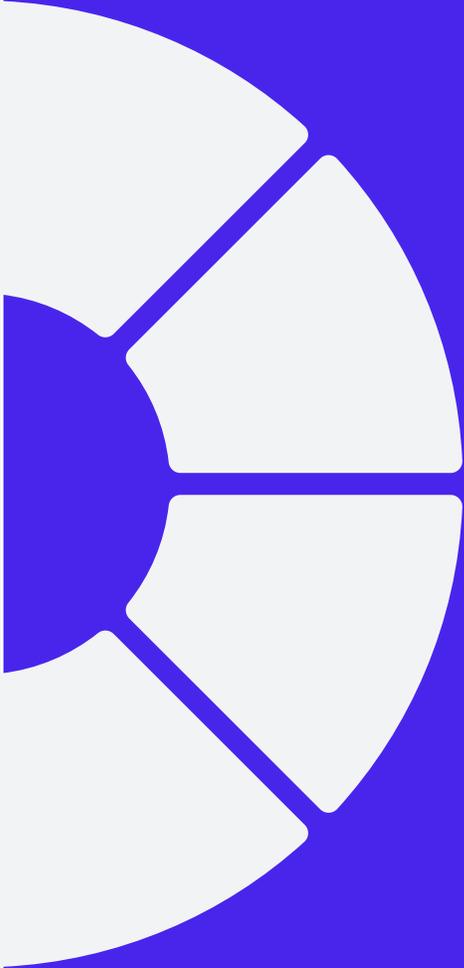
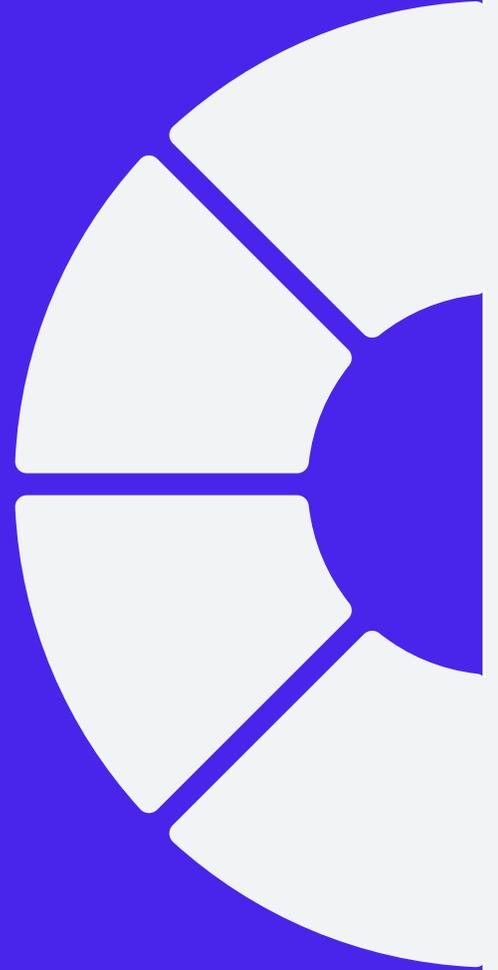




ARTIPHON

ORBA 2



USER MANUAL

V2.0.5

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Welcome

Congratulations on your new pet Orba! We think you're going to love it. There are all kinds of things you can do with this instrument, and we're excited for you to try them all. You might see how many loops you can make as you ride the bus to work. Or perhaps you'll use Orba as a gestural synth at your next gig – waving it through the air to control effects as the crowd goes wild. Or maybe you'll use Orba to play a software synth in that track you've been working on in your DAW. The possibilities are endless.

However you plan to Orba, you probably have some questions. You may be wondering why we only put eight pads on Orba. Or maybe you're wondering what all of those little flashing lights mean. Or maybe you just want to know how to turn up the volume. Whatever it may be, you're in the right place.

Welcome to the official Orba User Manual.

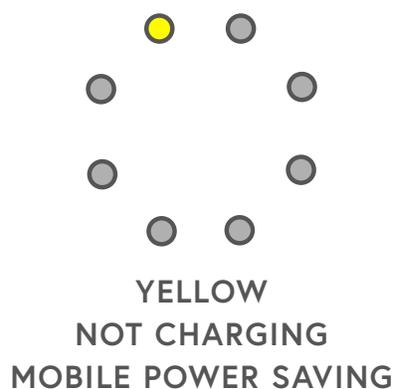
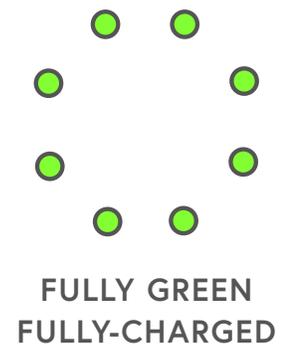
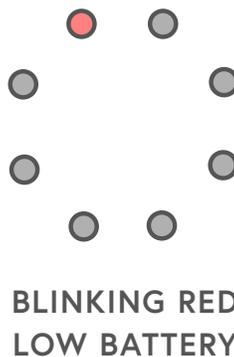
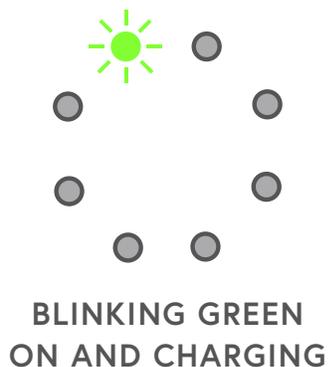
Power

Charging Orba

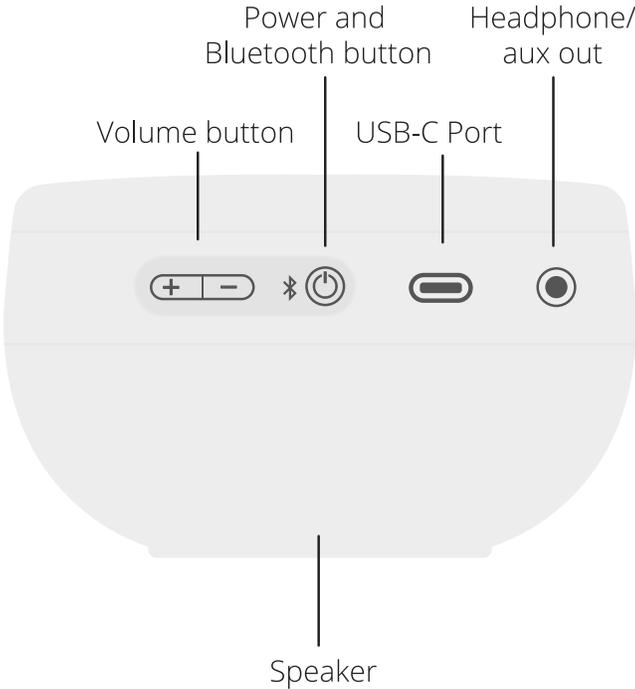
Orba can be charged from any power-charging USB port using the included USB-C cable. Either a wall charger for your phone or a computer will work perfectly. Orba remains fully functional while charging, so you can keep playing even while you're juicing up.

Charging Indicators

When you connect Orba to a power source and turn it on, you'll see a single green LED blinking on pad 8. This indicates that Orba's battery is charging. If Orba is off, you won't see any lights, but rest assured it's still charging.



Panel and Controls



| | |
|------------------------------------|---------------------------------------------------------------------------|
| Volume button | Increase and decrease the volume of Orba's speaker |
| Power and Bluetooth pairing button | Press and hold to turn Orba on and off |
| USB-C Port | Charge Orba's built-in battery and connect your external hardware devices |
| Headphone/aux out | 1/8" audio output for headphones or speakers |
| Speaker | 3W active speaker system |

The "A" Button



fig. 1
"A-button"

You can think of the A button as a function or menu button, similar to modifier keys on a computer like the Command key on Mac or the Control key on Windows. Any time you want to change what you're doing on Orba, you'll use the A button to make it happen. A single tap of the A button will cycle through each of the four main modes.

Try it:

Start in Drum mode and press the A button once.
Now you're in Bass mode!

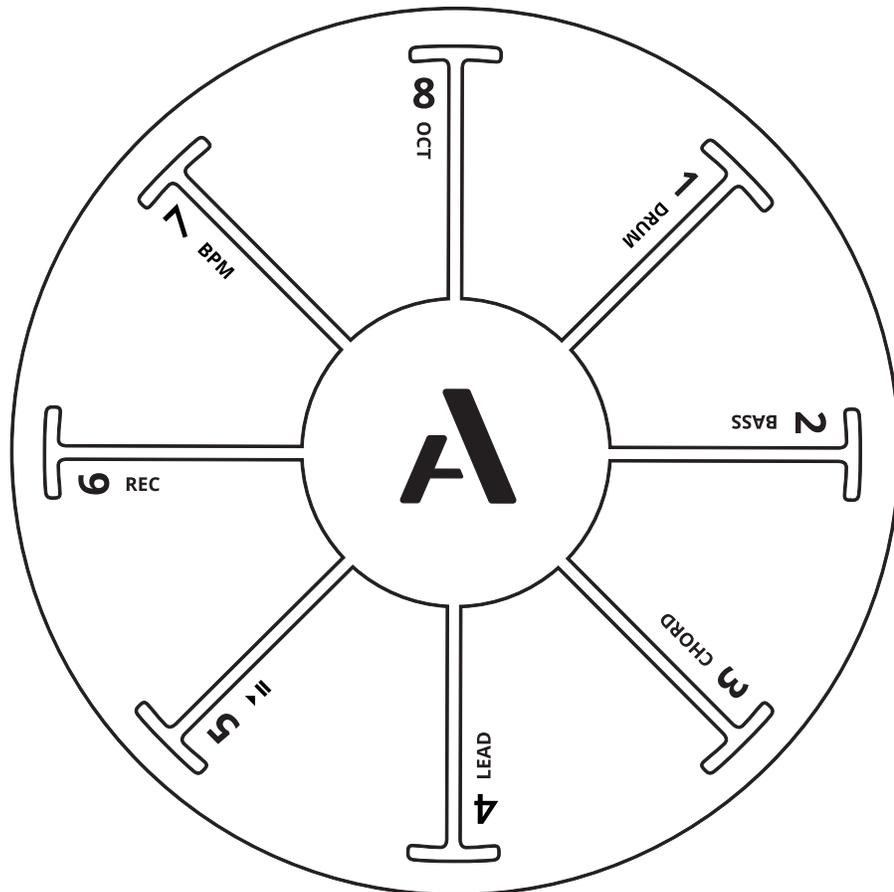
Using the A Button to Switch Modes

Press and hold the A button, then press one of Orba's instrument pads (pads 1-4) to activate that mode.

Try it:

If you don't want to cycle between modes, you can jump to any playing mode directly by holding A and pressing the pad for that mode.

Functions



Modes

1. Drum
2. Bass
3. Chord
4. Lead

Looping

5. ▶|| - Play / Pause
6. Rec - Record your loop
7. BPM - Adjust tempo
8. Oct - Change octave

Function Cheat Sheet

| Function | Combination |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Record | A + Pad 6 (Rec) |
| End a loop | A |
| Stop recording | A + Pad 6 (Rec) |
| Play/Pause loop | A + Pad 5 (Play/Pause) |
| Restart playback from beginning of loop. | Hold A + Pad 5 (Play/Pause) for one second. |
| Clear the loop on the current mode | Hold A + Pad 6 (Rec) until a series of red LEDs make one complete cycle around Orba. Alternatively, simply hold A while shaking Orba. |
| Clear everything | Hold A + Pad 6 (Rec) until a series of red LEDs followed by a series of orange LEDs each make a complete cycle around Orba. Alternatively, hold A + Pad 6 (Rec) while shake Orba. |
| Change BPM | Hold A + Pad 7 (BPM) and slide clockwise (increase tempo) or counter-clockwise (decrease tempo) Alternatively, hold A and tap Pad 7 (BPM) at the desired tempo. |
| Octave up | Hold A + Pad 8 (Octave) and slide clockwise. |

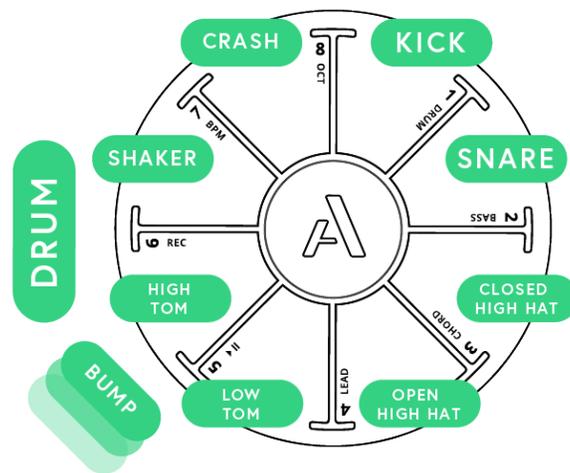
| | |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Octave down | Hold A + Pad 8 (Octave) and slide counter-clockwise |
| Next mode | A |
| Switch to Drum | A + Drum |
| Switch to Bass | A + Bass |
| Switch to Chord | A + Chord |
| Switch to Lead | A + Lead |
| Volume-per-part | You can mix the individual instrument parts of your songs directly on Orba. To adjust the volume for Drum, Bass, Chord, and Lead parts hold the A button + the instrument mode pad you wish to adjust while simultaneously pressing Orba's volume controls up or down. |
| Hard reset | Hold volume down (-) button and power button for 15 seconds Note: Holding volume up (+) and power button puts Orba into update mode. In this state Orba appears unresponsive. To exit update mode, connect via USB to the desktop app, open the settings menu and hold Shift while clicking the firmware update cloud icon. This will force a firmware restore and reactivate Orba. |
| Activate/ Deactivate Metronome | While in Record mode, hold A + BPM for 2 seconds |

Modes

DRUM

Drum mode has nine distinct drum sounds: one per pad, plus an additional one that is triggered by using the Bump gesture. You can also keep trigger the shaker by holding pad 8 and, well... shaking.

Though we mostly stick to the pad trigger sequence as illustrated below, some presets may have fun sample surprises when using these eight pads. You may hear things like AIR-horns, yeahs, and more.



Drums are velocity-sensitive and will respond to different intensities of tapping, similar to how a traditional drum changes its tone and volume by hitting it harder or softer. The sounds also respond to how long your finger stays on each pad. Try holding your finger on a cymbal to cut it short, or tap and release quickly on a tom to hear a long decay.

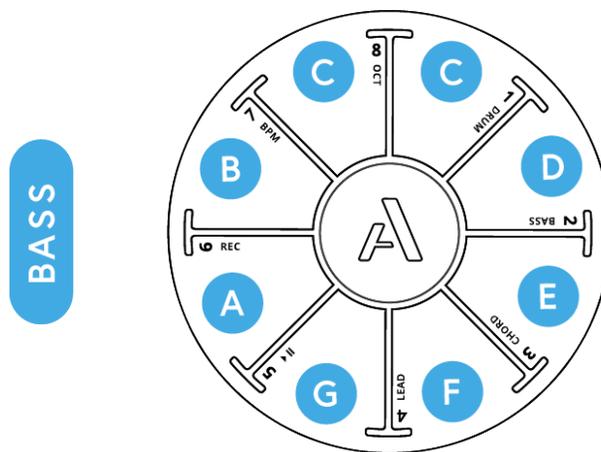
Try it:

You can alternate between open and closed hi-hat sounds on the same pad simply by changing the way you touch it. A tap with a quick release will let the "cymbal" ring out, a tap and hold will "choke" the sound.

Modes

BASS

Orba's Bass mode is monophonic, meaning only the most recent note is played at a given time (this is called "last-note priority" in synthspeak). By default, Bass is tuned to a C major diatonic scale.



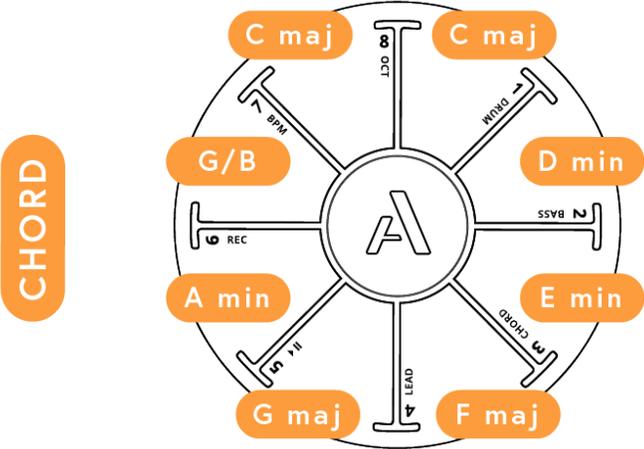
Try it:

Bass is a great mode for trying different motion gestures, especially Tilt and Radiate.

Modes

CHORD

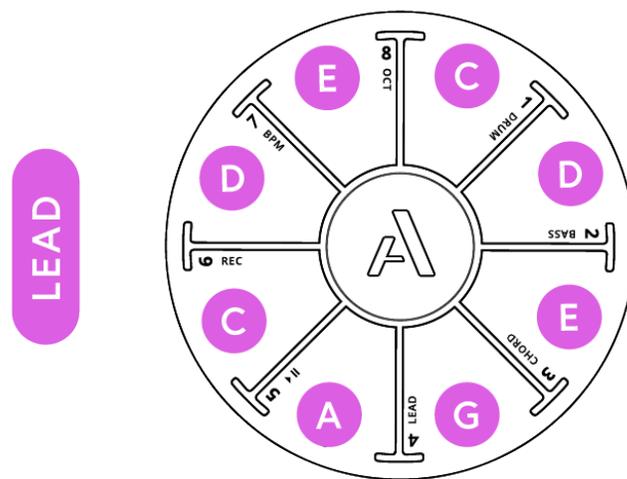
In Chord mode, each of Orba's pads triggers multiple notes simultaneously to form a chord in the key of the song. Chords are a fun way to casually explore song structures and create new ideas quickly. Like Bass, Chord mode is very responsive to the gestures Tilt and Radiate. By default, Chord is tuned to chords in C major.



Modes

LEAD

Lead is a polyphonic mode (meaning you can play several different notes simultaneously). In Lead, the pads are tuned to a C major pentatonic scale. This is a fun scale with five notes per octave, making it easy to find a melody that goes along all that rhythm you just played.



Looping

Looping is a fun and intuitive way to create a lot of musical ideas very quickly. Orba's built-in looper lets you record and layer all four modes together, and even overdub to add more notes as you get going.

Starting a Loop

- Choose one of the four instrument modes.
- Press **A + Pad 6 (REC)** in sequence. When you release you'll hear the metronome click—this indicates the tempo of the song and means you're ready to play your first loop. Although the metronome has started, the loop won't begin recording until you play your first note.



- Record a few notes, and then tap the A button when you're ready to end your loop. The notes you just played will automatically start to play back from the beginning. Note: the song length will always be as long as the first loop you've recorded. Orba 1 can record up to 16 bars, and Orba 2 can record up to 128 bars.
- Orba's looper is intuitive, meaning you can start or stop a loop a little ahead or behind the beat, and it will adjust the notes to what you intended to.

Overdubbing

While your first loop continues to play, you can begin to layer additional notes and loops on other modes. Orba will stay in overdub mode until you pause or stop playback by pressing **A + Pad 5 (Play/Pause)** to pause the song, or if you press **A + Pad 6 (REC)** to disarm your recording.

Try it:

Start with a simple Kick + Snare on drum, then press A to start overdubbing. Add in your hi-hats on the second pass, maybe toms on a third. Keep adding drum beats till you notice that your head has been bobbing for a few minutes ;)

Playback/Pause

- To pause or resume playback, press the **A + Pad 5 (Play/Pause)** buttons in sequence.
- To restart playback from the beginning of the loop, press and hold the **A + Pad 5 (Play/Pause)** for one second.



Clearing a Loop

To clear loops one at a time:

1. Pause playback (A + Pad 5 (Play/Pause))
2. Select the mode that you want to clear
3. Press and hold **A + Pad 6 (REC)** for two seconds. Alternatively, you can hold A and Shake Orba to clear your current loop

Clearing a Song

To clear your Song (all of your loops at once):

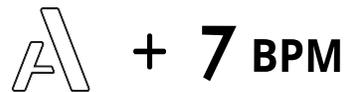
1. Press and hold **A + Pad 6 (REC)** for 5 seconds. Alternatively, you can hold **A + Pad 6 (REC) and Shake** Orba to clear your song.

Adjusting Tempo

Orba's default tempo is 120 beats-per-minute (BPM). There are a few different ways to adjust the tempo of your song. You can do this both in the app or on the device itself. For now, we will focus on the device itself.

Adjusting Tempo by Tapping

1. Hold the **A** button
2. Tap **Pad 7 (BPM)** at the desired tempo



Adjusting Tempo by Sliding

You can also make smaller adjustments to your tempo by using the Slide gesture.

- Hold **A + Pad 7 (BPM)** together
- Slide your finger up or down from the BPM pad

Transposing Orba

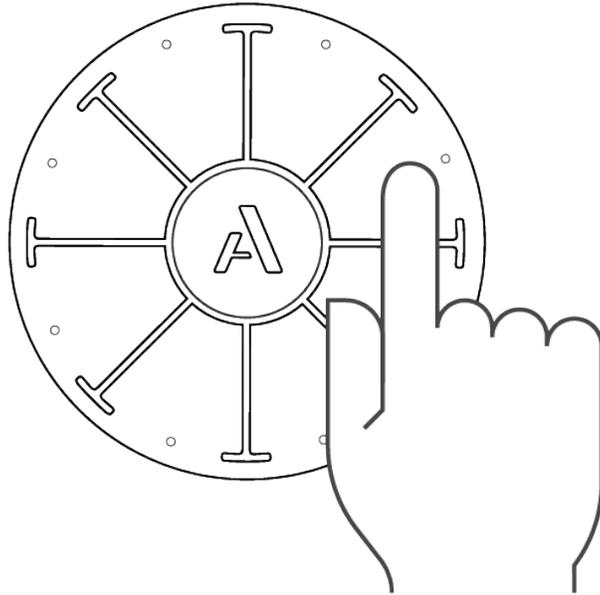
Changing Octaves

You can transpose octaves right on Orba itself. To shift octaves, press and hold To shift octaves, press and hold **A + Pad 8 (OCT)** Slide your finger from the octave pad up to Pad 1 to shift one octave higher, or down to Pad 7 to shift one octave lower.

Gestures

Orba's touch and motion sensors combine to capture even your most subtle gestures. Pick it up and hold it, or just reach over and play a few notes while it's sitting on your desk. Tap it with one hand or both, with your fingertips or thumbs, or shake it and bump the side. You can slide around each pad, or go crazy with some vibrato. It's all up to you! Below, you'll find a bit more information on each gesture and how exactly it works.

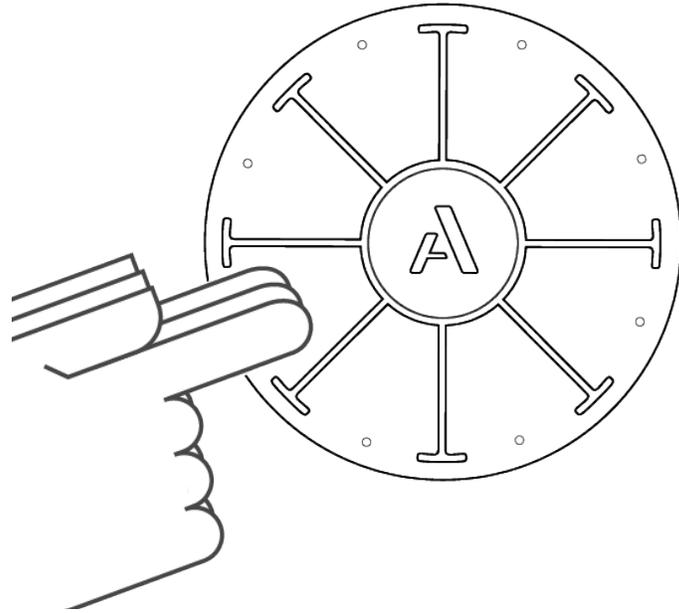
Tap



Tap your finger on a pad. Orba is velocity-sensitive, so the harder you Tap, the louder the sound.

MIDI Message: Note On/Off

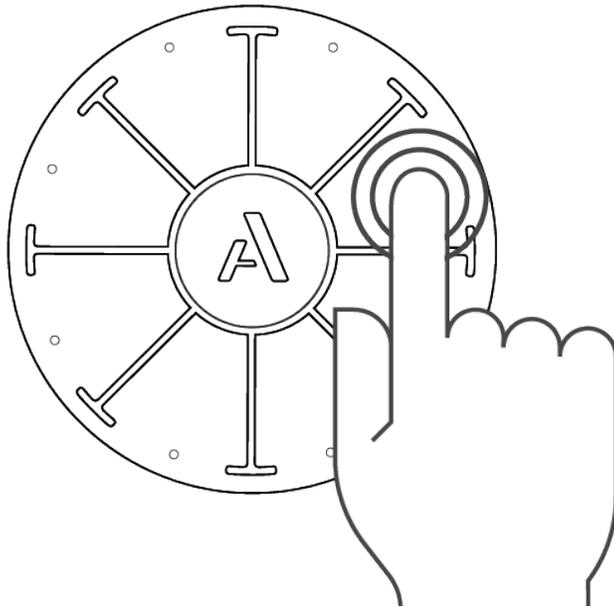
Vibrato



Tap and move your finger from side-to-side on a pad. Vibrato produces a change in pitch. the range of pitch can be adjusted with the Pitch Bend Scaling setting in the Orba App.

MIDI Message: Pitch Bend

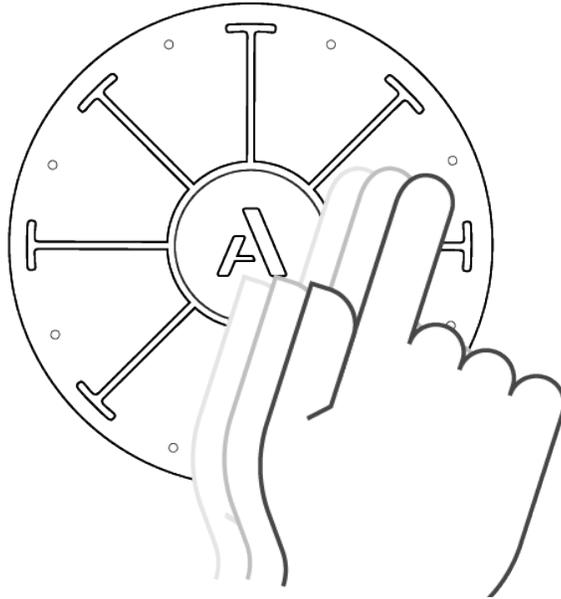
Press



Tap and hold your finger on a pad with varying degrees of intensity. As opposed to velocity which detects pressure, Press is activated by making your finger take up more (and less) surface area. Think about it like this: the more you spread out your finger, the more Press is activated. Pressing with sustained pressure will modulate effects on Orba's synth.

MIDI Message: Channel Pressure

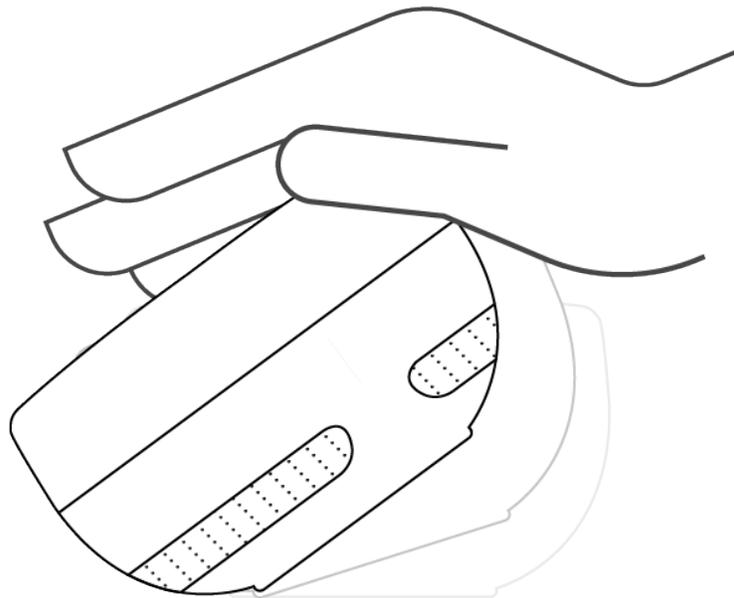
Radiate



Press and move your finger within a pad, in and out from the center to the edge of Orba. Radiate effects Brightness. When using it with Orba's internal synthesizer it may be affecting volume, envelopes, and others effects. Try it in Bass and Chord modes to start.

MIDI Message: Brightness - CC#74

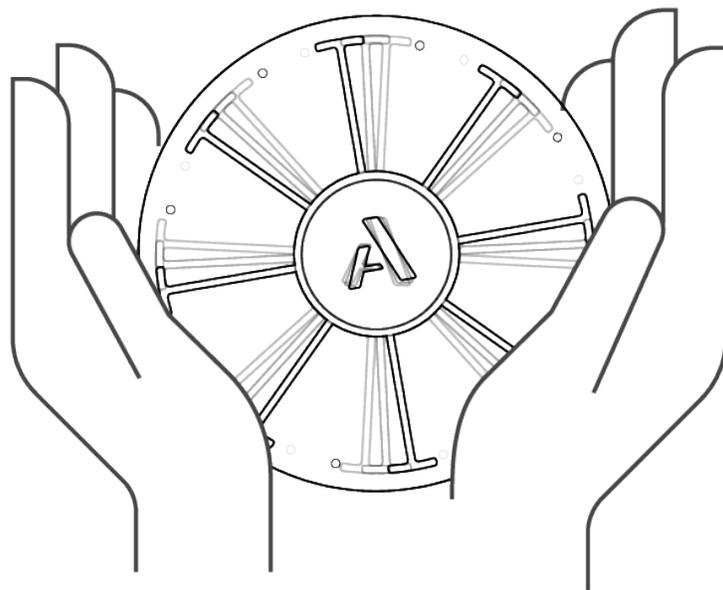
Tilt



Tilt Orba to the side to play effects. Tilt is Orba's version of the mod wheel on a traditional keyboard controller. As mod wheel is a very common MIDI effect, you'll find Tilt works automatically with most software synths and apps.

MIDI Message: Mod Wheel - CC#1

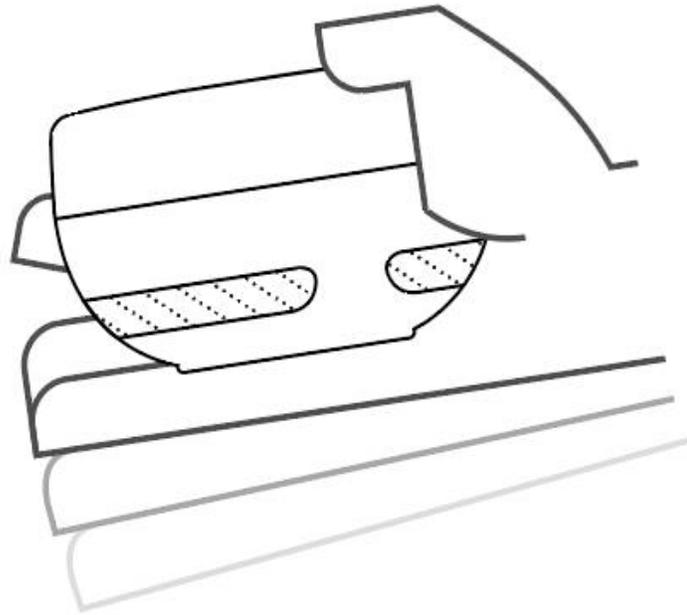
Spin



Rotate Orba like a knob.

MIDI Message: CC#112

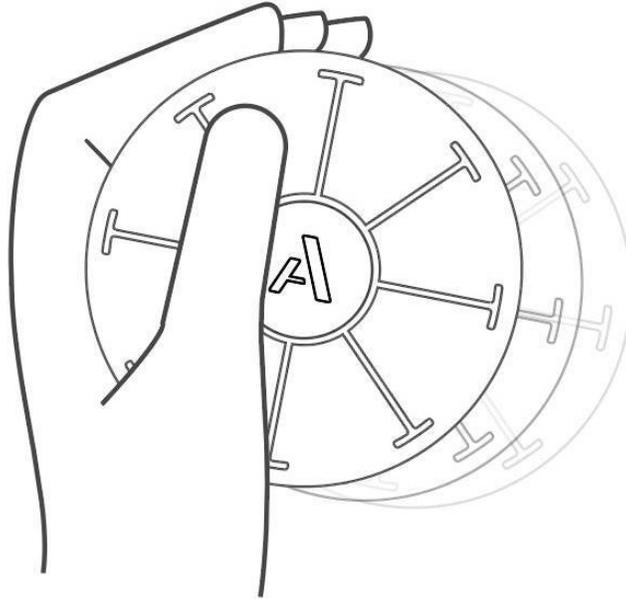
Move



Move Orba in space to modulate sounds and effects.

MIDI Message: CC#113

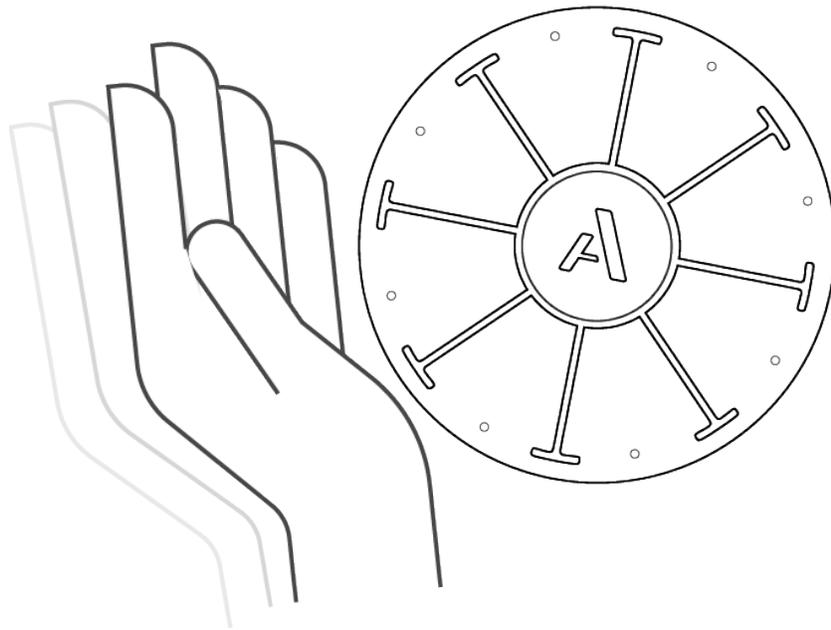
Shake



In Drum mode, hold pad 8 and shake Orba. Shaker works best using soft movements in a side-to-side motion.

MIDI Message: MIDI note 69 and CC#2

Bump



Tap Orba on its side. Try to Bump in drum mode: you'll get a "clap" sound!

MIDI Message: MIDI note 39

The Orba App

The Orba App allows you to customize Orba's key and tempo as well as load presets. You can use the Orba app to update firmware, too, ensuring you've got the latest and greatest features enabled on your instrument.

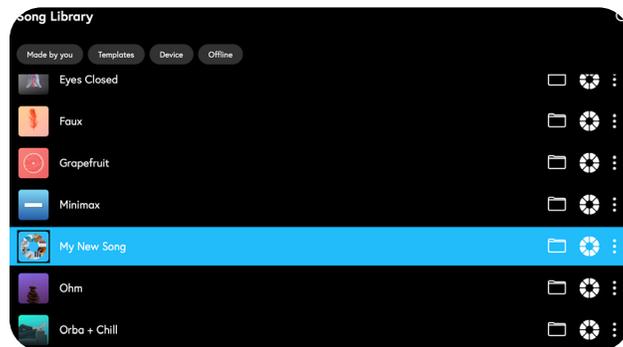
Does your app look different? See the Orba 1 Manual [here](#).

Song Tab

What is a Song?

A song is a collection of 4 presets (one for each instrument - Drum, Bass, Chord, and Lead). Songs can be saved to the Orba app and loaded on to Orba itself. They can be made from any combination of Presets. Tuning and Tempo adjustments are also saved when you save a Song, and will be loaded accordingly when a Song is loaded.

Songs can be accessed and created from the Browser in the Orba app. To load a Song, select it from the Song tab in the Browser and click "Send to Orba".



Song Icons

Song icons provide important information about the song.



Folder: This icon indicates that these sounds have been downloaded to your Orba app.



Orba wedges: This icon indicates that these sounds have been downloaded onto Orba. In order to play a song on Orba disconnected or load a song or preset via Bluetooth, you must download it to Orba.



Stem: A collection of stems from a song. (See page. 31)



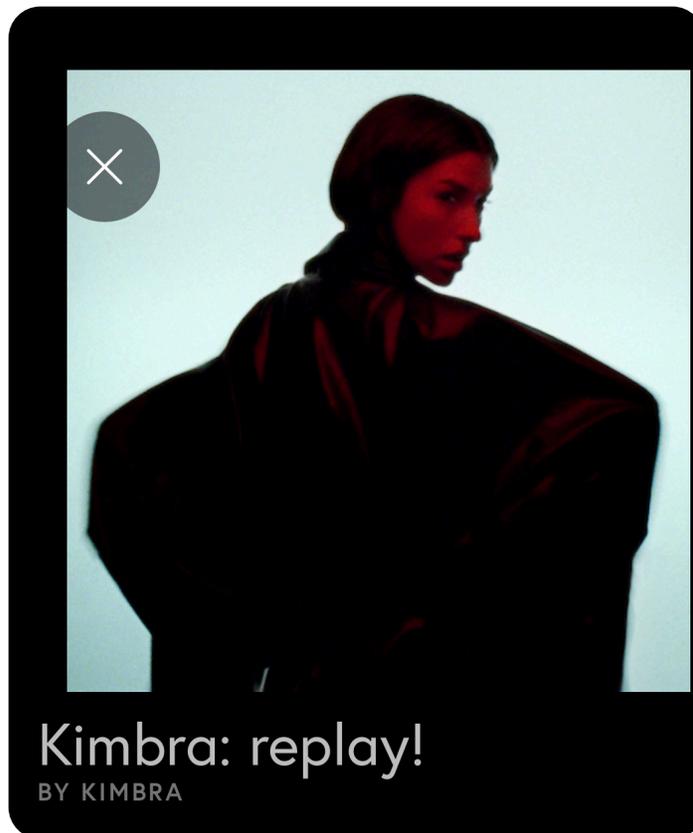
Artiphon A: A factory song or template of presets created by the Artiphon team.

Stem Songs

Stem Songs - a completely new way to make music using loops and patterns! Load these experiences onto your Orba 2 from the Songs tab to start layering, looping, and personalizing them using Orba's expressive gestures. Just look for the little , which indicates this new feature.

What is a Stem?

Stems are the isolated audio tracks that make up a fully-produced song, such as just the drums or just the vocals. Often, but not always, stems include effects – the vocal processing, for instance – that make a song sound the way it does. Artiphon has partnered with these artists to give you a more immersive playing experience. Note due to copyright, stems are not for commercial reuse, and you can not edit the key and tempo of stems.

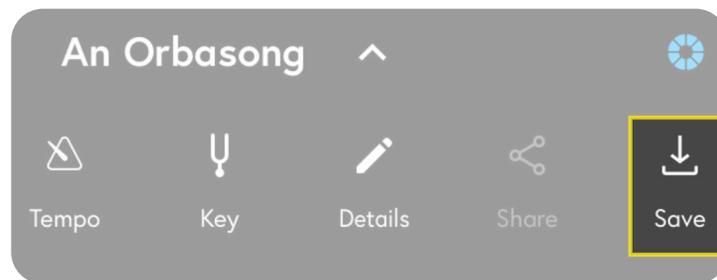


Song Settings

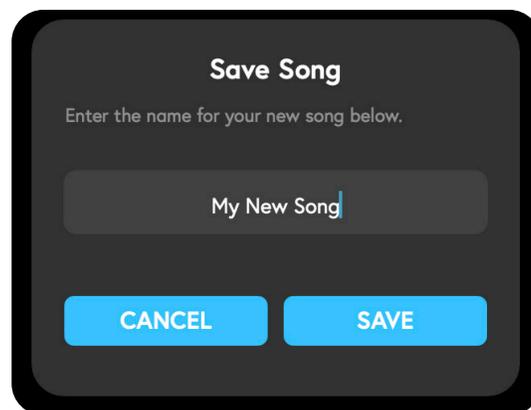
Saving a song

So you've made a song with Orba, and you really like it. What now?

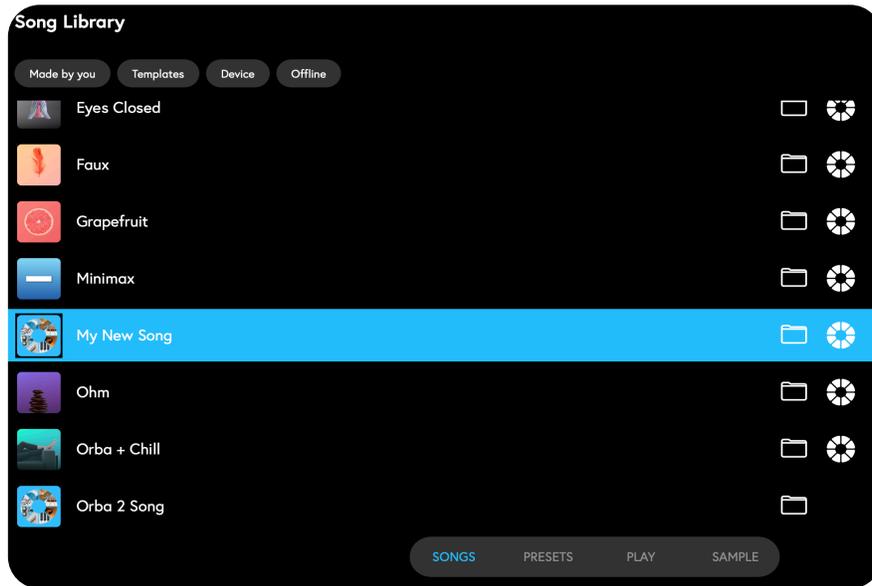
With the Orba 2 app, you can save songs into your own personal song library to access them later. Saving a song is easy, simply navigate to the Play tab, tap the arrow on top of your screen to open the songs menu, and select the Save option.



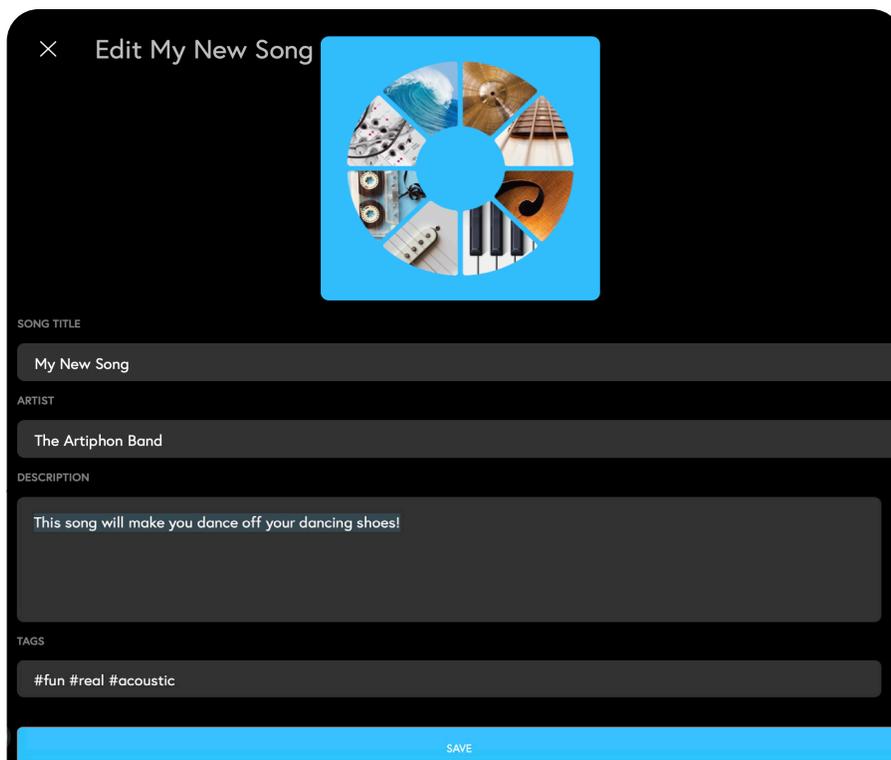
In the save tab, you'll be able to give your song a catchy name. Once finished entering your song's new name, select the blue save button to store it away. You will now be able to load your song on Orba wherever you are.



You can access your song library by selecting the songs tab at the bottom of your screen. In this tab, you will find your saved songs as well as a curation of song templates we designed for you. You can load a song by clicking the three dots on the right of your song name and selecting "Play." You can also create a song from scratch by selecting the "+" icon.



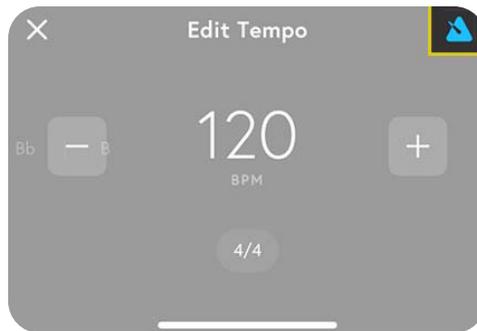
In this same menu, you can also edit your song metadata (like the song name, artist, description, and search tags) by selecting "View details".



Adjusting Tempo in the App

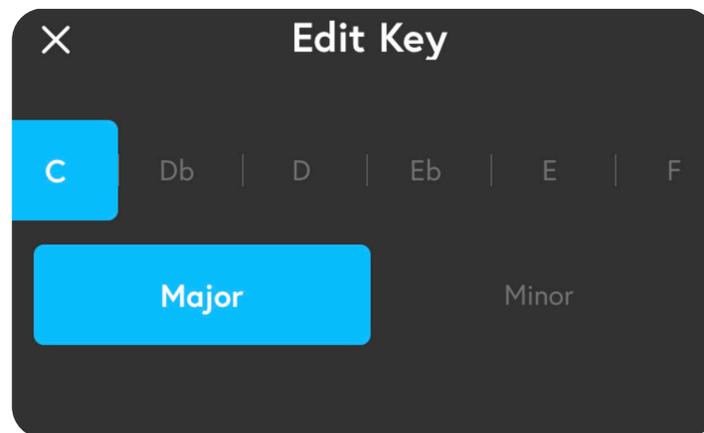
You can make incremental adjustments to the Tempo of your song within the Orba app. Tap the Settings dropdown caret in the upper-right corner of the app, and then tap 'Tempo.'

You can fine-tune the tempo in increments of +/-1 BPM or +/-10 BPM. You can also disable the onboard metronome. By default this toggle is active, meaning the metronome will automatically start when a recording is made on Orba. To mute the metronome, click the icon on the top-right corner of the menu.



Changing Keys

Orba's default tuning is in the key of C major. However, Orba can play in a wide range of keys. To change Orba's key, tap the Song Settings icon in the Orba app and select 'Key'.



Song Sharing

What are presets?

Song sharing is caring! You can share your musical concoctions (presets, samples, and all). Share them with a friend via email or text so that they can add guitar overlays or Airdrop them to your Mac and finish them up in your DAW of choice.

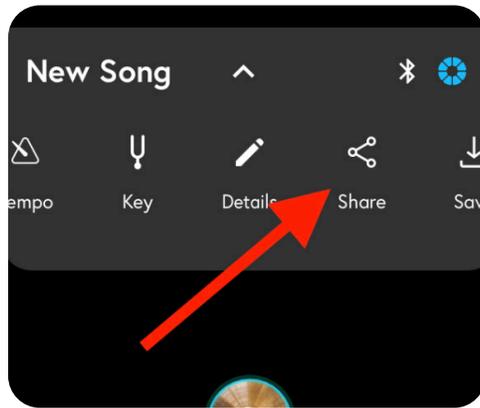
There are two ways to share:

- **Audio** - will export a stereo audio .wav file.
- **MIDI** -Will export a .mid file that will include channels for each mode in the song. Then you can use the MIDI data in your favorite DAW to expand your creation further!



To share a song:

1. You must first save the song to your Orba app
2. Tap the sharing icon in the upper song settings drop down in the Play tab



3. Select the sharing recipient
4. And Off it goes
5. Note: Depending on your operating system, your sharing options will vary.

Song sharing is caring!

Try it:

Toggle the +/- to set how many loop cycles the song should go for. For example, if you toggle three, your song will loop 3x.

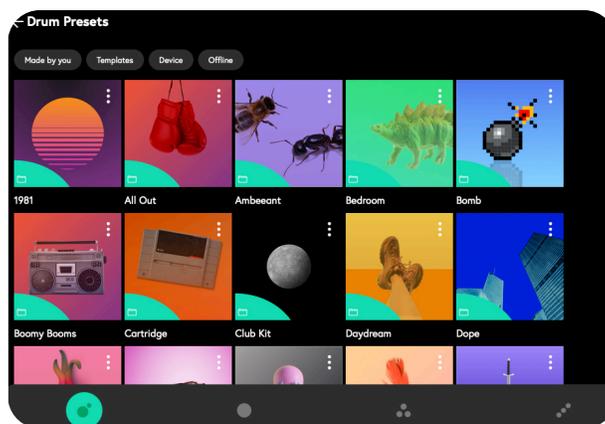
Presets Tab

What are presets?

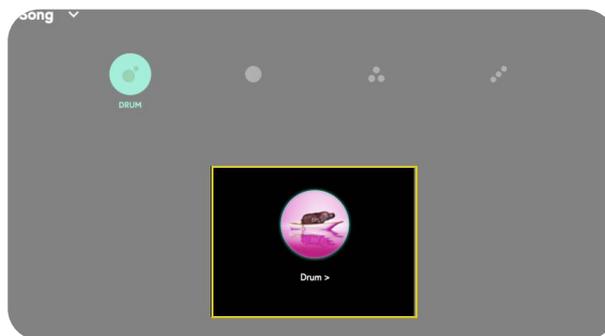
A preset is a sound, tuning, and set of gestures that apply to one of Orba's four instrument modes. Note: Presets are mode-specific. For example, a Drum preset could only be selected while in Drum mode. Changing a preset on Orba is done within the Play tab in the browse menu in the Orba app. If you want to change your sound, you do this by selecting a new preset! There are two ways to do this.

To change presets:

1. The simplest way to change a preset is to Navigate to the Presets tab. Once the library opens, tap the preset you'd like to load, and select send to Orba. Tip: you can send Presets to different modes by using the bottom toggle icons.

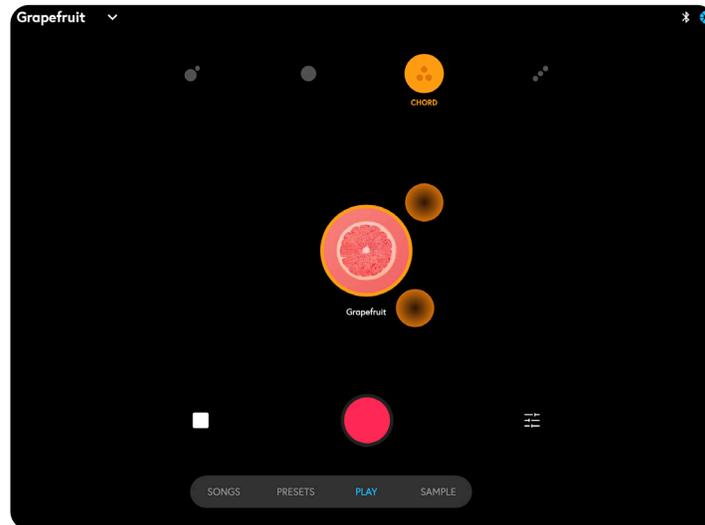


2. Alternatively, you can load a preset from the Play tab. Simply tap the loaded preset icon or name in the middle of the screen (this will take you back to the Presets tab), select the new Preset, and hit "Send to Orba".



Play Tab

Play mode is where the music-making happens! Here you get access to tuning, tempo, and key settings. You'll also find transport controls, which allow you to play, pause and record from within the app. Additionally, effects and quantize settings can be adjusted from this screen.



Transport Controls

Orba's play, pause, and record functions can be accessed and triggered from within the Orba app. Triggering these functions from the app has the same effect as triggering them directly from Orba itself.



Try it:

Watch your song come alive in a colorful dance. We've added a visualizer that grooves to your performance.

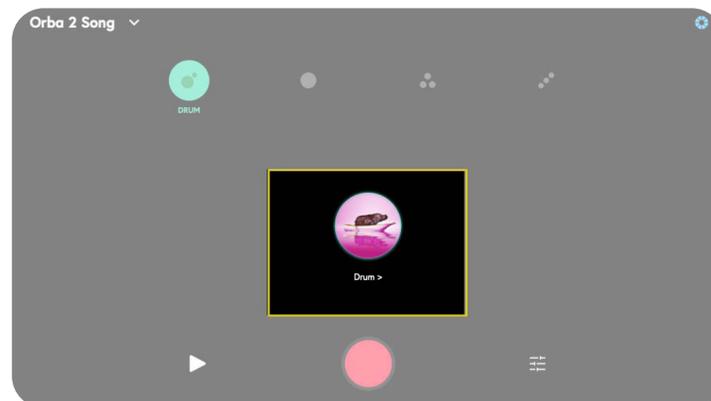
Mode Selector

Though the easiest way to cycle between modes is by using the center "A" button on Orba, you can alternatively select Modes with the icons within the Orba app's Play mode. With Orba connected to the app, simply click or tap on the Mode you want active. Orba will then enter that mode.



Loaded Preset information

Whichever preset you currently have loaded and active on Orba is displayed at the center of the Play screen in the Orba 2 app. As you cycle through Modes on Orba, the preset displayed here will update to reflect the current instrument and preset selection. You can easily access and update the current Preset by clicking the center Preset icon.



Preset Effects

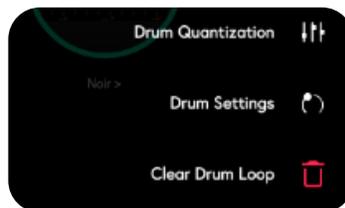
Mode Settings

Dive in deeper with Orba 's Mode settings. Crank up the Reverb and Delay on your Chords to become the next Reggae sensation, or make your sick bassline stand out with volume-per-part.

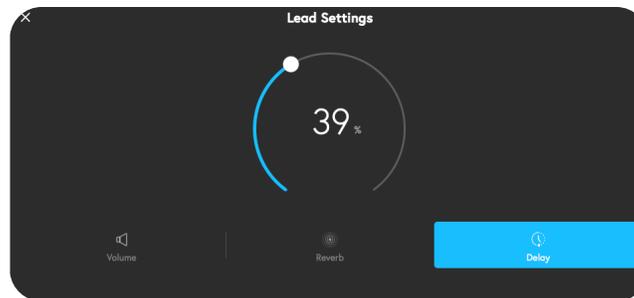


Clear Mode Loop

Accidentally added a snare on the wrong down beat, no problem. You can clear just the loop on the mode you are on and record it exactly how you want it.



There are three effect settings for each Mode in the Orba app:

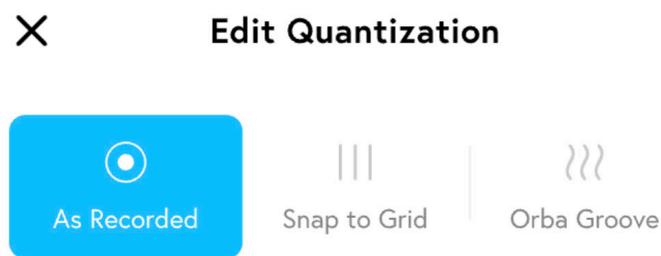


1. **Volume:** Can't hear your drums over your amazing lead part? Use the Volume Per-Part dial to mix your song exactly how you want it.
2. **Reverb:** Adds a little bit of an electronically produced echo effect to your part.
3. **Delay:** Records the notes you play and plays them back after a certain period of time.

Quantize

Was your timing ever so slightly off on that drum part? Just activate quantize in the Orba app to ensure that all notes are automatically sync'd to the nearest 16th note of your loop. This is especially great for electronic genres where robot-like timing and precision can be crucial.

There are 3 Quantization modes available in the Orba app:



- 1. As Recorded:** Your loop plays back exactly as it was played. No quantization adjustments are applied and quantize is off.
- 2. Snap to Grid:** The notes of your loop are locked exactly to the nearest 16th note of your tempo. This produces a very rigid, computerized-sounding rhythmic effect.
- 3. Orba Groove:** The notes of your loop are adjusted to the nearest 16th note, with just a touch of looseness or imprecision to give a slightly more human feeling to the rhythm. This version of quantization will sound less robotic and more organic while still cleaning up any loose playing.

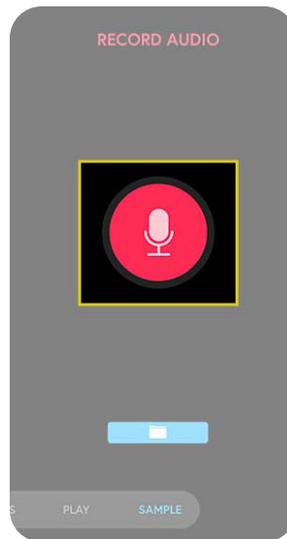
Note: Once quantize is applied and your loop is recorded, quantize can not be reset or turned off. This is because your MIDI notes are re-positioned and recorded to snap to the grid of your tempo as you play Orba in real-time.

Sample Tab

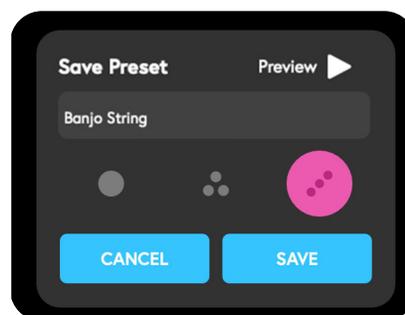
With the Orba 2 app, you'll be able to record any sound from the real world and transform it into a playable musical instrument. You will also be able to load in your favorite samples. Orba 2 can hold 2GB of user samples.

Recording a sample:

You can save and record samples right on the app using your device's built in microphone. You can also plug in a USB microphone to get your desired sound quality.



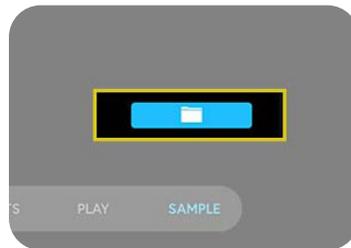
1. Navigate to the Sample tab in the browse menu.
2. To begin recording, tap the red microphone button. (The Orba app will automatically trim the silence at the beginning/ end of your clip).
3. Once you've completed your sample recording, tap the red microphone to end the recording. The save dialog box will pop up.



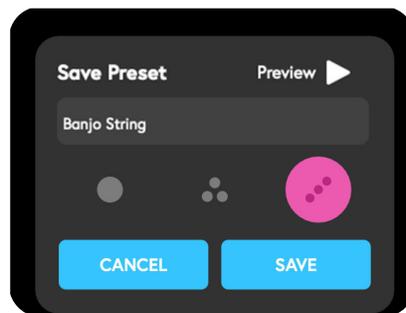
4. You can select and preview how the sample will sound in each of Orba's melodic modes. The smart technology will re-tune and modify the sample for you. For instance if you have a single banjo string and select Chord mode, it will turn your single string into a full chord.
5. Name and save your sample. You can now pull up your sample from the preset library.

Loading a Sample:

You can also load any sample clip and save it as a preset in the app. To load a sample:



1. Navigate to the Sample tab within the browse menu.
2. Tap the blue file folder, and find the sample you'd like to load in the device directory.
3. Once you select your desired sample, the app will prompt the Save and preview dialog box.



4. You can select and preview how the sample will sound in each of Orba's melodic modes. The smart technology will re-tune and modify the sample for you. For instance if you have a single banjo string and select Chord mode, it will turn your single string into a full chord.
5. Name and save your sample. You can now pull up your sample from the preset library.

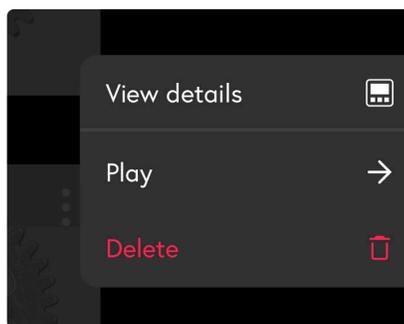
Note: Samples are not supported in Drum Mode.

Loading Samples onto Orba 2

Via MacOS, Windows, and Android (Recommended):

Now that you've recorded and saved your sample onto the app, you can pre-load it onto Orba so that you can play it at any time.

1. To preserve the quality of your samples, this process will require a hardwired USB connection. Let's begin by checking that Orba 2 is connected via USB cable and not Bluetooth.
2. Once the USB connection is checked, locate your recorded sample in the preset library and select the three dots in the upper right corner.
3. Select the **Play** → and load the new sample preset.

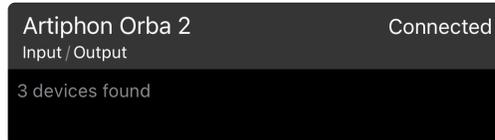


4. Now, you should be to play your new sample on Orba.

Via iOS:

Now that you've recorded and saved your sample onto the app, you can pre-load it onto Orba so that you can play it at any time. If you're on an iOS device, you need an Apple Lightning to USB converter. To preserve the quality of your samples, we require a hard-wired USB connection.

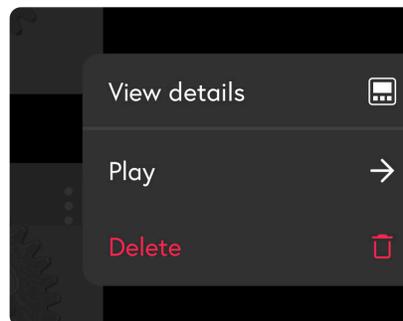
1. Connect your Orba via Bluetooth.



2. In the settings menu, make sure USB charging is toggled on. This may take a little bit to start working, so wait around 10 seconds.



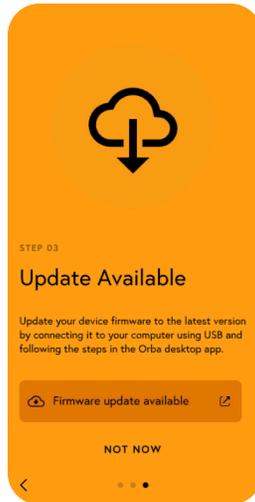
3. Disconnect Orba from Bluetooth.
4. Using your Lightning to USB adapter, plug in the included USB cable from Orba to your iPhone.
5. Locate your recorded sample in the app preset library and select the three dots in the upper right corner.
6. Select the **Play** → and load the new sample preset.



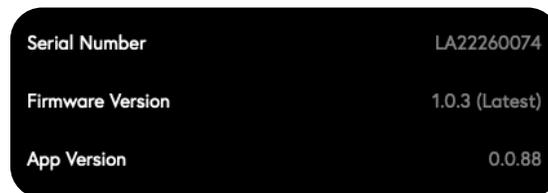
7. Now, you should be to play your new sample on Orba.

Updating Firmware

We are always adding features and improving the Orba experience. Keeping your firmware up-to-date is the best way to ensure you're getting the best this unique instrument has to offer.



If there is a new firmware update, you will receive a pop-up when you first open the app. Updating firmware can only be done on desktop through a USB-C connection.



To update your firmware, hold the Shift key + click on the firmware section noted above.

Note: If you are on a macOS, you must accept privacy permissions. Orba will automatically request these permissions when opening the app. If you initially deny these permissions and wish to enable them, you can do so by going into your Mac's Security and privacy settings.



Using Orba As A MIDI Controller

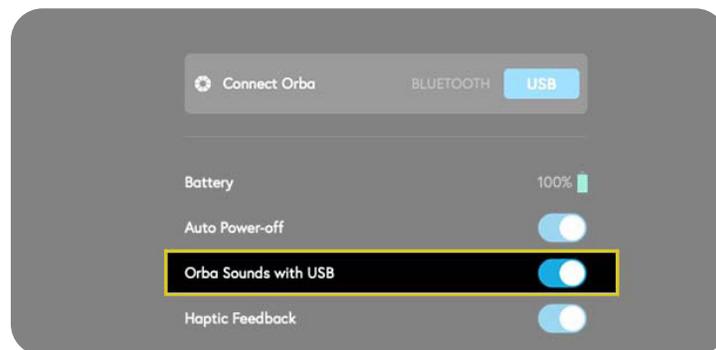
In addition to being a standalone synthesizer, Orba also works as a MIDI controller. You can use Orba to trigger and affect sounds in any MIDI-enabled software or hardware.

There are two ways to connect Orba as MIDI controller:

- You can use Orba using **MIDI over Bluetooth** on macOS, iOS, and Android.
- You connect via **USB-C** on macOS, Windows, and Android.

For ease, we've provided instructions below on connecting to macOS, Windows, iOS, and Android.

If you like, you can disable Orba's internal synth to make sure you're not hearing two different sound sources. To do that, you must open the Settings page by navigating to the Play tab and clicking the top right Orba wedges. Now To toggle Orba Sounds On/Off (This function only works when Orba is connected via USB).



Connecting To MacOS

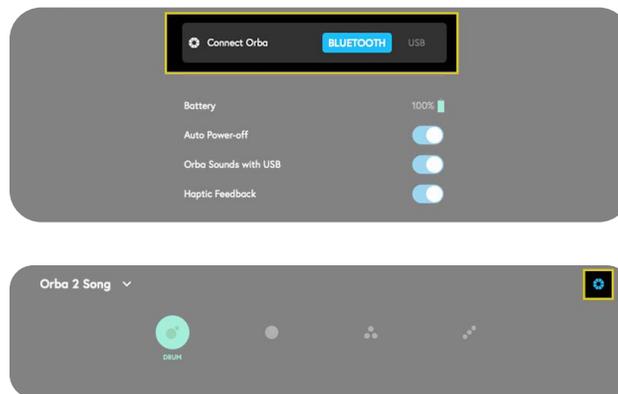
Via USB-C

Simply connect the included USB-C to USB-A cable to your computer. Macs with USB-C inputs will require a USB-C to USB-C cable or an adapter.

Via MIDI over Bluetooth

The simplest way to connect via Bluetooth is through the Orba app.

1. You can either do this when you initially open the app or by accessing the settings menu through the Orba wedges on the top right of the screen.

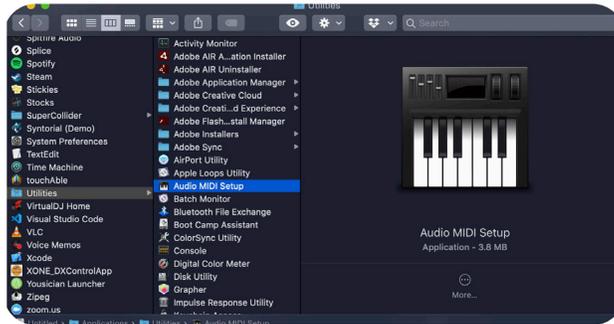


2. Select Bluetooth LE MIDI and choose the Orba device from the window that follows. If you don't see Orba in the list of available devices make sure that Orba is turned on and within range of your computer.

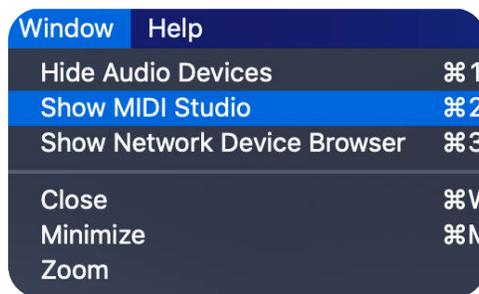


It's also possible to connect via Bluetooth without the Orba app. To do that, follow these steps:

1. Open Audio MIDI Setup on your Mac. This is found in the Utilities folder. Alternatively, you can use the keyboard shortcut **Command + Space**. Type "Audio MIDI Setup" to find the program.



2. Open the **Window** drop-down in Audio MIDI Setup and select Show MIDI Studio, or use the keyboard shortcut **Command+2**.



3. Select the Configure Bluetooth icon from the header window.



4. Select Orba from the list of available devices. If you don't see Orba on the list, make sure you have it turned on and in range.



Connecting to Windows

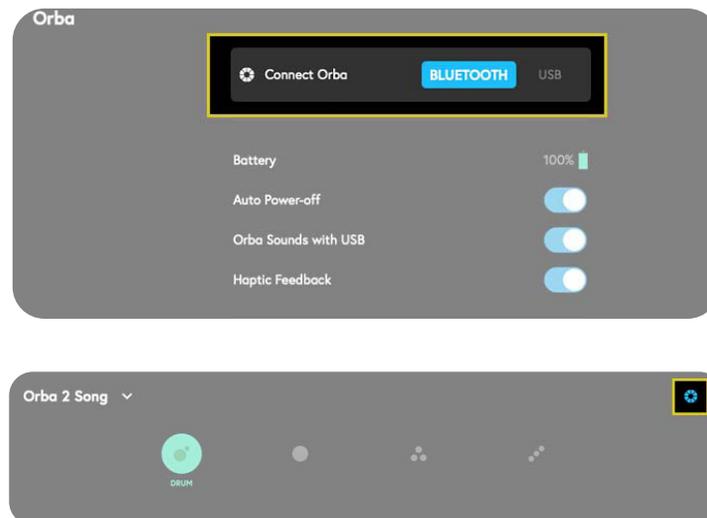
Via USB-C

Windows is easy! Just connect the included USB-C-to-USB-A cable to your computer. Unfortunately, Windows does not currently support MIDI over Bluetooth.

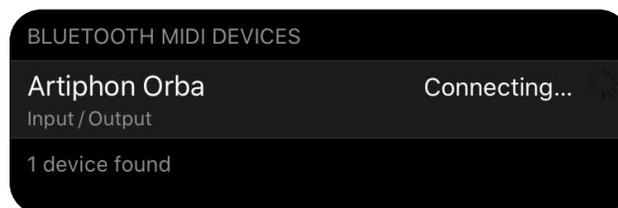
Connecting to iOS

With the Orba App

1. In the Orba app, navigate to the Orba icon in the upper right-hand corner of the screen.



2. Select Orba from the list of Bluetooth MIDI Devices.

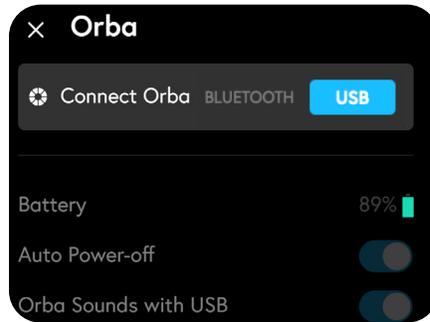


3. Note: If you don't see Orba as an option in this list, make sure the instrument is powered on and within range.

Connecting to Windows

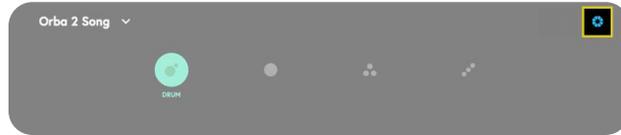
Via USB-C

- Open the Orba app and connect to your Android phone with a USB-C cable.

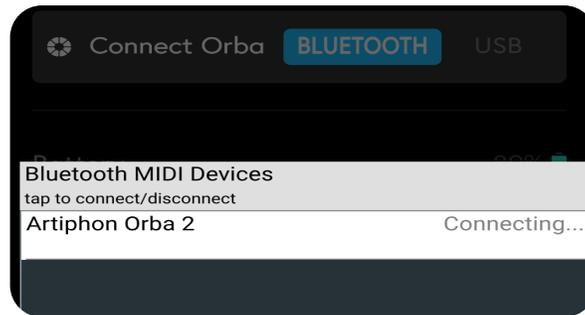


With Bluetooth

- In the Orba app, navigate to the Orba settings tap in the upper-right corner.



- Select Orba from the list of Bluetooth MIDI Devices and connect.



- Note: If you don't see Orba as an option in this list, make sure the instrument is powered on and within range.

Settings

To access your Orba's hardware settings click the top-right Orba wedges when in Play mode. Let's get techy.



Battery

This display shows Orba's battery percentage.



Auto Power-off

In order to conserve battery, Orba will shut off after being idle for a couple of minutes. You can disable this by toggling the Auto Power-Off button within the Orba settings.



Orba Sounds On/Off

When you use Orba as a MIDI controller to trigger sounds in external software or hardware, you may want to temporarily disable Orba's internal synth to prevent it from interfering with the sounds in your external gear. Otherwise, you'll hear two sounds every time you play (which could be awesome!). Do this by toggling the Orba Sounds On/Off setting. (This function only works when Orba is connected via USB).



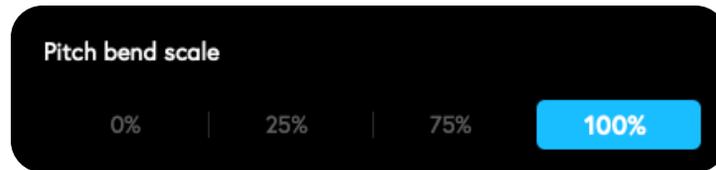
Vibration/ Haptic Feedback

Orba's haptic feedback can be disabled using the Vibration toggle.



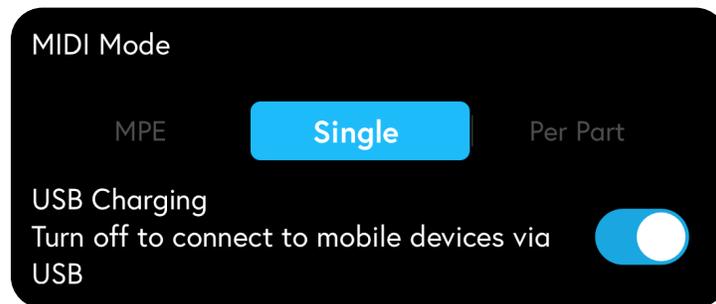
Pitch Bend Scale

Adjusts Orba's Pitch Bend Scaling settings by ranges (0% - 25% - 50% - 100%). This affects the rate of change in pitch shifts when performing Vibrato.es (0% - 25% - 50% - 100%). This affects the rate of change in pitch shifts when performing Vibrato.



MIDI Modes

Orba can be configured to send MIDI messages in 3 different ways: MPE, Single Channel, and Channel-Per-Part.



MPE (MIDI Polyphonic Expression)

MPE (MIDI Polyphonic Expression) is a method that allows players to control multiple parameters (pitch bend, aftertouch, and vibrato) independently per note. On a traditional MIDI keyboard, for example, the Pitch Bend wheel affects all notes at once. An MPE compatible controller will allow these notes to be affected independently from one another.

All notes are sent as MPE MIDI with every note having its own channel so that per-note controllers can be used. In this mode, only the MIDI notes for the currently active mode are sent out on MIDI. For example, when Bass mode is selected only the MIDI out for Bass is sent.

Single Mode

All notes are sent on MIDI channel 1. Only the MIDI notes for the currently active mode are sent. For example when drum mode is selected only the drum notes are sent out on MIDI.

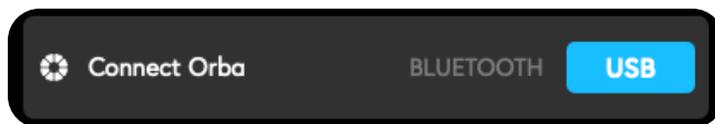
Channel-Per-Part

Each instrument mode sends MIDI data out on a dedicated channel. Switching modes will switch the output channel accordingly.

| | |
|------------|-------|
| Channel 10 | Drum |
| Channel 9 | Bass |
| Channel 16 | Chord |
| Channel 1 | Lead |

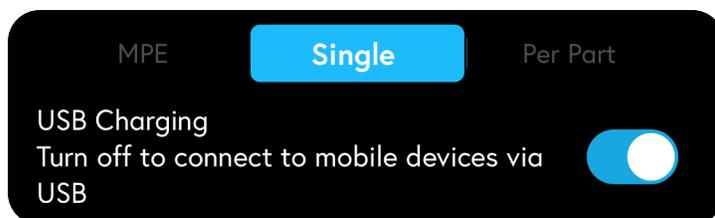
Orba Connection

Switch between connection Orba's methods. Orba can connect via USB on desktop computers and Android devices. Bluetooth LE MIDI connections are possible on macOS, iOS, and Android devices (Windows does not currently support Bluetooth LE MIDI).



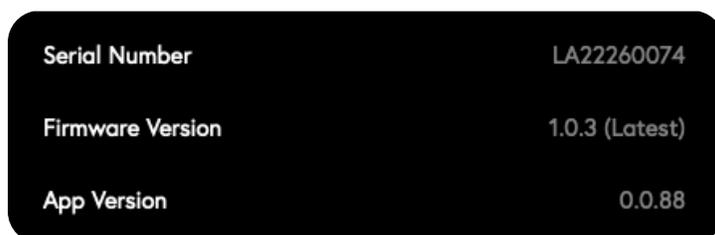
Mobile MIDI Mode

This mode consolidates the number of MIDI input ports available on Orba. When disabled (the default setting) Orba shows separate ports for Drum, Bass, Chord, and Lead. When enabled, Orba shows just one port. Some third-party apps may work better when only one MIDI input port is available, in which case enable Mobile MIDI Mode. Note: When USB charging is disabled, you'll have to use a wall charger to charge Orba 2.



Serial Number and Firmware

Registering your Orba online to get amazing email updates? We hope you are! You can access your serial number, firmware version, and app version in the Orba settings menu when Orba is connected to the app.



MIDI Implementation Chart

Gestures are associated with specific MIDI assignments. Below are the default MIDI assignments. Note: These may vary depending on the preset you load.

Gesture MIDI Note Mapping

| Gestures | MIDI | NOTES |
|-----------------|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tap | Note On | Note On/Note Off Velocity |
| Press | Channel Pressure | Bass, Chord, Lead only |
| Vibrato | Pitch Bend | Receiver/Sound generator should be set to a pitch bend range of 48. Pitch bend range is limited to a few cents for better playability on each of Orba's individual pads (except for the Vibrato Bass preset, which has a pitch bend range of 2 semitones). |
| Radiate | CC 74 (Brightness) | Bass, Chord, Lead only |
| Bump | MIDI Note 39 | |

| | | |
|---------------------------------------|-------------------------|--------------------------------------------|
| Shake | MIDI Note 69 and CC2 | Drum only, while holding Pad 8 (Shaker) |
| Move | CC 113 | Bass, Chord, Lead only |
| Spin | CC 112 | Bass, Chord, Lead only |
| Tilt | CC 1 (Mod- wheel) | Bass, Chord, Lead only |
| Press "A" button to change mode | Program Change 1-4 | |

Default Note Mapping

Each pad and each Mode sends its own MIDI messages. Below are the default MIDI assignments.

Note: These may vary depending on the preset you load.

Drum MIDI Note Mapping

| Drum | Note | MIDI Number |
|----------------------------|------|-------------|
| Pad 1 (Kick) | C1 | 36 |
| Pad 2 (Snare) | D1 | 38 |
| Pad 3 (Closed Hi-hat) | F#1 | 42 |
| Pad 4 (Open Hi-hat/ Crash) | C#2 | 49 |
| Pad 5 (High Tom) | G1 | 43 |
| Pad 6 (Low Tom) | A1 | 45 |
| Pad 7 (Ride Cymbal) | D#2 | 51 |
| Pad 8 (Shaker) | A#3 | 70 |
| Bump (Clap) | A3 | 39 |

Bass MIDI Note Mapping

| Bass | Note | MIDI Number |
|-------------|-------------|--------------------|
| Pad 1 | C2 | 48 |
| Pad 2 | D2 | 50 |
| Pad 3 | E2 | 52 |
| Pad 4 | F2 | 53 |
| Pad 5 | G2 | 55 |
| Pad 6 | A2 | 57 |
| Pad 7 | B2 | 59 |
| Pad 8 | C3 | 60 |

Chord MIDI Note Mapping

| Chord | Note | MIDI Number |
|-------|----------------|----------------|
| Pad 1 | C2, G2, C3, E3 | 48, 55, 60, 64 |
| Pad 2 | D2, A2, D3, F3 | 50, 57, 62, 65 |
| Pad 3 | E2, B2, E3, G3 | 52, 59, 64, 67 |
| Pad 4 | F2, A2, C3, A3 | 53, 57, 60, 69 |
| Pad 5 | G2, B2, D3, G3 | 55, 59, 62, 67 |
| Pad 6 | A2, C3, E3, A3 | 57, 60, 64, 69 |
| Pad 7 | G2, B2, D3, B3 | 59, 62, 71, 55 |
| Pad 8 | G2, C3, E3, C4 | 60, 64, 72, 55 |

Lead MIDI Note Mapping

| Lead | Note | MIDI Number |
|-------|------|-------------|
| Pad 1 | C3 | 60 |
| Pad 2 | D3 | 62 |
| Pad 3 | E3 | 64 |
| Pad 4 | G3 | 67 |
| Pad 5 | A3 | 69 |
| Pad 6 | C4 | 72 |
| Pad 7 | D4 | 74 |
| Pad 8 | E4 | 76 |

Troubleshooting

Orba has top-secret menus and modes only meant for product development purposes. Though it does not happen often, if you're intensely jamming on Orba, you can accidentally trigger these modes.

It may feel like all hope is lost. Fear not, here are a couple of common issues Orba players may run into. But please, if you've hit a snag or have any questions, submit a ticket to our Customer Support team, and they will be happy to help you out (and yes, we have real people).

My Orba is making no sound?

Ah, a quirky one. If you find that your Orba is not making any sound while connected via Bluetooth, it is likely your USB connection was unplugged while sampling, and this has caused your Orba to go mute. To make sure your Orba is not muted, navigate to settings, and make sure Orba sounds are toggled on.





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