Guide button to turn this function on/off. For details on setting the scale and key, refer to “Setting the Scale and Key” on page 10.

 This function cannot be used together with the easy scale function.

# Touchpad

## Touch scale

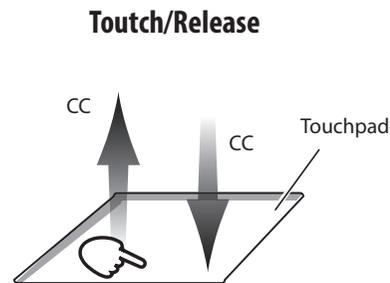
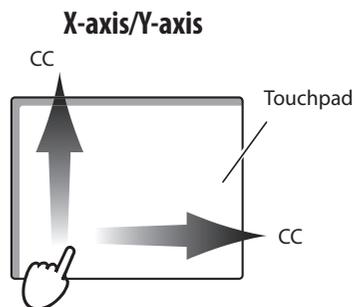
As you trace your fingertip across the Touchpad, the Touch Scale mode generates only notes that are in tune with the specified scale and key. Press the Touch Scale button to switch the Touchpad to Touch Scale mode.

For details on setting the scale and key, refer to page 10: Setting the Scale and Key.

**TIP** While holding down the Touch Scale button, press the Octave + or Octave - button to adjust the range of the Touchpad between 1 and 4 octaves.

## X-Y Control

The X-Y Control mode allows you to assign separate MIDI control change messages to the X-axis and Y-axis of the Touchpad, allowing the two parameters to be controlled simultaneously with a single gesture on the Touchpad. In addition, control change messages can be transmitted when the Touchpad is touched or released. Press the X-Y button to switch the Touchpad to X-Y Control mode.

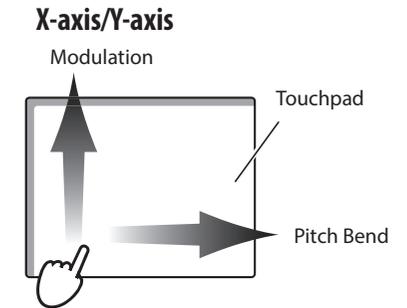


## Pitch/Mod

In the Pitch/Mod mode, pitch bend messages and modulation messages are transmitted with the touchpad.

Based on where you first touched the touchpad, you can control the pitch bend along the X-axis and apply modulation such as vibrato along the Y-axis.

Press the Pitch/Mod button to switch the Touchpad to the Pitch/Mod mode.



## Trigger Pads

The eight velocity-sensitive pads are excellent for playing and programming drum parts in real time, as well as triggering samples. In addition to note messages, control change messages or program change messages can also be transmitted, Depending on the setting. (→ page 14: Customizing Controllers)

 Do not leave a heavy object on a trigger pad for an extended period of time.

## Chord Pad

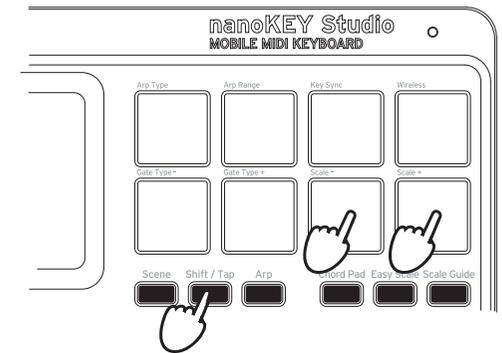
The Chord Pad feature allows you to use the Trigger Pads to play chords. With the Chord Pad feature on, chords are automatically assigned to the Trigger Pads, based on the current Scale and Key. (→ “Setting the Scale and Key”)

## Setting the Scale and Key

The nanoKEY Studio allows you to choose a particular musical scale and set the key, or root note, of that scale. The Scale and Key you specify will determine the scale and key used by the Touchpad Touch Scale feature, the Trigger Pad Chord Pad feature, and the Keyboard Easy Scale and Scale Guide features.

### Setting the Scale

While holding down the Shift/ Tap button, press trigger pad 7 (Scale -) or trigger pad 8 (Scale +) to specify the Scale. The selected scale is indicated by the keyboard backlighting.



### Setting the Key

While holding down the Shift/Tap button, press the Octave + or Octave - button to specify the Key (as when transposing the keyboard). The selected key is indicated by the keyboard backlighting. (→page 8: Transpose / Key)

# Arpeggiator

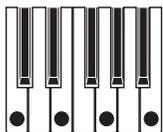
The Arpeggiator is a function that automatically separates the individual notes being played in a chord, and plays them back in a repeating pattern. Use the Arp button to turn this feature On and Off. The nanoKEY Studio also contains a variety of rhythm patterns that can make the Arpeggiator much more interesting—and useful! Using the Arpeggiator, Keyboard, Trigger Pads and/or the Touchpad allows you to infuse your performance great rhythmic dexterity.

## Arpeggiator Type

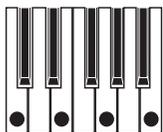
While holding down the Shift/Tap button, press Trigger Pad 1 (Arp Type) to switch between the Arpeggio types Up, Down, Alt 1, Alt 2, Random, and Trigger.

**TIP** The arpeggiator is played on the Global MIDI channel.

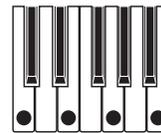
**Up:** The Arpeggio is played from the lowest note to the highest note.



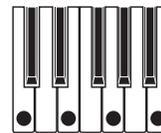
**Down:** The Arpeggio is played from the highest note to the lowest note.



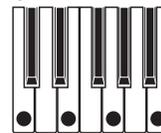
**Alt1:** There are two styles of Arpeggios that alternate between the Up and Down types. This type (Alt1) does not repeat the highest and lowest notes as it switches between the Up and Down types.



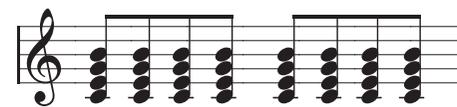
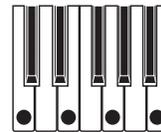
**Alt2:** There are two styles of Arpeggios that alternate between the Up and Down types. This type (Alt2) repeats the highest and lowest notes as it switches between the Up and Down types.



**Random:** The notes are played in a random order by the Arpeggiator.



**Trigger:** All held notes are played simultaneously, in a rhythmic, pulsing pattern. The “Octave Range” setting has no effect on the Trigger type.



## Setting the Tempo (Tap Tempo function)

While the Arpeggiator is on, press the Shift/Tap button several times at a steady interval, along with the beat of the song, to set the tempo (BPM) of the Arpeggiator.

**TIP** Pressing the button multiple times improves the accuracy.

## Rhythm Pattern

While holding down the Shift/Tap button, press Trigger Pad 5 (Gate Type -) or Trigger Pad 6 (Gate Type +) to select a new Arpeggiator rhythm pattern.

For details on the rhythm patterns, refer to page 25: Arpeggio rhythm pattern list.

## Key Sync

This function specifies whether the Arpeggiator will be synchronized with the Keyboard, Trigger Pads, and/or the touchpad when new notes are played. While holding down the Shift/Tap button, press Trigger Pad 3 (Key Sync) to turn this function On and Off.

**Off:** With Key Sync off, the arpeggio pattern will play normally.

**On:** With Key Sync on, each time you press a key on the Keyboard, tap a Trigger Pad, or place your finger on the Touchpad, the arpeggio notes will restart at the beginning of the pattern. You can use this function to manually align the start of the Arpeggio pattern with the start of the measure in real time when performing with other players.

## Arp Range

By increasing the Arp Range, the Arpeggio pattern can repeat over a number of octaves, before re-starting with the original notes played. While holding down the Shift/Tap button, press Trigger Pad 2 (Arp Range) to adjust the Arpeggio range from 1 to 4 octaves.

## Latch

Latching the Arpeggiator allows the pattern to continue playing, even when you have removed your fingers from the Keyboard, Trigger Pads, or Touchpad. While holding down the Shift/Tap button, press the Arp button to turn this function On and Off.

**Off:** The Arpeggiator pattern stops playing once you remove your fingers from the Keyboard, Trigger Pads, or Touchpad.

**On:** The Arpeggiator pattern continues to play after you have removed your fingers from the Keyboard, Trigger Pads, or Touchpad.

# Other Functions

## Selecting a Scene

The nanoKEY Studio contains eight user-configurable scenes. By switching scenes, the nanoKEY Studio can access different software titles, or address a different set of parameters on a DAW system, etc. While holding down the Scene button, press one of the Trigger Pads (1-8) to select a new scene.

# Customizing Controllers

## KORG KONTROL Editor Software

The KORG KONTROL Editor software is required to customize the operation of the nanoKEY Studio. Download the software from the Korg website (<http://www.korg.com/>), and install the software by following the instructions in the supplied document.

**TIP** For details on installing and using the KORG KONTROL Editor software, refer to the instruction manual for that software.

## Types of Parameters

The nanoKEY Studio contains two types of customizable parameters. Scene Parameters address the function of specific controllers inside of the selected Scene. Global Parameters control the overall operation of the nanoKEY Studio, regardless of the selected scene.

### Scene Parameters

These parameters determine how your software will react when you operate a controller on the nanoKEY Studio in a specific Scene. Eight user-configurable scenes can be created and saved in the nanoKEY Studio. By preparing a separate Scene for each software title you are using, you can achieve instant control of them all simply by switching scenes.

### Global Parameters

These parameters specify general behavior of the nanoKEY Studio, such as velocity curves of the keyboard and trigger pads, as well as energy-saving features. The global parameters will be shared among all scenes.

# Scene Parameters

## Keyboard

### **MIDI Channel ..... [1...16, Global]**

This parameter specifies which MIDI channel is used to transmit MIDI messages when you operate the Keyboard (or Touchpad in the Pitch/Mod mode). When set to "Global", MIDI messages will be transmitted on the Global MIDI Channel, specified in the global parameters. (→page.19: Global MIDI Channel)

## Trigger Pads

### **Assign Type ..... [Note, Control Change, Program Change, No Assign]**

This parameter specifies the MIDI messages assigned to Trigger Pads.

Note (Note# C-1 to G9)	Note messages will be transmitted. Specify the note number to be transmitted. Up to four note numbers can be assigned.
Control Change (CC# 0 to 127)	Control change messages will be transmitted. Specify the control change number to be transmitted.
Program Change (Prog# 0 to 127)	Program change messages will be transmitted. Specify the program number to be transmitted.
No Assign	No MIDI message will be transmitted.

### **MIDI Channel ..... [1...16, Global]**

This parameter specifies which MIDI channel is used to transmit MIDI messages from the Trigger Pads. When set to "Global", MIDI messages will be transmitted on the Global MIDI Channel, specified in the global parameters.

### **Pad Behavior..... [Momentary, Toggle]**

Select the trigger pad behavior from the following two types.

Momentary	When "Assign Type" is set to "Note", a note-on message is transmitted when you press a Trigger Pad, and a note-off message is transmitted when you release the Trigger Pad. When "Assign Type" is set to "Control Change", a control change message with the value 127 is transmitted when you press a Trigger Pad, and a control change message with the value 0 is transmitted when you release the Trigger Pad.
Toggle	When "Assign Type" is set to "Note", pressing the Trigger Pad will send a note-on message; pressing the pad again will send the note-off message. When "Assign Type" is set to "Control Change", pressing the Trigger Pad will send a control change message with a value of 127; pressing the pad again will send a control change message with a value of 0.

## Chord Pad

### **MIDI Channel ..... [1...16, Global]**

This parameter specifies which MIDI channel is used to transmit MIDI messages.

When set to "Global", MIDI messages will be transmitted on the Global MIDI Channel, specified in the global parameters.

## Knobs

### **Knob Enable..... [Enable, Disable]**

This parameter specifies whether the Knob operations are enabled or disabled. When set to "Disable", a MIDI message will not be transmitted, even if you operate a Knob.

### **MIDI Channel ..... [1...16, Global]**

This parameter specifies which MIDI channel is used to transmit

MIDI messages from the Knobs.

When set to "Global", MIDI messages will be transmitted on the Global MIDI Channel, specified in the global parameters.

**CC Number** ..... [0...127]

This parameter specifies the CC number of the control change message that will be transmitted.

**Left Value** ..... [0...127]

This parameter specifies the value of the control change message that is transmitted when you turn the Knob fully to the left.

**Right Value**..... [0...127]

This parameter specifies the value of the control change message that is transmitted when you turn the Knob fully to the right.

### Touchpad (Touch Scale mode)

**MIDI Channel** ..... [1...16, Global]

This parameter specifies which MIDI channel is used to transmit MIDI messages when using the Touchpad in the Touch Scale mode. When set to "Global", MIDI messages will be transmitted on the Global MIDI Channel, specified in the global parameters.

**Y-axis Enable**..... [Enable, Disable]

This parameter specifies whether to enable or disable the transmission of control change messages when you move your finger along the Y-axis in the Touchpad.

**Y-axis CC Number** ..... [0...127]

This parameter specifies the value of the control change message that will be transmitted.

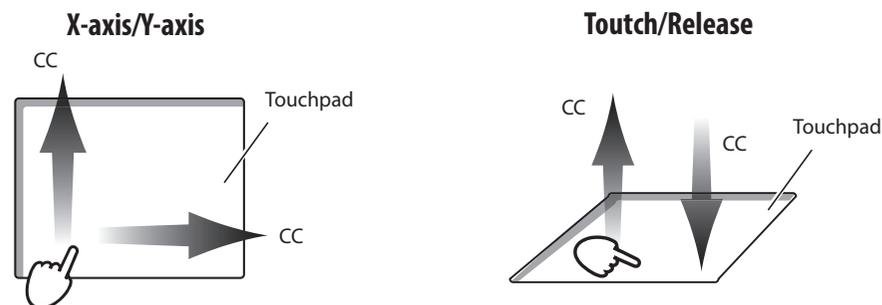
**Y-axis Lower Value**..... [0...127]

This parameter specifies the value of the control change message that is transmitted when you touch the bottom edge of the Touchpad.

**Y-axis Upper Value** ..... [0...127]

This parameter specifies the value of the control change message that is transmitted when you touch the top edge of the Touchpad.

### Touchpad (X-Y Control mode)



**MIDI Channel** ..... [1...16, Global]

This parameter specifies which MIDI channel is used to transmit MIDI messages when using the Touchpad in the X-Y Control mode. When set to "Global", MIDI messages will be transmitted on the Global MIDI Channel, specified in the global parameters.

• **X-Axis/Y-Axis**

**Assign Type** ..... [Control Change, No Assign]

This parameter specifies the MIDI messages assigned to the X-axis and Y-axis of the touchpad.

Control Change (CC# 0 to 127)	Control change messages will be transmitted. Specify the control change number to be transmitted.
No Assign	No MIDI message will be transmitted.

**CC Number** ..... [0...127]

This parameter specifies the CC number that will be transmitted when "Assign Type" has been set to "Control Change".

**Left Value / Lower Value**..... [0...127]

This parameter specifies the value of the control change message that is transmitted when you touch the left side or bottom edge of the touchpad.

**Right Value / Upper Value** ..... [0...127]

This parameter specifies the value of the control change message that is transmitted when you touch the right side or top edge of the touchpad.

• **Touch/Release**

In addition to the messages created by moving your finger across the Touchpad, Control change messages can also be transmitted when the Touchpad is touched—or released.

**Touch Enable**..... [Enable, Disable]

This parameter specifies whether to enable or disable touch/release.

**CC Number** ..... [0...127]

This parameter specifies the CC number of the control change message that will be transmitted.

**Off Value**..... [0...127]

This parameter specifies the value of the control change message that is transmitted when you lift your finger from the Touchpad.

**On Value** ..... [0...127]

This parameter specifies the value of the control change message that is transmitted when you place your finger on the Touchpad.

## Touchpad (Pitch/Mod mode)

When the touchpad is in Pitch/Mod mode, MIDI messages are transmitted on the same MIDI channel assigned to the keyboard.

- **Mod**

### **Mod Enable ..... [Enable, Disable]**

This parameter specifies whether to enable or disable the transmission of control change messages when you move your finger along the Y-axis of the Touchpad.

### **CC Number ..... [0...127]**

This parameter specifies the value of the control change message that will be transmitted.

### **Lower Value..... [0...127]**

This parameter specifies the value of the control change message that is transmitted when you touch the bottom edge of the Touchpad.

### **Upper Value ..... [0...127]**

This parameter specifies the value of the control change message that is transmitted when you touch the top edge of the Touchpad.

## Sustain Button

### **Assign Type ..... [Note, Control Change, No Assign]**

This parameter specifies the MIDI message assigned to the Sustain button.

Note (Note# C-1 to G9)	Note messages will be transmitted. Specify the note number to be transmitted.
Control Change (CC# 0 to 127)	Control change messages will be transmitted. Specify the control change number to be transmitted.
No Assign	No MIDI message will be transmitted.

### **MIDI Channel ..... [1...16, Global]**

This parameter specifies which MIDI channel is used to transmit MIDI messages. When set to "Global", MIDI messages will be transmitted on the Global MIDI Channel, specified in the global parameters.

### **Off Value..... [0...127]**

This parameter specifies the value of the message that is transmitted when the Sustain button is switched off.

### **On Value ..... [0...127]**

This parameter specifies the value of the message that is transmitted when the Sustain button is switched on.

When "Assign Type" is set to "Note", a note-on message is transmitted with the On Value as the velocity. When "On Value" is set to "0", a note-on message is transmitted with "1" as the velocity.

## Button Behavior ..... [Momentary, Toggle]

The Sustain button can be set to either of these modes:

Momentary	When "Assign Type" is set to "Note", a note-on message is transmitted when you press the Sustain button, and a note-off message is transmitted when you release the button. When "Assign Type" is set to "Control Change", a control change message with the On Value is transmitted when you press the Sustain button, and a control change message with the Off Value is transmitted when you release the button
Toggle	When "Assign Type" is set to "Note", each press of the Sustain button will alternately send a note-on message or a note-off message. When "Assign Type" is set to "Control Change", each press of the Sustain button will alternately send a control change message with the On Value or Off Value.

## Global parameters

### General

#### Global MIDI Channel ..... [1...16]

This parameter specifies the Global MIDI channel that the nanoKEY Studio is operating on. This can be set to match the MIDI channel of your software.

#### Battery Type..... [Alkaline, Ni-MH]

Be sure to use this parameter to specify the type of batteries you have installed in the nanoKEY Studio. Set this to "Ni-MH" when using nickel-metal hydride batteries or to "Alkaline" when using alkaline batteries.

### Wireless

#### Device Name

This parameter specifies the device name displayed when a wireless connection is being used.

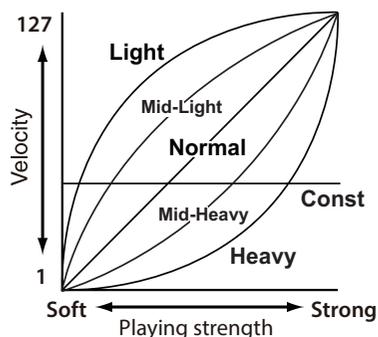
Up to 25 alphanumeric characters can be entered.

**TIP** This setting will be applied the next time that the nanoKEY Studio is turned on or the next time that the wireless function is turned on (→ page 5: Wireless Connection Setup).

## Controllers

### Key Velocity Curve..... [Light, Mid-Light, Normal, Mid-Heavy, Heavy, Const]

This parameter specifies how the volume changes in response to the force used when you play the Keyboard. Select one of the five velocity curves, or specify a constant value. Select the curve that is most appropriate for your playing dynamics or for the desired effect.



- Light** This curve lets you produce loud notes without having to play very strongly.
- Mid-Light** |
- Normal** This is the normal curve.
- Mid-Heavy** |
- Heavy** This curve requires strong playing for loud notes to be produced.
- Const** This produces a constant (fixed) velocity value.

### Key Velocity Constant Value ..... [1...127]

This parameter specifies the velocity value that will be transmitted when the Keyboard velocity curve has been set to "Const." This setting is useful when playing organ sounds.

### Trigger Pad Velocity Curve ..... [Light, Normal, Heavy, Const]

This parameter specifies how the volume changes in response to the force used when you tap a Trigger Pad. Select one of the three velocity curves, or specify a constant value.

### Trigger Pad Velocity Constant Value..... [1...127]

This parameter specifies the velocity value that will be transmitted when the Trigger Pad velocity curve has been set to "Const."

### Trigger Pad Sensitivity..... [1...3]

This parameter specifies the sensitivity of the trigger pads. "1" indicates the most sensitive, and "3" indicates the least sensitive. This parameter can be used to make the trigger pads more sensitive when inputting drums, so that the pads will respond even if they are lightly pressed, as well as to make the trigger pads less sensitive when triggering samples, in order to prevent the pads from responding accidentally.

⚠ If the "Trigger Pad Sensitivity" value is set too low, the Trigger Pads may remain on. If this should happen, set this parameter to a higher value.

### Touchpad Pitch/Mod Return Speed ..... [Immediate, Fast, Normal, Slow]

This parameter specifies how quickly the pitch bend and modulation return after you have removed your finger from the Touchpad. "Immediate" indicates the fastest speed, and "Slow" indicates the slowest.

### Touch Scale Note On Velocity ..... [1...127]

This parameter specifies the velocity of the note messages that are transmitted in Touch Scale mode.

### Chord Pad Octave Offset..... [-2...+2]

This parameter adjusts the pitch range played by the trigger pads when in Chord Pad mode, in one-octave units.

## Easy Scale Chord Octave Offset.....[-2...+2]

This parameter adjusts the pitch range of chords sounded by the black keys when in Easy Scale mode, in one-octave units.

## MIDI

### MIDI Clock Source .....[Auto, Internal, External-USB]

This parameter can be used to synchronize the nanoKEY Studio Arpeggiator to your software or DAW system

 The MIDI clock is not transmitted or received when a wireless connection is being used.

Auto	When a MIDI clock is input at the USB port, the arpeggiator automatically uses the "External" setting. When no MIDI clock is input, the arpeggiator automatically uses the "Internal" setting.
Internal	The arpeggiator operates at the tempo set with the BPM parameter. Select this setting when you do not need to synchronize the BPM with your software.
External-USB	The nanoKEY Studio arpeggiator will be synchronized with the MIDI clock of the computer connected to the USB port.

## Energy-Saving Features

### Auto Power Off ..... .....[Disable, 30 min, 1 hour, 2 hours, 4 hours]

When operating on batteries, the nanoKEY Studio can be set to automatically turn off after a set period of inactivity to preserve the battery life. You can choose the amount of time that must pass with no activity before the power will automatically turn off—30 minutes, 1 hour, 2 hours, or 4 hours. To prevent the nanoKEY Studio from turning off automatically, set the Auto Power Off to "Disable." To turn the nanoKEY Studio back on after the Auto Power Off function has turned it off, set the mode switch to "Standby", and then return it to " (Battery).

### Auto LED Off ..... [Disable, Enable]

By setting this parameter to Enable, you can choose to have the LEDs automatically decrease in brightness after a set period of inactivity; and then turn off completely after an additional set period of time where there is no activity. This setting is applied whether the nanoKEY Studio is operating with a USB connection or on batteries.

### LED Brightness ..... [1...3]

This parameter specifies the maximum brightness of the LEDs. "1" indicates the least bright, and "3" indicates the maximum brightness. This setting is applied whether the nanoKEY Studio is operating with a USB connection or on batteries.

 When the nanoKEY Studio is operating on batteries, the brighter the LEDs, the shorter the battery life. In order to extend the battery life, specify a lower setting.

**LED Illumination ..... [Disable, Enable]**

This parameter can be used to activate the nanoKEY Studio LED illumination after a set period of time has passed with no operations being performed. Set this to “Enable” so that the LEDs will light up or to “Disable” so that they will not light up. If the Keyboard, Knobs, etc. are operated while the LED Illumination is active, the nanoKEY Studio returns to its previous condition. This setting is applied whether the nanoKEY Studio is operating with a USB connection or on batteries.

**LED Eco Mode ..... [Disable, Enable]**

This parameter specifies whether to use the mode that dims the LEDs. Set this to “Enable” so that the LEDs will be dimmed or to “Disable” so that the LEDs will light up as usual. When this parameter is set to “Enable”, the battery consumption will be reduced when the nanoKEY Studio is operating on batteries. This setting is applied whether the nanoKEY Studio is operating with a USB connection or on batteries.

# Appendix

## Restoring the Factory Settings

While holding down the Scene, Shift/Tap and Chord Pad buttons, set the Mode switch to “USB” and turn on the nanoKEY Studio. The Scene button and Trigger Pads 1 through 8 will begin to blink. All settings of the nanoKEY Studio will be restored to the factory settings when the blinking stops.

- ⚠ Restoring the factory settings takes several seconds after the nanoKEY Studio is turned on. Never turn off the nanoKEY Studio while the Scene button is blinking.
- ⚠ The factory settings cannot be restored when the mode switch is set to “” (Battery).

## Troubleshooting

Check the Korg website (<http://www.korg.com/>) for the most recent FAQ.

### The nanoKEY Studio won't turn on.

#### With a USB connection:

- If the nanoKEY Studio is connected to a computer via a USB hub, the nanoKEY Studio may not turn on due to insufficient power. In that case, the nanoKEY Studio should be connected directly to the USB connector on the computer without using a USB hub.
- There may be a problem with the USB cable currently used. Check if the nanoKEY Studio can be turned on using the supplied USB cable.

#### With a wireless connection:

- Make sure that the Mode switch is set to “” (Battery).
- Make sure that the batteries have been inserted correctly, and that they are not depleted. If the batteries are depleted, replace them with new ones.

### A wireless connection cannot be established.

- Verify that your computer or iPhone/iPad is compatible with Bluetooth 4.0.
- Verify that the operating system for your computer or iPhone/iPad is compatible with Bluetooth Low Energy MIDI. Compatible operating systems are OS X Yosemite or later, Windows 8.1 or later (KORG BLE-MIDI Driver is required), and iOS 8.0 or later.

## The wireless connection cuts out.

- Make sure that your computer or iPhone/iPad is not too far away from the nanoKEY Studio.

## There is no response from the software.

- Make sure that the nanoKEY Studio is correctly specified in the MIDI port setup of your software.
- In order to use the functions of the nanoKEY Studio, your software must be set up. For the setup, refer to “Customizing Controllers” on page 14 and the instruction manual for your software.
- Your software may not support some functions. Check the instruction manual for your software.
- Make sure that the MIDI channel for messages transmitted by the nanoKEY Studio is set to the same MIDI channel in the software.

## Buttons do not operate as indicated by the nanoKEY Studio.

- Your software may not support some functions or may operate differently.

## Scale list

Scale Name	Scale [Key C]
Major 1 (Ionian)	C, D, E, F, G, A, B
Major 2 (Lydian)	C, D, E, F#, G, A, B
minor 1 (Aeolian)	C, D, E <sup>b</sup> , F, G, A <sup>b</sup> , B <sup>b</sup>
minor 2 (Dorian)	C, D, E <sup>b</sup> , F, G, A, B <sup>b</sup>
minor 3 (Phrygian)	C, D <sup>b</sup> , E <sup>b</sup> , F, G, A <sup>b</sup> , B <sup>b</sup>
Major Blues	C, D, E <sup>b</sup> , E, G, A
minor Blues	C, E <sup>b</sup> , F, G <sup>b</sup> , G, B <sup>b</sup>
Major Penta (Major Pentatonic)	C, D, E, G, A
minor Penta (minor Pentatonic)	C, E <sup>b</sup> , F, G, B <sup>b</sup>
Raga (Raga Bhairav)	C, D <sup>b</sup> , E, F, G, A <sup>b</sup> , B
Ryukyu	C, E, F, G, B
Chinese	C, E, F#, G, B
Bass Line	C, G, B <sup>b</sup>
Wholetone	C, D, E, G <sup>b</sup> , A <sup>b</sup> , B <sup>b</sup>
5th Interval	C, G

# Arpeggio rhythm pattern list

01	
02	
03	
04	
05	
06	
07	
08	
09	
10	
11	
12	
13	
14	
15	

# Specifications

Wireless method:	Bluetooth low energy
Jacks:	USB port (micro Type B)
Power supply:	USB bus power supply or two AAA batteries (alkaline or nickel-metal hydride batteries)
Battery service life:	Approx. 10 hours (when using alkaline batteries: Battery life will vary depending on the batteries used and on the conditions of use.)
Current consumption:	500 mA or less
Dimensions (W x D x H):	278 x 160 x 33 mm/ 10.94" x 6.29" x 1.29"
Weight:	471 g/1.04 lbs (excluding batteries)
Included items:	Two AAA alkaline batteries, USB cable, Quick Start Guide

\* For the purpose of improvement, the specifications and appearance are subject to change without notice.

## Operating requirements

Windows (USB connection):

Microsoft Windows 7 SP1 or later (32 bit/64 bit)

Windows (wireless connection):

Computer installed with Microsoft Windows 8.1 or later and compatible with Bluetooth 4.0 (KORG BLE-MIDI Driver is required)

Mac (USB connection): OS X 10.9 Mavericks or later

Mac (wireless connection): Mac installed with OS X 10.10 Yosemite or later and compatible with Bluetooth 4.0

iOS (wireless connection): iPhone/iPad installed with iOS 8 or later and compatible with Bluetooth 4.0

 nanoKEY Studio operation is not guaranteed with all devices that satisfy these operating requirements.

# **KORG INC.**

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

## Declaration of Conformity

- This DoC is issued under the sole responsibility of the manufacturer. -

Manufacturer : KORG INC.  
Address : 4015-2 Yanokuchi, Inagi-City, Tokyo 206-0812 Japan.  
Brand Name : KORG  
Description of Device : Bluetooth Module  
Model No. : KBM-1  
Rating / Power Supply : DC 3V

Fulfils the essential requirements of the Directive 2014/53/EU (RED).

The following standards were applied:

<Spectrum>

EN 300 328 V2.1.1

<EMC>

EN 301 489-1 V1.9.2

EN 301 489-17 V2.2.1

EN 55032:2012

EN 55024:2010

<Health & Safety>

EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013

EN 62479:2010

Remarks:

Authorized Representative

KORG (UK) Limited

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Signature: \_\_\_\_\_

Name: Norio Sekiya

Title: Senior Engineer of Safety Standard Group Quality Assurance Sec.

 affixed on 7/2015