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让数字艺术创作、分享和学习变得简单。

# User's Manual

## 用户手册

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Clarii mini 小小笛



Please visit our website to obtain this manual in other languages.

Por favor inicie sesión en nuestro sitio web oficial para obtener las versiones en otros idiomas de este manual de usuario.

Consulter notre site officiel pour obtenir ce manuel d'utilisateur dans d'autres langues.

请登录我们的官方网站获取本用户说明书的其他语言版本。

公式サイトにアクセスいただき、多言語ユーザーマニュアルもお手にとってご覧ください。

**[www.robkoo.com](http://www.robkoo.com)**

# Welcome

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Robkoo helps everyone become a digital artist.

Thanks for purchasing Clarii mini. Before using this unit, please read and understand this manual. After reading, please keep it available for immediate reference.

For ClariiOS version 1.0.

## Key to Symbols

✔ Suggested actions or tips

✘ Wrong actions or warnings

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# Introduction

## Concept

Clarii mini is a new form of wind instrument created by Robkoo. With its intuitive design, audio technology, and realistic sounds, Clarii makes performing music easier than ever.

Breathe. Shake. Play. Clarii mini is yet another musical instrument from the future after the launch of the original Wind Synthesizer R1.

### ► Sound of true instruments

With sounds sampled from top performers around the globe, Clarii saves 10 or even 20 years of practice to achieve the vibe of a pro.

### ► Shake & Play tones

Play special novelty tones by moving Clarii around. Turn Clarii into a rainstick, shaker and blade without blowing into it.

### ► Design for music on-the-go

Clarii sits well in your backpack. Play wherever you want with its own speaker.

### ► Adjustable thumb hook

The position of thumb hook can be adjusted in order to accommodate hand sizes of both children and adults.

### ► High-accuracy accelerometer

Trigger performance techniques by simply shaking and waving. Tilt up and down for vibrato, pitch bend or any assigned effects.

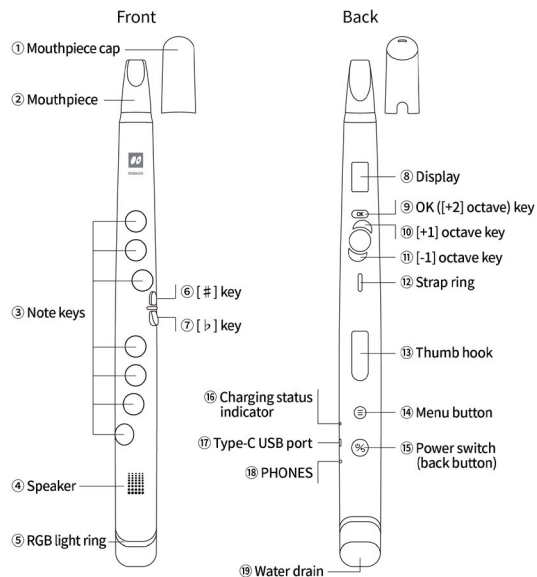
### ► Learn in 2 minutes

Learn the basic fingering chart in 2 minutes. Keep practicing for 2 weeks, you will be ready to gig.

## Package Contents

- Clarii mini
- Mouthpiece cap
- Dust bag
- Type-C cable
- User's manual
- Quickstart Guide

# Panel Descriptions

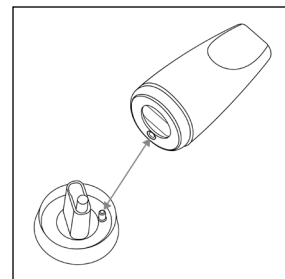


## ① Mouthpiece cap

Protects mouthpiece. Remove before playing. After playing, clean the mouthpiece before putting the cap back on.

## ② Mouthpiece

Replacable mouthpiece made for Clarii. Detach by gently sliding out (do not twist). While attaching, make sure to fit the plug as illustrated.



## ③ Note keys

Play notes by holding combinations of note keys while blowing into the mouthpiece. A variety of fingering modes are available.

- Please find the fingering charts in "Appendix - Fingering Charts" of this manual.

## ④ Speaker

Built-in speaker.

## ⑤ RGB lights

Glow different colors according to the status of Clarii.  
Can be turned off.

## ⑥ [#] key

Raises the note(s) played by one semitone while pressed.

## ⑦ [b] key

Lowers the note(s) played by one semitone while pressed.

## ⑧ Display

Displays the current tone, key, octave, status, as well as menu items.

## ⑨ OK ([+2] octave) key

- By default, hold to play 2 octaves above, release to restore.
- In menu, press to confirm.
  - ✔ You can set up this button in "Settings - Advanced Settings".

## ⑩ [+1] octave key

Hold to play 1 octave above, release to restore.

- ✔ Alternative cross-octave fingerings available in "Appendix - Fingering Charts" of this manual.

## ⑪ [-1] octave key

Hold to play 1 octave below, release to restore.

## ⑫ Strap ring

To attach the neck strap.

- ✔ A neck strap can effectively prevent Clarii from falling.

## ⑬ Thumb hook

Fit your right thumb below the hook to hold Clarii.

- ✔ Adjust the position of thumb hook to get the best fit with hands.

## ⑭ ≡ Menu button

Press to enter the settings menu. Keep pressing to browse through settings.

### ⑮ ⑮ Power switch (back button)

- Hold for 2 seconds to power up.
- Hold for 3 seconds to power off.
- In menu, press to go back.

### ⑯ Charging status indicator

Turns red when charging, turns green when fully charged.

### ⑰ Type-C USB port

Charges Clarii and transfers data. Connect this port to a computer or smart device to upgrade, charge, or exchange data.

### ⑱ PHONES

Stereo 3.5mm output for headphones/earbuds.

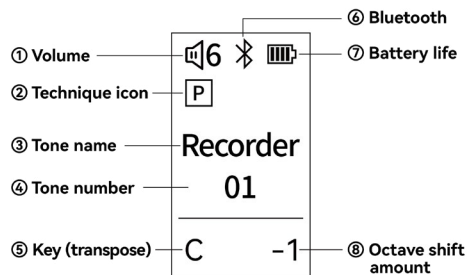
- Please make sure the volume is proper before wearing the headphones.

### ⑲ Water drain

Drops of water will exit here. Wipe them off with a soft cloth. Do not jam the water drain.

## Display

### Performance Mode



#### ① Volume

Shows the current level of volume or indicates the muted status.

#### ② Technique icon

Shows the current technique. **P** indicates "Portamento." While **P** is on, all neighboring notes will glide to each other.

#### ③ Tone name

Name of the current tone.

#### ④ Tone number

The corresponding number of the current tone.

#### ⑤ Key (transpose)

Shows the name of current key.

#### ⑥ Bluetooth

Appears when Bluetooth MIDI is enabled (connected or not). Absent when Bluetooth MIDI is off.

#### ⑦ Battery life

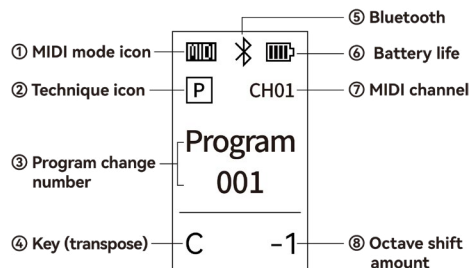
Shows the remaining battery life.

#### ⑧ Octave shift amount

Absent by default. If octave has been shifted in Advanced Settings, it shows the amount of octave shifts.

## MIDI Mode

Clarii will switch to MIDI mode when connected to a DAW or JamKoo App.



#### ① MIDI mode icon

Appears when Clarii switches to MIDI mode. When connected to JamKoo App, JamKoo icon will appear instead .

#### ② Technique icon

Shows the current technique. **P** indicates “Portamento.”

#### ③ Program change number

The current program change number, ranging from 001 to 128.

#### ④ Key (transpose)

The current key (transpose), globally effective in MIDI mode.

#### ⑤ Bluetooth

Appears when Bluetooth MIDI is enabled (connected or not). Absent when Bluetooth MIDI is off.

#### ⑥ Battery life

Shows the remaining battery life.

#### ⑦ MIDI channel

The current MIDI Channel. Displays “CH01” to “CH16” for Channel 1 to 16.

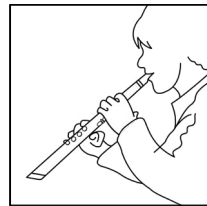
#### ⑧ Octave shift amount

If the base octave has been shifted, it shows the amount of octave shifts. The shift applies globally in MIDI mode.

## Playing

### Playing Position

Hold Clarii as the illustration shows, with left hand above right hand. Rest your left thumb on the circle between octave keys. Fit your right thumb below the thumb hook to support this position.



- It is advisable to wear a neck strap.

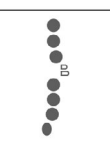
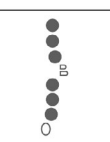
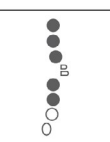
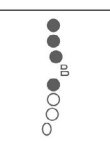
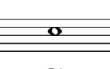
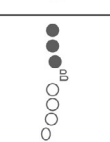
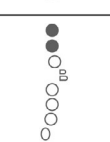
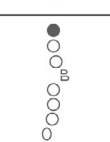
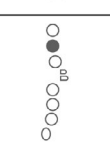
### ► Using the Mouthpiece

- Default method: gently wrap the mouthpiece with lips (like using a straw). Do not bite the mouthpiece.
- Alternative method: stick a saxophone/clarinet mouthpiece patch on its top. Wrap your lips around the mouthpiece and gently touch the top with your upper teeth.

- To prevent injury, please do not bite the mouthpiece with strength.

## Basic Fingering Chart

● Hold      ○ Release

|                                                                                         |                                                                                         |                                                                                         |                                                                                         |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| <br>C3 | <br>D3 | <br>E3 | <br>F3 |
|        |        |        |        |
| <br>G3 | <br>A3 | <br>B3 | <br>C4 |
|        |        |        |        |

Multiple fingering modes available in Advanced Settings. Access advanced fingering charts in "Appendix – Fingering Charts" of this manual. Please visit Robkoo website ([www.robkoo.com](http://www.robkoo.com)) to access the latest fingering charts.

## Selecting a Tone

Press  menu button once to view the tone list. Use [+1]/[-1] octave keys to select, and press OK key to confirm.

## Shake & Play

Special Shake & Play tones can be played through simply shaking and waving Clarii. Such tones do not support transpose or octave shift.

- While using Shake & Play tones, please watch out for connected cables.

 5  

**Rainstk**

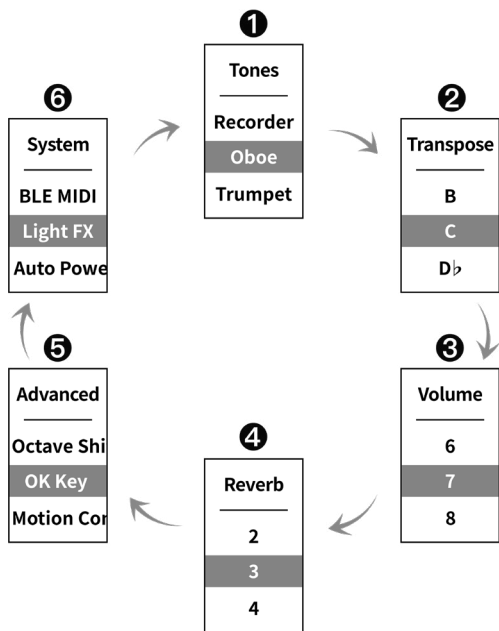
**16**

**Shake**

# Basic Settings

## Settings Menu

Press the  menu button to enter settings menu. Keep pressing the  menu button again to switch through Tones, Transpose, Volume, Reverb, Advanced, and System.



## ► Navigating the settings menu

- Enter menu / switch menu:  menu button
- Confirm: OK key
- Cancel/back:  power switch
- Next/plus: [+1] octave key
- Previous/minus: [-1] octave key

## ► Settings with JamKoo App

While Clarii is connected with JamKoo App, it can be found on the "Devices" page of JamKoo. Click on its card, full settings are accessible on the following page.

- 🔗 Read more about JamKoo App in "MIDI Mode – Connecting with JamKoo App" of this manual.

## Tones

The first menu. Use [+1]/[-1] octave keys to switch tones. Press OK key to confirm.

|          |
|----------|
| Tones    |
| Recorder |
| Oboe     |
| Trumpet  |

## Transpose

This adjusts the global transpose (key). There are 12 keys: G, A♭, A, B♭, B, C (default), D♭, D, E♭, E, F, and F♯.

|           |
|-----------|
| Transpose |
| B         |
| C         |
| D♭        |

## Volume

This adjusts the overall volume of PHONES and built-in speaker. There are 10 levels from 1 to 10, along with mute (Off).

| Volume |
|--------|
| 6      |
| 7      |
| 8      |

## Reverb

This adjusts the level of reverb in performance mode (as built-in reverb does not work in MIDI mode). There are 5 levels of reverb from 1 to 5, along with Off.

| Reverb |
|--------|
| 2      |
| 3      |
| 4      |

# Advanced Settings

Advanced Settings are accessible in settings menu.

## Octave Shift

This shifts the octave of all tones, ranging from -3 to +3.

| Octave Shift |
|--------------|
| +1           |
| 0            |
| -1           |

## OK Key

OK key is the first key under the display. By default, it works as [+2] octave key in performance mode. It can also be set up as the switch of portamento.

- Octave [+2] (default): hold to play 2 octaves above, release to restore.
- Portamento: to enable smooth and continuous gliding between notes. Press OK key once to enable its function, press again to disable it.

| OK Key      |
|-------------|
| Octave [+2] |
| Portamento  |

## Motion Control

While motion control is enabled, the selected control kicks in as Clarii gets tilted up at a certain angle.

- Off (default): disable motion control.
- Pitch bend: tilt up Clarii to pitch bend up, lower it to restore.

| Motion Control |
|----------------|
| Portamento     |
| Vibrato        |
| Off            |

- Portamento: tilt up Clarii to enable portamento, lower it to disable.
- Vibrato: tilt up Clarii to turn on vibrato, lower it to turn off. The higher the tilt angle, the stronger the vibrato effect.

## Motion Angle

This adjusts the interval of angles to trigger motion control. There are 5 levels from 1 to 5. The smaller the number, the easier to trigger. Default at level 3.

| Motion Ang |
|------------|
| 2          |
| 3          |
| 4          |

## Portamento Time

This adjusts the speed of portamento between notes. There are 5 levels from 1 to 5. The smaller the number, the faster the speed.

| Porta.Time |
|------------|
| 2          |
| 3          |
| 4          |

## Pitch Bend Range

This switches the range of pitch bend controls between 1, 2, and 3 semisteps. Default at 2.

| PB.Range |
|----------|
| 1 semi   |
| 2 semi   |
| 3 semi   |

## Fingering Mode

Alternative fingering modes are available for players with different backgrounds. Saxophone (recorder) fingering is the default fingering mode.

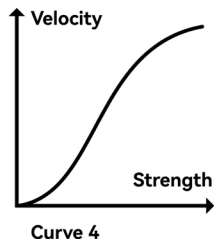
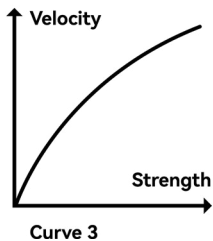
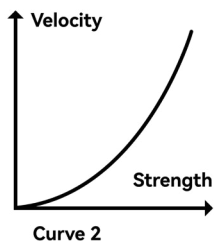
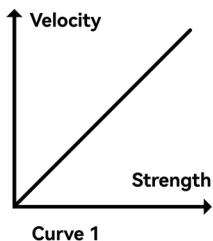
| Fingering M |
|-------------|
| Whistle+    |
| Sax         |
| Hulusi      |

- 🔍 A selection of fingering charts are available in "Appendix - Fingering Charts" of this manual. Please visit Robkoo website ([www.robkoo.com](http://www.robkoo.com)) to access the latest fingering charts.

## Breath Curve

This selects the velocity curve of breath sensor. There are 4 curve styles available as below, with the horizontal axis representing the strength of breath and the vertical axis representing the interpreted velocity.

| Breath Cur |
|------------|
| 4          |
| 1          |
| 2          |



## Breath Sensitivity

This adjusts the sensitivity of breath sensor. 5 levels are available from 1 to 5, with level 2 as default. The lower the level number is, the more breath-saving Clarii becomes.

| Breath Sen |
|------------|
| 1-Easy     |
| 2          |
| 3          |

## Key Sensitivity

This adjusts the sensitivity of note keys. 8 levels are available from 1 to 8, with level 6 as default. The lower the number is, the faster note keys respond.

| Key Sens. |
|-----------|
| 5-Normal  |
| 6         |
| 7         |

- Unwanted notes may occur when keys are too sensitive. Change key sensitivity to a higher number to avoid.

# System Settings

System Settings are accessible in settings menu.

## BLE MIDI

Enabled by default. When BLE MIDI is enabled, a Bluetooth icon will be on the top of the display. Clarii is able to connect with smart phone, computer and other smart devices through BLE MIDI as a MIDI controller.

|          |
|----------|
| BLE MIDI |
| On       |
| Off      |

## Light FX

This switches on/off the RGB light ring.

|          |
|----------|
| Light FX |
| On       |
| Off      |

## Auto Power Off

Clarii will power off after standing by for a certain period of time. This setting selects the length of time before the auto power off. 4 options are available: 5mins, 30mins, 60mins, and "Never".

|            |
|------------|
| Auto Power |
| 5min       |
| 30min      |
| 60min      |

## Language

English and Chinese (simplified) are supported.

|          |
|----------|
| Language |
| English  |
| 中文       |

## Factory Reset

This resets all settings.

|               |
|---------------|
| Factory Reset |
| Confirm       |
| Cancel        |

## Version Info.

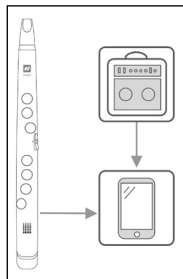
This displays the model name, serial number (SN), ClariiOS version, firmware version, and sound bank version. Please visit Robkoo website ([www.robkoo.com](http://www.robkoo.com)) to access the latest updates.

|              |
|--------------|
| Version Info |
| Model        |
| SN           |
| ClariiOS     |

# MIDI Mode

## Connecting Clarii

Clarii can be used as a MIDI controller to play virtual instruments on computer or smart device.



### ► USB MIDI

Connect Clarii with computer or smart device via USB cable as illustrated. Clarii sends out MIDI controls through cable, while the connected device outputs the sound.

### ► BLE MIDI

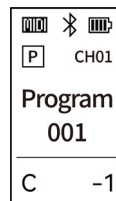
Clarii comes with built-in BLE (Bluetooth Low Energy) MIDI connectivity. While BLE is enabled, Clarii can connect with computer or smart device wirelessly.

The default Bluetooth device name of Clarii is “Clarii mini - (last 4 digits of serial number)”. This name can be modified using JamKoo App.

- Serial number (SN) is visible at the physical bottom of Clarii or in menu “System - Version Info.”

## Playing in MIDI Mode

Upon successful connection with computer or smart device, Clarii will switch to MIDI mode, indicated by a display shown in the graph. The display will only show the program change number. When Clarii switches to MIDI mode, speaker will mute.



## Connecting with JamKoo App

### ► Download (free)

Search “JamKoo” in App Store or Google Play and download for free.



### ► Connect

Keep Clarii near JamKoo, and find it on the Devices page of JamKoo. Alternatively, use USB Type-C cable to connect with smart device. A “Connected” message will pop up, indicating successful connection.

- Make sure both Clarii and the smart device have Bluetooth enabled, meanwhile JamKoo is given access to Bluetooth.

### ► Use JamKoo sounds

Upon successful connection to JamKoo, you can use Clarii as a MIDI controller and pick any JamKoo sounds to play in local performance sets or online tracks. Your device will output all sounds.

## ► Access more features (Bluetooth connection only)

Tap “” to manage MIDI devices.

- Settings: go to “Settings” on the card of your Clarii.
- Custom fingerings: access “Fingering Mode” on the settings page of your Clarii, and add extra fingerings for any note.

# Appendix

## Important Notes

Please read carefully before using Clarii:

- ✕ To avoid electric shock, damage, or other dangerous events that may result in injury or catastrophic outcomes, please use Clarii safely by complying with the following notes.

### ► Power supply

Please use a standard 5V AC adapter.

### ► Do not disassemble

No part of Clarii is supposed to be repaired by users themselves. DO NOT open up Clarii, take away parts, or modify the hardware in any way. If malfunction occurs, please stop using Clarii and visit Robkoo website ([www.robkoo.com](http://www.robkoo.com)) to find a retailer for repair service.

### ► Warning on humidity

Please DO NOT expose Clarii in rain, use Clarii near water, or use Clarii in humid environment. Please keep Clarii away from any liquid container (e.g. vase, bottle, glass) to avoid infiltration. If water or any liquid infiltrates Clarii, please power off Clarii and remove all cables immediately.

Repair information can be found on Robkoo website ([www.robkoo.com](http://www.robkoo.com)). DO NOT connect cables with wet hands.

### ► **Caution of heat**

The battery inside Clarii is not replaceable. Do not expose Clarii to harsh sunlight, burning objects or other heat sources.

### ► **In event of accident**

When any of the following event occurs, please power off Clarii immediately. Visit Robkoo website ([www.robkoo.com](http://www.robkoo.com)) for repair information.

- Smell or smoke coming out from Clarii.
- Objects sliding into Clarii.
- Falling or damaging.

- Please follow the guidelines below to prevent injury, damage, or property loss to you and other people.

### ► **Storage**

To avoid flipping, DO NOT store Clarii at unstable locations.

To avoid malfunctions, DO NOT expose Clarii to corrosive gases or salt gas.

Please remove all cables before storing Clarii.

### ► **Connection**

Please switch off the audio equipment before connecting to Clarii. Please apply minimal level of volume before powering on/off any equipment.

### ► **Use Clarii safely**

DO NOT stick finger into any gap or hole of Clarii.

Please avoid having objects (e.g. paper, plastic, metal) sticking into any gap of Clarii. In event of such situations, please power off Clarii immediately, and remove all cables. Visit Robkoo website ([www.robkoo.com](http://www.robkoo.com)) for latest repair information.

DO NOT stack your body or heavy objects onto Clarii, and DO NOT apply excessive strength on the buttons, ⏻ power switch, or ports of Clarii.

DO NOT apply high/uncomfortable volume with speaker/amp/headphone for extended period of time, in order to avoid ear damage. If you experience symptom of deaf or tinnitus, please seek help from a doctor.

Robkoo is not responsible for any damage or data loss caused by misuse or unauthorized refit of Clarii.

### ► **Surrounding environment**

Please use Clarii in an environment between -15°C to 45°C, between 5% RH to 75% RH, and between PH6.5 to PH7.2.

## Maintenance

### ► Mouthpiece

Clean your mouth before playing to maintain the hygiene of mouthpiece. Drops of water will exit from the water drain, dry off with soft cloth.

Mouthpiece can be removed regularly to wash. Hold the ring below mouthpiece with one hand, meanwhile slowly detach the mouthpiece with the other hand. After washing, use soft cloth to wipe it dry.

### ► ClariiOS update

Robkoo may periodically release updates for Clarii to improve its performance or fix bugs.

Connect Clarii to JamKoo App for available updates.

## Troubleshooting

| Problem                              | Solution                                                                                                                                |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Breath is not responding.            | Moisture may accumulate inside Clarii and interfere with the breath sensor. Lean Clarii vertically and let water exit from water drain. |
| Display language is Chinese.         | The language may be set to Chinese by accident. The path in menu is " 系统设置 - 语言 ". Select English and press OK key to confirm.          |
| Fingering does not respond properly. | Fingering may not function if all 7 note keys are touched when powering up. Release all 7 note keys at the same time to fix.            |

|                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Clarii cannot be found by other smart devices.              | <ul style="list-style-type: none"> <li>• Check the Bluetooth icon on the top of display (performance mode). If the icon is absent, enable Bluetooth in “Settings -System - BLE MIDI”.</li> <li>• Check if the smart application is authorized to use Bluetooth and location. If not, please authorize the application in settings of the device.</li> <li>• Bluetooth MIDI needs to be connected within a supported application. DO NOT connect in settings of the device where Bluetooth earbuds are connected.</li> </ul> |
| Cannot charge.                                              | The adapter may not be qualified. Use another adapter that supports USB protocol.                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Noise comes from PHONES port while connected with computer. | Some computers may cause noise while charging Clarii via USB cable. Use another power source or avoid charging while playing.                                                                                                                                                                                                                                                                                                                                                                                               |
| Random sounds occur while performing.                       | <ul style="list-style-type: none"> <li>• Check if OK key was pressed (enabled).</li> <li>• Check if motion control is enabled, and if the motion angle is too low.</li> </ul>                                                                                                                                                                                                                                                                                                                                               |

## Tone List

| Group        | No. | Patch      |
|--------------|-----|------------|
| Classical    | 1   | Recorder   |
|              | 2   | Oboe       |
|              | 3   | Trumpet    |
|              | 4   | (Alto) Sax |
|              | 5   | Violin     |
| Ethnic       | 6   | Hulusi     |
|              | 7   | Zhudi      |
|              | 8   | Suona      |
|              | 9   | Pipa       |
| Synth        | 10  | 80s Gamer  |
|              | 11  | Firefly    |
|              | 12  | Heal       |
| Fun          | 13  | Meow       |
| Shake & Play | 14  | Shaker     |
|              | 15  | Kongfu     |
|              | 16  | Rainstick  |

- 🔗 Please visit Robkoo website ([www.robkoo.com](http://www.robkoo.com)) to access the latest Tone List.

# Fingering Charts

● Hold

○ Release

## ► Saxophone fingering (default)

|  |  |  |  |  |
|--|--|--|--|--|
|  |  |  |  |  |
|  |  |  |  |  |

|  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|  |  |  |  |

|  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|  |  |  |  |

Sharps/flats can usually be played without semitone keys by using alternative express fingerings. Meanwhile, express octave fingerings are available for certain notes in a higher octave. It means that some notes beyond one octave can be played without using any octave key:

|  |  |  |
|--|--|--|
|  |  |  |
|  |  |  |

|  |  |
|--|--|
|  |  |
|  |  |

|  |  |  |
|--|--|--|
|  |  |  |
|  |  |  |

- ☞ You can set up custom fingerings by connecting Clarii with JamKoo App. Please visit Robkoo website ([www.robkoo.com](http://www.robkoo.com)) to access the latest Fingering Charts.

## ► EVI+ fingering

EVI+ is an adaption to the classical EVI fingerings. The row of Basic is identical to the original form - with base position at C4. The right hand fingerings are similar to a trumpet, while the highest key on left hand is [-5] semitone steps.

Extended: the lowest key on right hand is [+5] semitone steps, giving this fingering mode a wider range without using octave keys.

Express 1&2: because Clarii mini is feather-light, the left hand is not required to support it. Lifting left ring finger (the 3rd key from top) is [-1] semitone step, while lifting left middle finger (the 2nd key from top) is [+1] semitone step. In other words, the 2 keys can work as [±1] trill keys.

Express 3: lifting both left middle and ring fingers makes no difference to pressing those keys together, as the 2 keys will offset each other. Notice how almost one octave (G#3 - F4) is playable with right hand only.

[ # ] & [ ♭ ] keys still function on top of any fingering.

|           | C3 | C#3/D#3 | D3 | D#3/E#3 | E3 | F3 |
|-----------|----|---------|----|---------|----|----|
| Basic     |    |         |    |         |    |    |
| Extended  |    |         |    |         |    |    |
| Express 1 |    |         |    |         |    |    |
| Express 2 |    |         |    |         |    |    |
| Express 3 |    |         |    |         |    |    |

| Basic     |  |  |  |  |  |  |  |
|-----------|--|--|--|--|--|--|--|
| Extended  |  |  |  |  |  |  |  |
| Express 1 |  |  |  |  |  |  |  |
| Express 2 |  |  |  |  |  |  |  |
| Express 3 |  |  |  |  |  |  |  |

| Basic     |  |  |  |  |  |  |
|-----------|--|--|--|--|--|--|
| Extended  |  |  |  |  |  |  |
| Express 1 |  |  |  |  |  |  |
| Express 2 |  |  |  |  |  |  |
| Express 3 |  |  |  |  |  |  |

### ► Whistle+ fingering

Whistle + is an adaption to Irish tin whistle in C. The row of Basic shows the minimal fingerings of a natural scale.

Acoustic: some of the fingerings existing in the acoustic counterpart are programmed and listed here.

Express 1: on top of Basic and Acoustic, the lowest key can be used as an extra [-1] key.

Express 2: pressing one extra key that is 2 keys downwards (if any) moves a note down by 1 semitone step. Combine with Express 2 where possible to play a [-2].

Express 3: the cross-octave express fingerings are partially available. It helps play a few extra notes in the higher octave without using the octave keys.

[ # ] & [ ♭ ] keys still function on top of any fingering.

|           | B2 | C3 | C#3/D#3 | D3 | D#3/E#3 | E3 | F3 |
|-----------|----|----|---------|----|---------|----|----|
| Basic     |    |    |         |    |         |    |    |
| Extended  |    |    |         |    |         |    |    |
| Express 1 |    |    |         |    |         |    |    |
| Express 2 |    |    |         |    |         |    |    |
| Express 3 |    |    |         |    |         |    |    |

|           | F#3/G#3 | G3 | G#3/A#3 | A3 | A#3/B#3 | B3 |
|-----------|---------|----|---------|----|---------|----|
| Basic     |         |    |         |    |         |    |
| Extended  |         |    |         |    |         |    |
| Express 1 |         |    |         |    |         |    |
| Express 2 |         |    |         |    |         |    |
| Express 3 |         |    |         |    |         |    |

|           | C4 | C#4 | D4 | D#4/E#4 | E4 |
|-----------|----|-----|----|---------|----|
| Basic     |    |     |    |         |    |
| Extended  |    |     |    |         |    |
| Express 1 |    |     |    |         |    |
| Express 2 |    |     |    |         |    |
| Express 3 |    |     |    |         |    |

When the upper 6 note keys play together as the 5th (sol):

### ► Hulusi fingering

| 1= G |   |   |   |   |   |   |   |   |
|------|---|---|---|---|---|---|---|---|
| 3    | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 |
|      |   |   |   |   |   |   |   |   |

### ► Dizi fingering

| 1= G |   |   |   |   |   |   |   |    |
|------|---|---|---|---|---|---|---|----|
| 3    | 5 | 6 | 7 | 1 | 2 | 3 | 4 | #4 |
|      |   |   |   |   |   |   |   |    |

Express fingerings are also applicable to both Hulusi and Dizi fingerings:

| 3 |  |  |  |  | 5 |  |  |  |  |
|---|--|--|--|--|---|--|--|--|--|
|   |  |  |  |  |   |  |  |  |  |
| 6 |  |  |  |  | 7 |  |  |  |  |
|   |  |  |  |  |   |  |  |  |  |

## MIDI Messages

In MIDI mode, depending on your settings, the following messages will be sent to computer or other sound sources.

| Message        | Control(s)                                    | Setting(s)                  |
|----------------|-----------------------------------------------|-----------------------------|
| CC 1           | Motion sensor                                 | Motion Control - Vibrato    |
| CC 2           | Breath sensor                                 | -                           |
| CC 5           | (Sent with notes while portamento is enabled) | Porta. Time                 |
| CC 7           | Volume                                        | Volume                      |
| CC 65          | Portamento on/off                             | OK Key - Portamento         |
|                |                                               | Motion Control - Portamento |
| Program change | Tone switching                                | -                           |
| Pitch bend     | Pitch bend                                    | Motion Control - Pitch Bend |

## Specifications

|                |                                                                         |
|----------------|-------------------------------------------------------------------------|
| Power supply   | USB (Type-C) 5V $\overline{\text{---}}$ 1A                              |
| Battery        | Li-ion, 1200mAh                                                         |
| Current draw   | 1A                                                                      |
| Sensor         | Breath sensor, motion sensor                                            |
| Standby time   | Up to 12 hours                                                          |
| MIDI interface | USB MIDI, BLE MIDI                                                      |
| Audio ports    | Stereo 3.5mm TRS headphone output                                       |
| Accessories    | Type-C cable, User's Manual, Quickstart Guide, mouthpiece cap, dust bag |
| Size           | 46cm (length) × 4cm (width) × 5cm (height)                              |
| Weight         | 263g                                                                    |

The built-in BLE module has been certified by SRRC, CMIIT ID: 2020DP2713.



All products bearing this symbol are waste electrical and electronic equipment (WEEE as in Directive 2012/19/EU) which should not be mixed with unsorted household waste. Instead, you should protect human health and the environment by handing over your waste equipment to a designated collection point for the recycling of waste electrical and electronic equipment, appointed by the government or local authorities. Correct disposal and recycling will help prevent potential negative consequences to the environment and human health. Please contact the installer or local authorities for more information about the location as well as terms and conditions of such collection points.

Manufacturer: Robkoo Information & Technologies Co., Ltd.

Address: B109, DoBe E-Manor of Qibao, No. 6 Huazhong Road, Minhang District, Shanghai, China

## Warranty Overview

PLEASE READ: IMPORTANT INFORMATION ABOUT YOUR WARRANTY AND OTHER LEGAL RIGHTS

### Limited One Year Warranty

For goods lawfully purchased from Robkoo and/or our authorized resellers, Robkoo warrants that this product will be free of defects in materials and manufacture under normal use for one year. The warranty term begins on the date of in store purchase or the date of delivery (if the purchase is made online). A proof of purchase in the form of receipt and a proof of delivery may be required. The warranty is conditioned on proper use of the product by the purchaser. Robkoo reserves the right to deny this Limited One Year Warranty if the defect is the result of abuse, neglect, alteration or attempted repair by non-authorized personnel. Upon return of the warranty-eligible product to Robkoo or an authorized repair center, your product will be repaired or replaced, free of charge, with a functional equivalent product that is new or refurbished in Robkoo's discretion.

Details about your rights under this warranty policy may vary from region to region, please consult your local reseller or visit Robkoo website ([www.robkoo.com](http://www.robkoo.com)) for more information.

### Additional statutory rights

You may have warranty rights under applicable consumer laws that give you greater rights than our Limited One Year Warranty described above. Accordingly, the Robkoo Limited Warranty is in addition to, and not instead of, your statutory rights.

BY PURCHASING AND USING THIS PRODUCT, YOU AGREE THAT IN NO EVENT SHALL ROBKOO BE HELD LIABLE FOR ANY SPECIAL, INDIRECT, CONSEQUENTIAL OR INCIDENTAL DAMAGES OR FOR INJURY, LOSS OR DAMAGE WHICH A PERSON OR PROPERTY MAY SUSTAIN BY USE OF THIS PRODUCT. SOME STATE AND NATIONAL LAWS MAY NOT ALLOW THE EXCLUSION OF DAMAGES. THIS LIMITATION OF LIABILITY APPLIES ONLY WHERE ALLOWED BY LAW.

Warranty and repair policies are subject to change. Please see all of Robkoo's most current policies at Robkoo website ([www.robkoo.com](http://www.robkoo.com)).

## FCC Warning

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.



PAP

Li-ion

箱

外装フィルム

内紙、緩衝材

Please visit our website to obtain this user's manual in other languages.

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

# 欢迎

上海锣钹信息科技有限公司，是一家致力于数字艺术领域创新的科技公司。感谢您购买 Clarii mini 小小笛。在使用之前，请确定您已经阅读并理解本手册的内容。请将本手册妥善保管以便在需要时参阅。

适用于系统 1.0 版本。

## 视频说明书

您可以扫描下方的二维码，查阅视频说明书：



## 格式说明

- ✓ 建议的操作或提示。
- ✗ 错误的操作方式或警告。

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# 简介

## 主要特性

Clarii mini 小小笛是锣钹科技研发的吹奏型新形态乐器。它轻巧便携，性能犀利，集合了一流工业设计和音频技术，创新使用了多项专利，让您轻松地进入音乐演奏的世界。

Clarii mini 小小笛的特性，远超您对乐器的想象。

### ► 搭载真采样音色

通过真采样技术，将全球一流乐手演奏的原声汇聚装载到乐器中。过去在传统乐器上需要数年功力才能演奏出的音色，您可以通过 Clarii mini 轻松做到。

### ► 动感音色

创新内置雨声筒、沙锤、刀光剑影等类似打击乐器的“动感音色”，握持 Clarii mini，简单摇晃即可发声。摇身一变，加入气氛组。

### ► 创新外观设计

可以放进背包的吹奏乐器，自带扬声器，前所未有的轻松便携。随时随地，兴起而奏。

### ► 可调节指托

指托位置上下可调节，可以适用于不同手型和手指长度的演奏者，提供舒适的演奏体验。

### ► 内置体感传感器

高精度体感传感器，准确感知您的演奏。只需改变吹管的抬起角度，便可轻松触发各种技巧。例如弯音、滑音和颤音。

### ► 配套 App 丰富体验

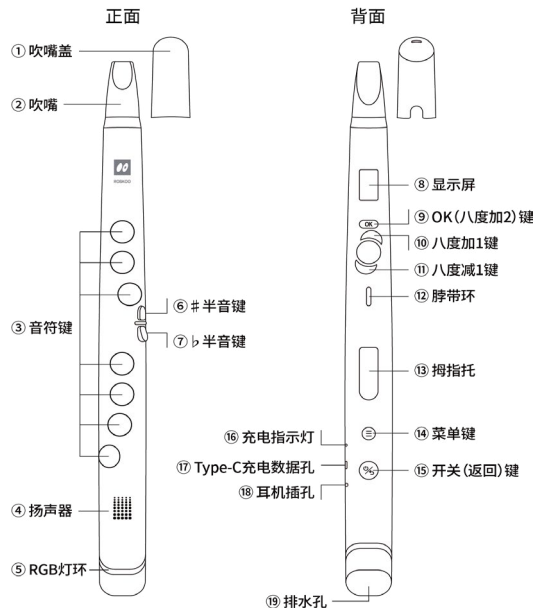
连接配套的“自乐班”App，学习专属互动课程。更可扩充上百种音色，体验海量动态乐谱。

## 包装清单

- Clarii mini 小小笛
- 吹嘴盖
- 用户手册
- 快速指引
- 防尘袋
- Type-C 充电数据线

# 部件说明

## 设备部件

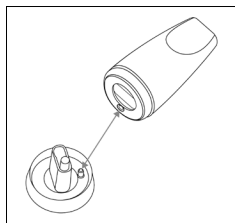


### ① 吹嘴盖

用于保护吹嘴。在演奏前请将吹嘴盖取下，妥善放置。演奏完毕，把吹嘴擦拭干净后再将吹嘴盖盖回。

### ② 吹嘴

Clarii mini 小小笛专用吹嘴。可以拆卸更换，取下时请握住吹嘴轻轻向外拔出，不要旋拧。安装时，注意对准吹管接口中的对位点，如图所示。



### ③ 音符键

用于演奏。在默认设置下，您可以使用萨克斯指法进行演奏。

有关指法的信息，请参阅本手册“附录 - 指法表”章节。

### ④ 扬声器

内置扬声器。当3.5mm耳机插孔接入耳机或音箱时，扬声器将不发声。

### ⑤ RGB灯环

根据设备状态展示不同的灯光效果。您可以在“系统设置 - 灯光效果”中，关闭灯光。

### ⑥ #半音键

用于临时演奏半音，按下后升高半音，抬起后还原。

## ⑦ **♭ 半音键**

用于临时演奏半音，按下后降低半音，抬起后还原。

## ⑧ **显示屏**

显示音色、调号、八度、菜单选项、设备状态等信息。

## ⑨ **OK（八度加 2）键**

- 演奏模式下，默认按下后所有音符升高 2 个八度。
- 菜单模式下，按下表示确认。

🔍 您可以自定义 OK 键在演奏时的功能，请参阅本手册“高级设置 - OK 键功能”章节。

## ⑩ **八度加 1 键**

用于临时演奏高 1 个八度的音，按住时当前演奏的音高将提高 1 个八度，抬起后还原。

## ⑪ **八度减 1 键**

用于临时演奏低 1 个八度的音，按住时当前演奏的音高将降低 1 个八度，抬起后还原。

🔍 有关高八度简化指法的信息，请参阅本手册“附录 - 指法表”章节。

## ⑫ **脖带环**

用于挂系脖带或腕带，防止 Clarii mini 在演奏中意外掉落。

## ⑬ **拇指托**

演奏时，将右手大拇指放在此处，轻轻将 Clarii mini 托起。指托的位置可以上下调整，以适用不同手型。

## ⑭ ③ **菜单键**

点按即可进入菜单。再次点按，切换菜单。

🔍 有关菜单操作的说明，请请参阅本手册“基础设置 - 进入设置菜单”章节。

## ⑮ ④ **开关（返回）键**

- 长按 ④ 开关键，开 / 关机。
- 菜单模式下，点按 ④ 开关（返回）键，返回上一级。

## ⑯ **充电指示灯**

充电时，指示灯保持红色长亮，充满后保持绿色长亮。

## ⑰ **Type-C 充电数据孔**

充电及数据传输插孔。用于对 Clarii mini 进行充电、系统升级，或与电脑及移动设备传输数据。

## ⑱ **耳机插孔**

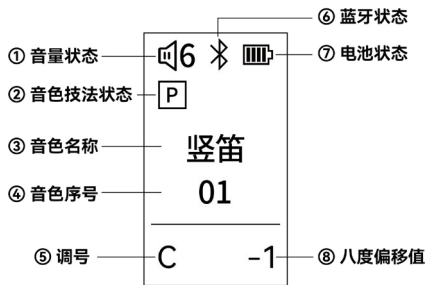
立体声 3.5mm 耳机输出孔。您可以将耳机连接到这里，听到 Clarii mini 的声音。当插孔接入耳机或音箱时，扬声器将不发声。

🔍 为了保护您的听力，在戴上耳机前，请确保音量不要调得太大。

## ⑲ **排水孔**

冷凝水滴将从此处排出。请在演奏一段时间后用软布擦拭干净。不要堵住该排水孔。

## 显示屏 - 演奏模式



### ① 音量状态

显示当前设置的音量级别，或静音状态。

### ② 音色技法状态

显示当前的音色技法状态。**[P]** 是滑音技法“Portamento”的首字母，该图标显示时，音符间会有滑音效果。

### ③ 音色名称

当前音色的名称。

### ④ 音色序号

显示当前音色的序号。

### ⑤ 调号

所有音色的调号。如果变调，所有音色都会同步变调。

### ⑥ 蓝牙状态

蓝牙开启时，显示该图标。蓝牙关闭后，则不显示图标。

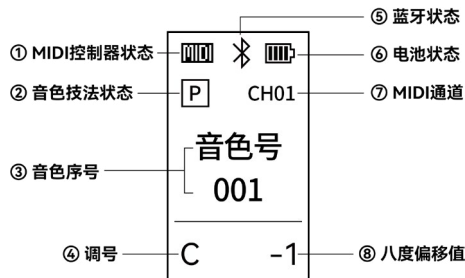
### ⑦ 电池状态

Clarii mini 当前的电池电量比例。

### ⑧ 八度偏移值

默认为 0，此时数值不显示。如果您想整体提升或降低 Clarii mini 音色的八度，可以在高级设置中调整八度偏移。当您设置过后，此处显示八度偏移值。八度偏移设置对所有音色都起作用。

# 显示屏 - MIDI 控制器模式



## ① MIDI 控制器状态

当 Clarii mini 进入 MIDI 控制器模式时，显示该图标。  
当连接自乐班 App 时，则显示自乐班图标。

## ② 音色技法状态

显示当前的音色技法状态。P 是滑音技法“Portamento”的首字母，该图标显示时，音符间会有滑音效果。

## ③ 音色序号

显示当前 MIDI 音色编号（Program Change）数值。  
MIDI 控制器模式时，音色序号范围为 001 至 128。

## ④ 调号

当前设置的调号，调号设置在 MIDI 模式下全局有效。

## ⑤ 蓝牙状态

蓝牙开启时，显示该图标。蓝牙关闭后，则不显示图标。

## ⑥ 电池状态

显示电池电量的比例。

## ⑦ MIDI 通道

当 Clarii mini 进入 MIDI 控制器模式时，将在 MIDI 通道 1 输出。

## ⑧ 八度偏移值

当您在设置中对音色做八度偏移后，此处显示八度偏移值。八度偏移在 MIDI 模式下全局有效。

# 演奏

## 演奏姿势

按图示握持 Clarii mini，左手在上，右手在下。将左手拇指自然放在八度加 1 和八度减 1 键中间的圆形区域。右手拇指放置于下方拇指托处，轻轻托起吹管。



- 建议您在演奏前为 Clarii mini 挂系好脖带。

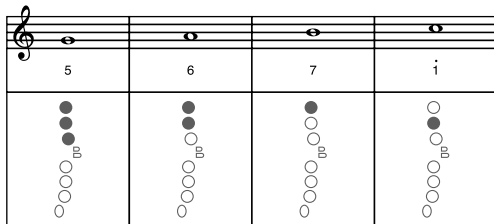
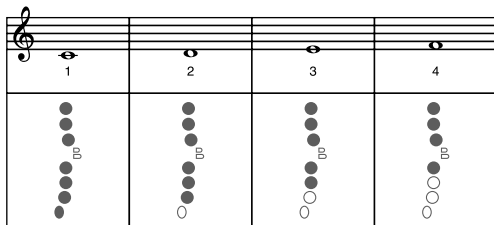
## 吹嘴含咬方法

- 方法一：像使用吸管喝饮料的口型一样，轻轻用嘴巴包住吹嘴，不要用上齿咬吹嘴。
- 方法二：将上齿轻轻咬在吹嘴的上边沿，用嘴巴包住吹嘴。在使用这种方式时，建议您在吹嘴的上部，牙齿咬合的地方贴上萨克斯或单簧管等乐器使用的牙垫，这样可以保护您的牙齿和吹嘴。
- 为了保护您的牙齿，不要用力咬合吹嘴。

## 基本指法

● 表示按下音符键

○ 表示松开音符键



- 在 Clarii mini 小小笛“高级设置”中，您可以选择萨克斯、葫芦丝或笛子指法。有关详细指法的信息，请参阅本手册“附录 - 指法表”章节。

## 切换音色

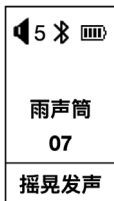
按下  $\text{⏮}$  菜单键，菜单的第一项是“音色”。按八度加 1 或者八度减 1 可以上下切换音色，选定后，按 OK（八度加 2）键，即可保存并返回演奏界面。

## 动感音色

Clarii mini 小小笛内置动感音色，这些音色主要通过摇晃、翻转等操控方式来演奏。使用动感音色，可以将您的吹管变成一个“打击乐器”。

动感音色不支持更改调号、偏移八度的操作。

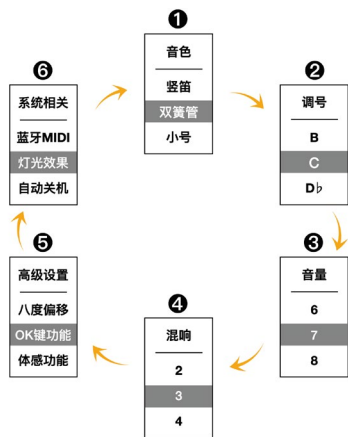
- ✘ 使用动感音色时，请留意吹管的接线。可以挂系腕带，防止设备意外脱落。



# 基础设置

## 进入设置菜单

点按  $\text{⏮}$  菜单键，吹管进入菜单模式。连续按  $\text{⏮}$  菜单键，将依次在音色、调号、音量、混响、高级设置、系统相关的一级菜单中切换。



### ► 设置状态下的按键功能

$\text{⏮}$  菜单键：按一次进入菜单，再次按切换菜单。

$\text{⏮}$  开关（返回）键：返回上一级。

OK（八度加 2）键：确定并返回。

八度加 1 键：上一个。

八度减 1 键：下一个。

## ► 连接自乐班 APP 设置

当您将 Clarii mini 与自乐班 App 连接后，可以在自乐班 App 的设备连接页面中，看到 Clarii mini 的设备卡片。点击卡片进入设备详情页面，在其中可以查看或调节 Clarii mini 的相关设置项。

- 有关自乐班 App 信息，请参阅本手册“用作 MIDI 控制器 - 连接自乐班 App”章节。

## 音色

菜单的第一项是音色。按八度加 1 键或八度减 1 键可上下切换，选定后，按 OK (八度加 2) 键，即可保存并返回演奏界面。

|     |
|-----|
| 音色  |
| 竖笛  |
| 双簧管 |
| 小号  |

## 调号

此项可调节吹管的全局调号设置。包含 G、A $\flat$ 、A、B $\flat$ 、B、C (默认)、D $\flat$ 、D、E $\flat$ 、E、F、F $\sharp$  共 12 个调。

|           |
|-----------|
| 调号        |
| B         |
| C         |
| D $\flat$ |

## 音量

此项同时调节吹管内置扬声器和耳机插孔的音量。支持关闭，以及从小到大的 1 ~ 10 级音量调节。

|    |
|----|
| 音量 |
| 6  |
| 7  |
| 8  |

## 混响

此项可调节 Clarii mini 在演奏模式下的混响级别，并不会影响 MIDI 控制器模式。支持关闭，以及由小到大的 1 ~ 5 级混响。

|    |
|----|
| 混响 |
| 2  |
| 3  |
| 4  |

# 高级设置

## 八度偏移

对 Clarii mini 的八度做整体调整，支持 -3 八度至 +3 八度的调整范围。

|      |
|------|
| 八度偏移 |
| +1   |
| 0    |
| -1   |

## OK 键功能

OK 键在吹管屏幕的下方，默认为八度加 2 功能。您也可以将其设置为滑音功能。

- 八度加 2：按住时，所有演奏音符升高 2 个八度，松开 OK 键后恢复正常八度。默认为此选项。
- 滑音：当 OK 键设置为滑音时，按下 OK 键，滑音功能打开，此时演奏的音符带有滑音效果，屏幕上也会出现滑音图标 。再次按下 OK 键后，功能关闭。

|       |
|-------|
| OK键功能 |
| 八度加2  |
| 滑音    |

## 体感功能

体感功能开启后，将 Clarii mini 扬起至体感功能触发角度时，开始触发技法效果。

- 关：关闭体感功能。
- 弯音：向上扬起 Clarii mini 时，将使得当前演奏音高向上偏转，实现弯音效果。
- 滑音：Clarii mini 到达体感功能触发角度后，开启滑音。
- 颤音：Clarii mini 到达体感功能触发角度后，开启颤音。颤音效果随体感角度而变化，角度越大，颤音效果越强。默认为此选项。

|      |
|------|
| 体感功能 |
| 滑音   |
| 颤音   |
| 关    |

## 体感角度

此项可调节 Clarii mini 的体感功能触发角度。支持 1 ~ 5 级调节。数字越小，触发角度越低，越容易触发。默认为 3。

|      |
|------|
| 体感角度 |
| 2    |
| 3    |
| 4    |

## 滑音时长

此项可调节音符之间滑音的时长，在滑音状态开启时生效。支持 1 ~ 5 级调节。数字越小，滑音时长越短。

|      |
|------|
| 滑音时长 |
| 2    |
| 3    |
| 4    |

# 弯音范围

此项可以设置音符上下弯音的最大范围。支持 1 ~ 3 个半音数。默认为 2。

| 弯音范围 |
|------|
| 1半音  |
| 2半音  |
| 3半音  |

# 指法

为了方便您快速掌握 Clarii mini 的演奏，我们提供了不同的指法模式。在默认情况下，您可以直接使用萨克斯指法在 Clarii mini 上进行演奏。也可以设置为我们提供的葫芦丝、笛子等指法。

- 萨克斯：默认选项。
- 葫芦丝
- 笛子
- 小号 +
- 哨笛 +

当设置为葫芦丝和笛子指法后，Clarii mini 屏幕左下角会展示换算过的调号。

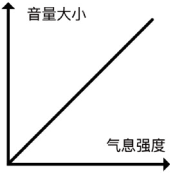
- 完整的指法列表，请参阅本手册“附录 - 指法表”章节。

| 指法  |
|-----|
| 哨笛+ |
| 萨克斯 |
| 葫芦丝 |

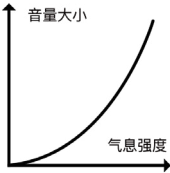
# 呼吸曲线

此项可调节 Clarii mini 的音量如何响应您的气息强度。四个选项分别对应如下呼吸曲线示意图。以曲线 3 为例，轻轻地吹奏就可以产生比较大的音量。

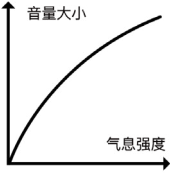
| 呼吸曲线 |
|------|
| 4    |
| 1    |
| 2    |



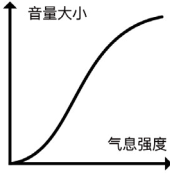
曲线1



曲线2



曲线3



曲线4

## 呼吸灵敏度

此项可调节 Clarii mini 的呼吸灵敏度，支持 1 ~ 5 级调节。数字越小，越容易吹奏。默认为 2。

|          |
|----------|
| 呼吸灵敏度    |
| 1-易吹     |
| <b>2</b> |
| 3        |

## 按键灵敏度

此项可调节设备按键的灵敏度，支持 1 ~ 8 级调节。数字越小，按键反应越快。按键灵敏度数值极小的时候，演奏中可能出现不希望的音符，此时应适当将数值调高。

|          |
|----------|
| 按键灵敏度    |
| 5-适中     |
| <b>6</b> |
| 7        |

## 系统相关

### 蓝牙 MIDI

默认打开。开启时，Clarii mini 显示屏上方显示蓝牙图标。Clarii mini 可通过蓝牙 MIDI 来连接手机、电脑等设备。

|          |
|----------|
| 蓝牙MIDI   |
| _____    |
| <b>开</b> |
| 关        |

### 灯光效果

Clarii mini 的灯带会根据音色类别而呈现不同的颜色。此项可开启或关闭 Clarii mini 的管身灯光。

|          |
|----------|
| 灯光效果     |
| _____    |
| <b>开</b> |
| 关        |

### 自动关机

如果您在一定时间内未演奏，Clarii mini 将会自动关闭电源。此项用于设定自动关机的时间，有 5 分钟、30 分钟、60 分钟和永不关机四种模式。如果您不希望 Clarii mini 自动关机，请选择“永不”选项。

|            |
|------------|
| 自动关机       |
| _____      |
| <b>5分钟</b> |
| 30分钟       |
| 60分钟       |

## 语言

支持简体中文、英文等语言选择。

|         |
|---------|
| 语言      |
| English |
| 中文      |
| Español |

## 恢复出厂设置

将 Clarii mini 的设置参数恢复为出厂状态。

|      |
|------|
| 恢复出厂 |
| 确认   |
| 取消   |

## 版本信息

展示当前设备的型号、序列号和相关版本信息。下翻页面可以看到更多信息。

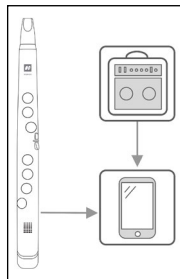
固件及音色更新可关注锣钹科技官方网站 ([www.robkoo.com](http://www.robkoo.com)) 获取最新消息。

|      |
|------|
| 版本信息 |
| 型号   |
| 序列号  |
| 系统   |

## 用作 MIDI 控制器

### 连接方式

Clarii mini 可以作为 MIDI 控制器，控制外部电脑或移动设备中运行的软件音源。



#### ► 使用 USB MIDI

使用 USB 连接线将 Clarii mini 与电脑或移动设备连接。连接方式参考右侧图示。

Clarii mini 与电脑或移动设备通过 USB 连接，电脑或移动设备耳机输出至音箱。

#### ► 使用蓝牙 MIDI

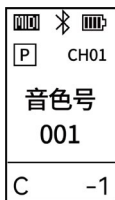
Clarii mini 内置蓝牙 MIDI，在蓝牙开启状态下，可以与电脑或移动设备无线连接。

Clarii mini 的蓝牙名称默认为“Clarii mini-SN 码后四位”，您可以使用自乐班 App 修改设备的蓝牙名称。

- 您可以在 Clarii mini 尾部的标签上，以及设置菜单的“系统相关 - 版本信息”中查看到序列号。

## 用作 MIDI 控制器演奏

Clarii mini 连接电脑或移动设备后，将开启 MIDI 控制器模式。Clarii mini 显示屏呈现如图界面，显示当前 001-128 之间的 MIDI 音色号（Program Change）。使用软音源时，Clarii mini 的扬声器会关闭声音。



## 连接自乐班 App

### ► 下载

使用手机或平板电脑，扫描右侧二维码，或在手机和平板电脑的应用商店中搜索“自乐班”，根据提示下载安装。（苹果和安卓系统均适用。）



### ► 连接

将 mini 靠近装有自乐班 App 的设备，在 App 设备管理页面，添加并连接您的 Clarii mini。或者用 Type-C 数据线连接 Clarii mini 与移动设备的数据接口（充电孔），当自乐班出现“连接成功”弹框后，即可开始使用。

- 确保 Clarii mini 和装有自乐班 App 移动设备的蓝牙都已打开，且自乐班 App 拥有蓝牙权限。

### ► 使用自乐班音色

Clarii mini 与自乐班连接成功后，进入自乐班曲目演奏界面，可以挑选心仪的音色来使用。这时把音箱连接到自乐班设备，将输出自乐班音色的声音。

- 设置：设备管理页面会以设备卡片的形式展示您的 Clarii mini，点击“设置”，进入设备详情页面，可以调节 Clarii mini 的各项设置。
- 学习：打开自乐班 App 后，下方有“社区”“学院”“演奏”等图标，点击“学院”，可以观看学习专属互动教学课程。
- 自定义指法：在设备管理页面，点击 Clarii mini 设备卡片的“设置”，进入设备详情页面中的“指法”，可以为某个音高添加额外的指法。

## 注意事项

请在操作使用前，仔细阅读下述内容。

- ✗ 为了避免因触电、短路、损伤、火灾或其它危险可能导致的严重受伤甚至死亡，请务必遵守下列基本注意事项。

### ► 充电

请使用获得 CCC 认证并满足标准协议的电源适配器。

### ► 请勿拆机

本设备不含任何用户可自行修理的零件。请勿自行拆机或试图拆卸其零件或进行任何方式的改造。若出现异常，请立即停止使用，关注本公司官方网站（[www.robkoo.com](http://www.robkoo.com)）了解最新的维修信息。

### ► 关于潮湿的警告

请勿让本设备淋雨或在水附近及潮湿环境中使用，或将盛有液体的容器（如花瓶、瓶子或玻璃杯）放在其旁边，否则可能会导致液体溅入任何开口。如果水等任何液体渗入设备，请立即切断电源并拔出所有已连接的连接线，然后关注本公司官方网站（[www.robkoo.com](http://www.robkoo.com)）了解最新的维修信息。切勿用湿手插拔电源线插头。

### ► 关于过热环境的警告

Clarii mini 内含电池，电池不可自行更换。电池不可以暴露在阳光、火源等类似热源之下。

### ► 当意识到任何异常情况时

当出现以下任何一种问题时，请立即关闭电源开关，拔出所有已连接的连接线。然后关注本公司官方网站（[www.robkoo.com](http://www.robkoo.com)）了解最新的维修信息。

- 散发出异常气味或冒烟。
- 某些物体掉入设备中。
- 设备掉落或损坏。

- ⚠ 为了避免您或周围他人可能发生的人身伤害、设备或财产损失，请务必遵守下列基本注意事项。

### ► 安放位置

勿将本设备放在不稳定的地方，否则可能会导致突然翻倒。

请勿将本设备放置在可能会接触到腐蚀性气体或含有盐份的空气中。否则可能会导致故障。

收纳设备之前，请务必拔出所有已连接的连接线。

### ► 连接

将本设备连接到其它音频设备之前，请关闭音频设备的电源开关。在打开或关闭所有设备的电源开关之前，请将所有音量都调到最小。

## ► 小心操作

请勿将手指或手插入本设备的任何间隙或开口。

请避免在设备上的任何间隙或开口插入或落进异物（纸张、塑料、金属等）。如果发生这种情况，请立即关闭电源，然后将所有已连接的连接线拔出。关注本公司官方网站（[www.robkoo.com](http://www.robkoo.com)）了解最新的维修信息。

请勿将身体压在本设备上或在其上放置重物，操作按钮、开关或插口时要避免过分用力。

请勿长时间持续在很高或不舒服的音量水平使用扬声器或耳机，否则可能会造成永久性听力损害。如果遇到失聪或耳鸣的情况，请寻求医治。

对由于不正当使用或擅自改造本设备所造成的损失、数据丢失或破坏，ROBKOO 不负任何责任。

## ► 关于工作环境

请在：温度 -15 °C 至 45 °C、湿度 5%RH 至 75%RH、PH 值 6.5 至 7.2 的环境下使用本产品。

演奏前请漱口，防止异物进入吹嘴。演奏过程中，冷凝水和唾液会从排水口自然排出，演奏完后可用软布擦拭干净。

## 售后三包政策

凡购买本公司产品的消费者，均享受以下三包权益：

1. 产品支持七天无理由退货（未拆封不影响二次销售）。特别提醒：由于本产属于入口贴身产品，故拆开外包装的塑封均不可无理由退货。
2. 如 30 天内有任何质量问题，均可进行换新或退货服务。
3. 产品享有一年的免费保修服务（人为因素造成的损坏除外）。
4. 以上条款的生效时间均为到货日。

## 固件更新

为了对 Clarii mini 的功能进行持续改进和优化，或修复一些已知问题，您有时需要对 Clarii mini 进行固件更新。

将 Clarii mini 蓝牙连接至自乐班 App，找到设备管理页面，在对应的 Clarii mini 设备卡片处，可以查看并升级到最新固件。

有关升级的信息和帮助，您可登录镲钹科技官方网站（[www.robkoo.com](http://www.robkoo.com)），或关注“镲钹库”官方公众号了解。

故障排除

| 问题现象                    | 解决办法                                                                                                                                                                                                                   |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 演奏不受呼吸控制                | 可能 Clarii mini 内部积聚了水滴。如果设备内部积聚水滴，呼吸控制器可能无法正常工作。将 Clarii mini 倾斜靠在墙壁上，使其内部水滴流出。                                                                                                                                        |
| 吹奏时指法失灵                 | 如果开机时触摸到了音符键，有可能导致指法失灵。放开音符按键即可解决。                                                                                                                                                                                     |
| 您的智能手机上搜索不到 Clarii mini | <ul style="list-style-type: none"><li>检查 Clarimini 显示屏在演奏界面时，右上角是否有蓝牙标志，如没有，在吹管菜单的“高级设置”中开启蓝牙。</li><li>检查智能手机的软音源应用是否开启蓝牙权限，如没有，请在手机设置 - 蓝牙权限中开启。</li><li>连接 Clarimini 需要在支持蓝牙 MIDI 的 App 中搜索，不能直接在设备蓝牙界面连接。</li></ul> |
| 无法充电                    | 有可能充电适配器不合规。更换合规适配器，只要是符合 USB 协议标准的适配器均可以使用。                                                                                                                                                                           |

|                         |                                                                                                                       |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------|
| 连接电脑充电时耳机口有噪声           | 请不要在使用电脑 USB 接口充电时，连接耳机或演奏。                                                                                           |
| 演奏中出现怪音                 | <ul style="list-style-type: none"><li>如果 OK 键设置为滑音功能，请检查是否误触 OK 键，开启了滑音。</li><li>请检查是否打开了体感控制。</li></ul>              |
| 演奏音符音高不准，总是有偏移          | 请检查是否将体感功能设置为弯音。可以在高级设置中更改或关闭体感功能。                                                                                    |
| 屏幕显示 001-127 的数字，不显示音色  | Clarii mini 进入 MIDI 控制器模式时，屏幕会显示当前的 MIDI 音色序号。如果想恢复显示音色名字的“演奏模式”屏幕，请在 MIDI 软件上断开 Clarii mini 的连接，或者重启 Clarii mini。    |
| Clarii mini 变成英文等语言，看不懂 | 进入设置菜单，切换回中文语言。切换方式：按 6 次 ⌵ 菜单键，看到“System（系统设置）”时，按八度 +1 键，翻找到“Language（语言）”时，按 OK 键进入。按八度 +1 键，找到“简体中文”这一项，按 OK 键保存。 |

## 音色列表

| 类别   | 序号 | 音色名称 |
|------|----|------|
| 西洋乐器 | 1  | 竖笛   |
|      | 2  | 双簧管  |
|      | 3  | 小号   |
|      | 4  | 萨克斯  |
|      | 5  | 小提琴  |
| 中国乐器 | 6  | 葫芦丝  |
|      | 7  | 竹笛   |
|      | 8  | 唢呐   |
|      | 9  | 琵琶   |
| 电子音色 | 10 | 复古玩家 |
|      | 11 | 流萤   |
|      | 12 | 追光   |
| 趣味音色 | 13 | 猫叫声  |
| 动感音色 | 14 | 沙锤   |
|      | 15 | 刀光剑影 |
|      | 16 | 雨声筒  |

## 指法表

● 表示按下音符键

○ 表示松开音符键

### ► 萨克斯指法

1

#1/b2

2

#2/b3

3

4

#4/b5

5

#5/b6

6

#6/b7

7

i

同时, Clarii mini 还提供了高一个八度的简化演奏指法。不使用八度加 1 键, 就可以实现部分音符的高八度演奏。

The charts show the following fingerings:

- i**: 1st finger on C4, 2nd finger on C5, 3rd finger on C6, 4th finger on C7, 5th finger on C8.
- #i**: 1st finger on C4, 2nd finger on C5, 3rd finger on C6, 4th finger on C7, 5th finger on C8.
- 2**: 1st finger on C4, 2nd finger on C5, 3rd finger on C6, 4th finger on C7, 5th finger on C8.
- #2/b3**: 1st finger on C4, 2nd finger on C5, 3rd finger on C6, 4th finger on C7, 5th finger on C8.
- 3**: 1st finger on C4, 2nd finger on C5, 3rd finger on C6, 4th finger on C7, 5th finger on C8.
- 4**: 1st finger on C4, 2nd finger on C5, 3rd finger on C6, 4th finger on C7, 5th finger on C8.
- #4/b5**: 1st finger on C4, 2nd finger on C5, 3rd finger on C6, 4th finger on C7, 5th finger on C8.
- 5**: 1st finger on C4, 2nd finger on C5, 3rd finger on C6, 4th finger on C7, 5th finger on C8.

### ► 葫芦丝指法

在 Clarii mini 默认指法的基础上, 增改了个别指法。葫芦丝指法简音作 5 (sol) 时, 指法表如下:

| 1 = G |   |   |   |   |   |   |   |   |
|-------|---|---|---|---|---|---|---|---|
| 3     | 5 | 6 | 7 | 1 | 2 | 3 | 4 | 5 |
|       |   |   |   |   |   |   |   |   |

### ► 笛子指法

在 Clarii mini 默认指法的基础上, 增改了个别指法。笛子指法简音作 5 (sol) 时, 指法表如下:

| 1 = G |   |   |   |   |   |   |   |    |
|-------|---|---|---|---|---|---|---|----|
| 3     | 5 | 6 | 7 | 1 | 2 | 3 | 4 | #4 |
|       |   |   |   |   |   |   |   |    |

### ► 小号 + 指法

小号 + 指法承袭自经典的 EVI 指法。“基本”一行与原小号指法一致: C4 为基准音高, 右手指法与原声小号乐器相同, 最上方的音符键按下即降低 5 个半音。

拓展: 最下方的音符键, 按下即升高 5 个半音, 用于在不使用八度键的情况下拓展音域。

便捷 1&2: 由于小小笛机身较轻, 左手无需用力也可以正常握持。抬起左手的无名指(从上数第 3 个按键)即降低 1 个半音, 抬起左手中指(从上数第 2 个按键)即升高 1 个半音。因此可将两个音符键作为额外的半音键使用。

便捷 3: 同时抬起左手的中指和无名指, 与同时按下这两根手指的效果相同, 因为两个音符键抵消了各自的效果。所以在将近一个八度的范围内, 可以仅用右手演奏。

# 和 b 半音键依然适用。

|      |  |  |  |  |  |
|------|--|--|--|--|--|
|      |  |  |  |  |  |
| 基本   |  |  |  |  |  |
| 拓展   |  |  |  |  |  |
| 便捷 1 |  |  |  |  |  |
| 便捷 2 |  |  |  |  |  |
| 便捷 3 |  |  |  |  |  |

|      |  |  |  |  |  |  |
|------|--|--|--|--|--|--|
|      |  |  |  |  |  |  |
| 基本   |  |  |  |  |  |  |
| 拓展   |  |  |  |  |  |  |
| 便捷 1 |  |  |  |  |  |  |
| 便捷 2 |  |  |  |  |  |  |
| 便捷 3 |  |  |  |  |  |  |

| 基本   |  |  |  |  |  |  |
|------|--|--|--|--|--|--|
| 拓展   |  |  |  |  |  |  |
| 便捷 1 |  |  |  |  |  |  |
| 便捷 2 |  |  |  |  |  |  |
| 便捷 3 |  |  |  |  |  |  |

便捷 2: 便捷半音指法。按住某个指法时, 额外按下“向下继续数的第 2 个音符键”, 即可获得额外 -1 个半音的效果。该效果可与“快捷 1”指法叠加, 形成 -2 个半音的效果。

便捷 3: 部分八度快捷指法仍然适用。

# 和 b 半音键依然适用。

| 基本   |  |  |  |  |  |  |  |
|------|--|--|--|--|--|--|--|
| 拓展   |  |  |  |  |  |  |  |
| 便捷 1 |  |  |  |  |  |  |  |
| 便捷 2 |  |  |  |  |  |  |  |
| 便捷 3 |  |  |  |  |  |  |  |

## ► 哨笛 + 指法

哨笛 + 指法模拟了 C 调爱尔兰哨笛。“基本”一行包含了快速学习自然音阶所需的最简易指法。

原声: 一部分存在于原声乐器的指法。

便捷 1: 在“基本”和“原声”之上, 最下方的音符键可以用作一个额外的 -1 键。

| 基本   |  |  |  |  |  |  |
|------|--|--|--|--|--|--|
| 拓展   |  |  |  |  |  |  |
| 便捷 1 |  |  |  |  |  |  |
| 便捷 2 |  |  |  |  |  |  |
| 便捷 3 |  |  |  |  |  |  |

| 基本   |  |  |  |  |  |
|------|--|--|--|--|--|
| 拓展   |  |  |  |  |  |
| 便捷 1 |  |  |  |  |  |
| 便捷 2 |  |  |  |  |  |
| 便捷 3 |  |  |  |  |  |

## ► 简化高八度指法

适用于葫芦丝和笛子指法。

| 3 | 5 |
|---|---|
|   |   |
| 6 | 7 |
|   |   |

可以使用微信扫描下方二维码，在小程序中查看全部指法。



指法表

## MIDI OUT 消息列表

将 Clarii mini 用作 MIDI 控制器时，随着用户设置的不同，以下 MIDI 消息会被发送至电脑或外部音源：

| 消息类型           | 控制功能       |
|----------------|------------|
| CC 1           | 体感传感器      |
| CC 2           | 呼吸传感器      |
| CC 5           | 滑音时长       |
| CC 7           | 音量         |
| CC 65          | OK 键、体感传感器 |
| Program change | 切换音色       |
| Pitch bend     | 体感传感器      |

## 技术规格

|         |                                          |
|---------|------------------------------------------|
| 充电方式    | Type-C 5V≐1A                             |
| 电池类别    | 锂电池 1200mAh                              |
| 最大电流    | 1A                                       |
| 传感器     | 气压传感器、加速度计                               |
| 最长待机时间  | 12 小时                                    |
| MIDI 接口 | USB MIDI、蓝牙 MIDI                         |
| 音频接口    | 立体声 3.5mm 耳机输出                           |
| 配件      | Type-C 数据线、说明手册、快速指引、吹嘴盖、收纳包             |
| 尺寸      | 46cm ( 长, 含吹嘴盖 ) x 4cm ( 宽 ) x 5cm ( 高 ) |
| 重量      | 263g                                     |

本产品内部使用的蓝牙模块已通过 SRRC 认证，其核准代码为：CMIIT ID 2020DP2713。

有害物质说明

| 部件名称                                                                              | 有害物质                           |           |           |                 |               |                 |
|-----------------------------------------------------------------------------------|--------------------------------|-----------|-----------|-----------------|---------------|-----------------|
|                                                                                   | 铅<br>(Pb)                      | 汞<br>(Hg) | 镉<br>(Cd) | 六价铬<br>(Cr(VI)) | 多溴联苯<br>(PBB) | 多溴二苯醚<br>(PBDE) |
| 外壳                                                                                | O                              | O         | O         | O               | O             | O               |
| PCBA                                                                              | X                              | O         | O         | O               | O             | O               |
| 附件（连接线等）                                                                          | O                              | O         | O         | O               | O             | O               |
| 本表格依据 SJ/T 11364 的规定编制。                                                           |                                |           |           |                 |               |                 |
| O：表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572 规定的限量要求以下。                                   |                                |           |           |                 |               |                 |
| X：表示该有害物质至少在该部件的某一均质材料中的含量超出 GB/T 26572 规定的限量要求。                                  |                                |           |           |                 |               |                 |
| 本产品标有“X”的原因是现阶段没有可供选择替代的技术或部件，并符合欧盟 RoHs 法规要求，属于豁免部分。                             |                                |           |           |                 |               |                 |
| 本产品所有部件均符合 RoHS 和 REACH 标准，如需查询可通过 ROBKOOL 官网联系相关客服人员咨询。                          |                                |           |           |                 |               |                 |
|  | 本产品除电池外，在正常使用状态下的环保使用期限是 10 年。 |           |           |                 |               |                 |
|  | 本产品的电池，在正常使用状态下的环保使用年限是 5 年。   |           |           |                 |               |                 |



合格证

|      |             |    |
|------|-------------|----|
| 产品名称 | 真采样电吹管      | 合格 |
| 产品型号 | Clarii mini |    |



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