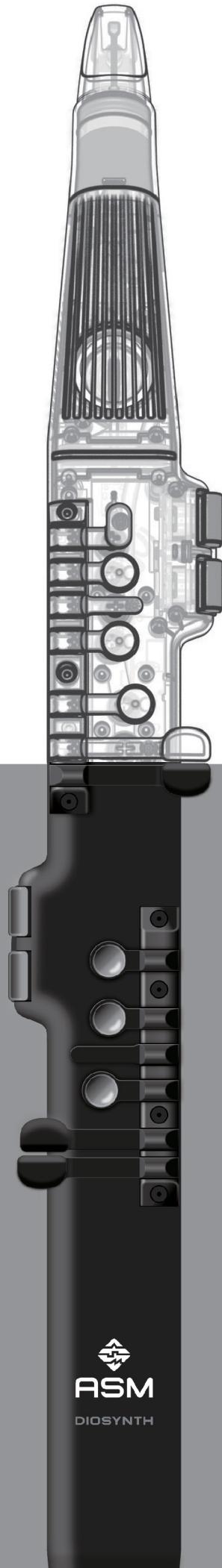




DIOSYNTH

Owner's Manual



ASM
DIOSYNTH

SPECIAL THANKS

Product Design and Management

Glen Darcey – CEO Ashun Sound Machines
Tao Zhang – Project management
Victoria Liu – Product manager

Engineering

Bob Liao - DSP
Eric Li – System PIC
Maria Zhang – QA Manager
Yutian Zhang – Software
Haipeng Ye - Hardware
Yitong Peng – Product Specialist
Guixian He - Electronics
Qinhong Li - Electronics
Wanxuan Guo – System QA
Jianlin Nie – ID Design
Lang Xie – Structural Design
Peng Zhou – Engineering PIC

Sound Designers

Nick Su – Sample LEAD
Glen Darcey - GD
Eddie "EWI" Spencer – ES
Bernie Kenerson - BK
Matt Marantz - MM
Tony Obr – TO
Jeff Song
Sasha
Sora Shao

Manual

Matt Vrazo (author)
Randy Lee (editor)
Nancy Lee (design & layout)

Musicians

Chase Baird
Joe Berry
Sergio Capoferri
Glen Darcey
Jiaying Fan
Lito Fontana
Ya Gao
Elio Giobbi
Haitao Li
Zhongxin Li
Zeqin Lin
Hang Lu
Daniele Marconi
Manuel Papetti
Yitong Peng
Xiaotong Qi
Jim Scimonetti
Zhongyuan Sheng
Giulio Spinozzi
Meng Su
Hongxin Su
Brandon Wilkins
Frank Xu
Jiamao Xu
Keke Zhang

Recording Engineers

Nick Su
Uri Gelman – Voodoo Doll Productions
Peiyu Wang
Sasha
Roberto Gaetani
Glen Darcey
Roberto Lanciotti
Brandon Wilkins
Ace Yukawa

© Ashun Sound Machines – 2025 – All rights reserved.

www.AshunSoundMachines.com

Information contained in this manual is subject to change without notice and does not represent a commitment on the part of Ashun Sound Machines. The software described in this manual is provided under the terms of a license agreement or non-disclosure agreement. The software license agreement specifies the terms and conditions for its lawful use. No part of this manual may be reproduced or transmitted in any form or by any purpose other than the purchaser's personal use, without the express written permission of Ashun Sound Machines. All other products, logos or company names quoted in this manual are trademarks or registered trademarks of their respective owners.

IMPORTANT SAFETY INSTRUCTIONS

Save your ears!

The product and its software, when used in combination with an amplifier, headphones or speakers, may be able to produce sound levels that could cause permanent hearing loss. DO NOT operate for long periods of time at a high level or at a level that is uncomfortable.

If you encounter any hearing loss or ringing in the ears, please consult an audiologist.

Precautions include, but are not Limited to, the following:

1. Read and understand all the instructions.
2. Always follow the instructions on the instrument.
3. Before cleaning the device, always remove the USB and DC cable. When cleaning, use a soft and dry cloth. Do not use gasoline, alcohol, acetone, turpentine or any other organic solutions; do not use a liquid cleaner, spray or cloth that's too wet.
4. Do not use the device near water or moisture, such as a bathtub, sink, swimming pool or similar place.
5. Do not place the device in an unstable position where it might accidentally fall over.
6. The device may be subject to strong electromagnetic interference. If this happens, simply follow the steps described in the user manual to restore the product to its original settings. When the product's functions cannot be restored, please use this product in another location.
7. Do not open or insert anything into the device that may cause a fire or electrical shock.
8. Do not spill any kind of liquid onto the device.
9. Always take the device to a qualified service center. You will invalidate your warranty if you open and remove the cover, and improper assembly may cause electrical shock or other malfunctions.
10. Do not use the device with thunder and lightning present; it may cause electrical shock or damage the unit.
11. Do not expose the device to direct sunlight or extreme temperatures.
12. Do not use the device when there is a gas leak nearby.
13. Refer to all manufacturers' instructions regarding the proper installation, use, and disposal of batteries.
14. Ashun Sound Machines is not responsible for any damage or data loss caused by improper operation of the device.

Cleaning the Diosynth mouthpiece

The mouthpiece should be removed and cleaned after each playing session. Dry all surfaces and clean the mouthpiece with light dish soap, then rinse with water and dry.

Specifications Subject to change

The information contained in this manual is believed to be correct at the time of printing. However, Ashun Sound Machines reserves the right to change or modify any of the specifications without notice or obligation to update the hardware that has been purchased.

Before requesting Service...

Please study this manual carefully and consult your dealer before requesting service. Service charges incurred due to a lack of knowledge relating to how a function or feature works (when the product is operating as designed) are not covered by the manufacturer's warranty and are therefore the owner's responsibility.

DIOSYNTH MENUS

Transpose Button	ProgramCh Rx
Master Tuning	Velocity Tx
Master (Patch) Tuning	Breath 1 Tx
Master Transpose	Breath 2 Tx
Master (Patch) Transpose	Bite TX
Master Scale	Gyro TX
Master (Patch) Scale	Joystick <--
Patch Octave	Joystick -->
Setup	PressPad1 TX
Controller Settings	PressPad2 TX
Key Delay	Assign1 TX
Breath Minimum	Assign2 TX
Breath Gain	Assign3 TX
Breath Curve	System
Bite Mode	Clock Source
Bite Zero	Tempo
Bite Depth	Bluetooth Audio In
Bite Function	USB Audio In
Octave Range	USB Audio Out
Assign 1 Function	Output Mode
Assign 1 Mode	Master Reverb
Assign 2 Function	Master FX1
Assign 2 Mode	Master FX2
Assign 3 Function	Sort By
Assign 3 Mode	Patch Protect
PressPad1	Fingering
P1Sense	Bluetooth Enable
P1Mode	BT Pairing
PressPad2	BT Reset
P2Sense	Theme Color
P2Mode	LCD Contrast
Gyro Mode	LCD Sleep
Joystick Pitch Bend Mode	Shutdown
Joystick Up Amt	FactoryPatchRes
Joystick Down Amt	Init All Patches
Joystick <-	Setup Reset
Joystick ->	Language
Vibrato Rate	System Info
Vibrato Amount	Serial Number
	PANIC MODE
MIDI	
Local On/Off	
MIDI Enable	
MIDI Rx Channel	
MIDI Tx Channel	
ProgramCh Tx	

DIOSYNTH MENUS (Continued)

Edit Patch	
Part 1 / Part 2	
	EQ-Low Gain
	EQ-Mid1 Gain
	EQ-Mid2 Gain
	EQ-Hi Gain
	IFX Type
	IFX (parameter 1)
	IFX (parameter 2)
	Reverb Type
	Rev-Reverb Time
	Rev-LoCut
	Reverb Send
	Reverb Return
	MFX1 Type
	MFX1 (parameter 1)
	MFX1 (parameter 2)
	MFX1Send
	MFX1Return
	MFX2 Type
	MFX2 (parameter 1)
	MFX2 (parameter 2)
	MFX2 Send
	MFX2 Return
	Dry Level
	Patch Level

CONTENTS

Special Thanks	2	Reading the display	21
Important Safety Instructions	3	[SETUP]	22
Diosynth Menus	4	Controller Settings	22
Sound Browsing Notes	8	Key Delay	22
Welcome to Diosynth!	9	Breath Minimum	22
Main Features	10	Breath Gain	22
Quick Start Guide	11	Breath Curve	22
Inside the Box	11	Bite Mode	23
Software and future updates	11	Bite Zero	23
Diosynth Layout	12	Bite Depth	23
Front Panel	12	Bite Function	23
Rear Panel	13	Octave Range	23
Control Panel	14	The Bite Sensor	23
Plug It In	15	Assignable buttons	24
Power	16	Assign Function 1-3	24
Power Supply	16	Assign Mode 1-3	24
Connecting to a computer	16	Press Pads 1-2	24
Battery Power	16	P1 Sense / P2 Sense (Sensitivity)	24
Powering On	16	P1 Mode / P2 Mode	24
Audio	17	Gyro Control	24
Speakers/Headphones	17	Joystick	25
Using the internal speaker	17	Joystick Up Amt	25
Using headphones	17	Joystick Down Amt	25
Using a mixer or audio interface	17	Joystick ←/→	25
USB Audio	17	Vibrato	25
Bluetooth® Audio	17	Vibrato Rate	25
Bluetooth for Audio-input-only streaming	17	Vibrato Amount	25
MIDI	18	What is MIDI?	26
USB MIDI	18	MIDI Continuous Controllers	26
5-pin DIN MIDI	18	Diosynth as a MIDI Controller	26
Bluetooth MIDI	18	MIDI Settings	27
Playing Diosynth	19	Local On/Off	27
Mouthpiece and Neck Strap	19	MIDI Enable	27
Performing Posture	19	MIDI Rx Channel	27
Embouchure	19	MIDI Tx Channel	27
Selecting Sounds	20	ProgramCh Tx	27
Navigating Patches	20	ProgramCh Rx	27
Categories	20	Velocity Tx	27
Patch Banks	20	MIDI Breath Control standards	27
Menu System	21	Breath 1 Tx	27
Navigating the menus	21	Breath 2 Tx	28

Bite Tx.....	28	Rev-LoCut	32
Gyro Tx	28	Reverb Send	32
Joystick ← / Joystick →	28	Reverb Return	32
PressPad 1 / PressPad 2 Tx	28	MFX Type 1 and 2	32
Assign 1–3 Tx.....	28	MFX parameters 1 and 2	32
SYSTEM	29	MFX Send 1 and 2	32
Clock Source.....	29	MFX Return 1 and 2.....	32
Tempo.....	29	Dry Level.....	32
Bluetooth Audio In.....	29	Patch Level	32
USB Audio In.....	29	Table A: Effects List	33
USB Audio Out	29	[SAVE]	35
Output Mode.....	29	[TRANS #/b]	36
Master Reverb	29	Global / Patch Mode	36
Master FX1 and 2	29	Master / Patch Tuning	36
Sort By	29	Master / Patch Transpose	36
Patch Protect	29	Master / Patch Scale	37
Fingering	29	User Scale	37
Bluetooth Enable	29	Master Scale Note 1–8	37
BT Pairing	29	Patch Octave	37
BT Reset.....	30	Favorites [FAV]	38
Theme Color.....	30	Favorites Registration	38
LCD Contrast.....	30	Troubleshooting	39
LCD Sleep	30	Diosynth Patch List by Bank	41
Shutdown.....	30	Diosynth Patch List by Category	45
Factory Patch Reset	30	Diosynth Sample List	48
Init All Patches	30	Diosynth Sample Effects List	49
Setup Reset.....	30	Fingering Charts	50
Language.....	30	Sax	50
System Info.....	30	Flute	52
Serial Number.....	30	Recorder	53
Panic.....	30	Trumpet	54
Editing a Patch	31	Diosynth Voice Path	55
[SOUND / EDIT]	31	Diosynth Specifications	56
Patch Parameters	32	Declaration of Conformity	57
Part 1/2	32		
EQ-Low Gain	32		
EQ-Mid1 Gain	32		
EQ-Mid2 Gain	32		
EQ-Hi Gain	32		
IFX Type	32		
IFX parameters 1 and 2	32		
Reverb Type.....	32		
Reverb Time	32		

SOUND BROWSING NOTES

Glen Darcey (CEO, Ashun Sound Machines)

I am very proud of our first foray into making windsynths. I have designed many synthesizers for multiple companies over the years, culminating in our award-winning Hydrasynth, which has been called a modern classic by many, and our 8-oscillator algorithmic synthesizer, the beastly Leviasynth.

I was a sax player before I ever got into synthesizers, and I came to windsynths in the mid 1980's. I have been blessed to be able to design and work on other windsynths for other companies in the past, as well as getting to know and work with many of the greatest windsynth players and designers in the world over the years.

Part of ASM's goal for our product line is to make products that allow for new levels of expressive playing and opening new doors in sound design. We have a very wide range of patches that were created by talented pros from different musical genre backgrounds. This has resulted in a sound set that can cover many performance and recording situations well.

- We have sounds that will work great in electronic music genres like ambient, techno, Berlin school, etc.
- We have sounds that will be great for musicians playing in local concert bands, orchestras and churches, where you might need to double on an acoustic sound that is missing.
- There are "traditional" windsynth sounds that mimic the sounds used by the great windsynth/EWI players of the past or present.
- There are sounds of harder-to-find and rare instruments like the contralto flute, contrabass flute, Eb Tubax, Peruvian llama whistle, Contralto clarinet, etc., that give you access to instruments you might not be able to afford or play.

The sound set should have something for everyone. But of course, not everything will be for everyone. Part of owning an electronic wind instrument is that it opens new doors and avenues for the person playing a traditional acoustic instrument. Since the majority of windsynths on the market are based entirely on sample-playback technology, and are not true synthesizers, Diosynth will allow you to use and create a wider range of sounds than you might find in a lot of the competition.

Some browsing suggestions:

- Browsing sounds by Bank will take you on a sound exploration that will give you a tour of the kinds of sounds you can make.
- Browsing sounds by Category will allow you to take a more focused approach to finding specific sounds faster.
- When trying out sounds, be sure to try them across the whole range. Many sounds are labeled LEAD or BASS, for example, but there are cases where a BASS sound might make a great LEAD or a LEAD makes a great BASS sound.
- The category of SPLIT means there are two sounds. Most splits have one sound on the bottom two octaves and a lead or melody sound on the top three octaves. Some of these are drone sounds or note sequences you can play against.

Also be sure to try the Joystick \leftrightarrow movement when playing each sound. The sound designers used it in many creative ways. On some CHORD sounds, the joystick might allow you to remove the chord notes and just play the main melody note. On some sounds you will get a growl sound \rightarrow and a vibrato sound \leftarrow . Sometimes it is used to do something like add a second sound layer or sweep the Wavescan oscillators.

We hope Diosynth is an instrument that inspires you to create, to come up with new ideas in performance and recording, to practice more often, and that it brings you joy for many years to come.

Best regards,

Glen



WELCOME TO DIOSYNTH!

Congratulations on your purchase of Diosynth, and welcome to the exciting world of digital wind synthesis! Diosynth has been designed to allow for both maximum expression, as expected from traditional acoustic instruments, while also allowing for entirely new forms of sound design never before heard on a digital wind synthesizer. Along with a variety of traditional instrument sample sets, Diosynth contains synthesis elements from the award winning Hydrasynth® synthesizer line. The intuitive interface lets you switch easily between sounds and fingering modes—and for additional control, our free editor program for Mac® and Windows® makes it even easier to revise and design your own brand-new sounds.

Visit www.ashunsoundmachines.com to download our free applications and more!

- **Diosynth Manager®** (Windows® / macOS®): Edit your sounds and organize sound banks
- **Diosynth Live®** (iOS™/Android™): Easy and visual patch recall for live performers
- Download new sound banks as they are released

MAIN FEATURES

Dual Synthesis / Sample Playback Engine

Diosynth is based on the award-winning Hydrasynth® synthesis engine. We have added a sample playback engine, with a full complement of woodwind, brass, string and ethnic instrument sounds.

Synthesis engine

- Two WaveScan oscillators with 219 waveforms
- 16 Hydrasynth® filter models, including our vowel filter
- Noise generator with our Hydrasynth® morphing filter
- 32-slot modulation matrix
- 5 LFOs with step sequencer modes
- 5 Envelopes with looping modes
- 'Growl effect': Ringmod with 3rd Oscillator

Sample Instruments

- Flutes from Piccolo to Contrabass Flute
- Saxes from Soprano to Eb Tubax
- Clarinets from Eb Soprano to Contralto
- Double reeds, Oboe to Contrabassoon
- Ethnic Flutes and Whistles
- Trumpets, Trombones, French Horns and Tubas with mute variations and sections
- Violins, Cello, Bass, Ensembles, etc.
- Harmonicas, Accordions (like the cool kids have), and more

Key Features

- Real keys for real musicians
- 2 Instruments (Parts) so you can layer or split sounds
- Transpose to any key, globally or per patch
- Multiple fingering modes (Saxophone, Flute, Recorder, and Trumpet)
- XY joystick for live performance controls
- 2x thumb pressure pads
- 3x assignable buttons
- Gyro, positional sensor can be used as a mod source
- 7+ octave range
- Alternate tuning scales – microtonal support
- Can be powered by USB or by 2x 18650 Li-ion rechargeable batteries

(batteries and charger not included)

MIDI Connectivity

- Bluetooth® MIDI for wireless setups
- USB-C MIDI – supplies power as well as MIDI and audio
- 5-pin DIN MIDI – perfect for older hardware and 3rd party extended-range wireless MIDI devices

Audio I/O

- Stereo TRS audio output with separate level control
- Built-in speaker with separate level control
- 3.5mm headphone output
- USB Audio input/output
- Bluetooth® audio streaming input

QUICK START GUIDE

Inside the Box

Your Diosynth was carefully packed at the factory with the following items:

- Hardshell flight case, with space for accessories and four batteries (optional)
- Folding stand
- Extra mouthpiece
- Neck strap
- Y cable adapter for computer connections
- USB-C <-> C cable with right angle connector
- USB-C <-> A cable with right angle connector
- Stereo audio cable with right angle connector
- Power supply with universal power adapters
- Printed owner's manual
- Spit scrunchy & cleaning cloth

Save your receipt!

Ashun Sound Machines designed and constructed your Diosynth with extreme attention to detail. Our quality assurance personnel test each unit thoroughly before it goes out. But in the unlikely event of a hardware problem, you will need to present a copy of your original receipt to obtain warranty service. This will help the service center to confirm your warranty coverage. So please be sure to save your receipt in a safe location (a photo of the receipt is acceptable).

Software and future updates

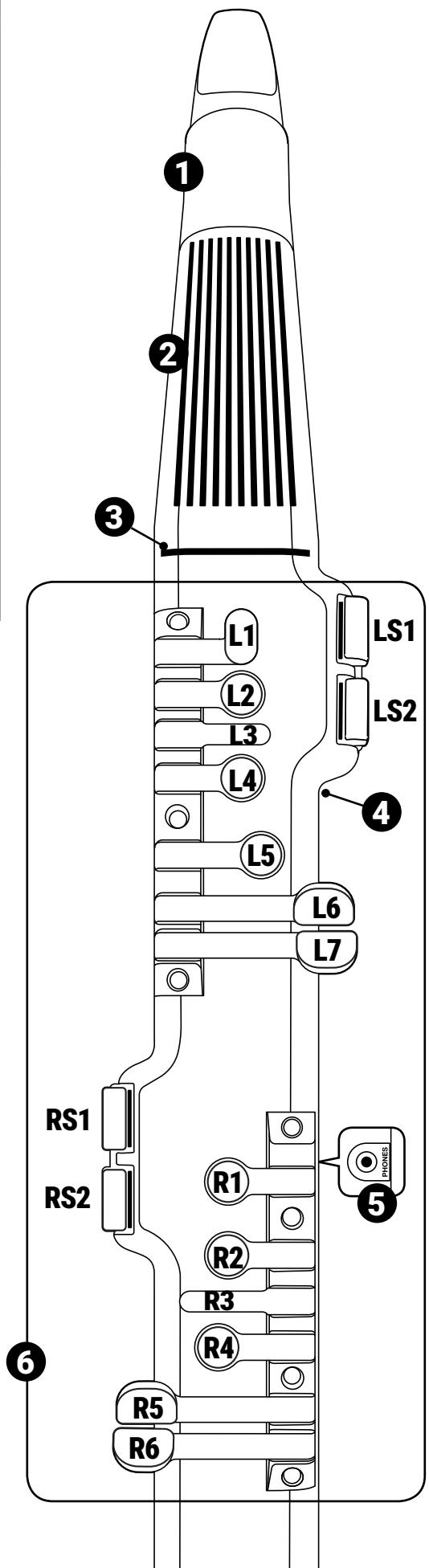
We are always working on new updates for our products.

Visit <https://www.ashunsoundmachines.com> to find the latest firmware and soundset updates.

Our website is also the place to find our free Diosynth Live application for Android™/iPhone™. It lets you create a setlist of patches you can recall quickly with a touch on your mobile device.

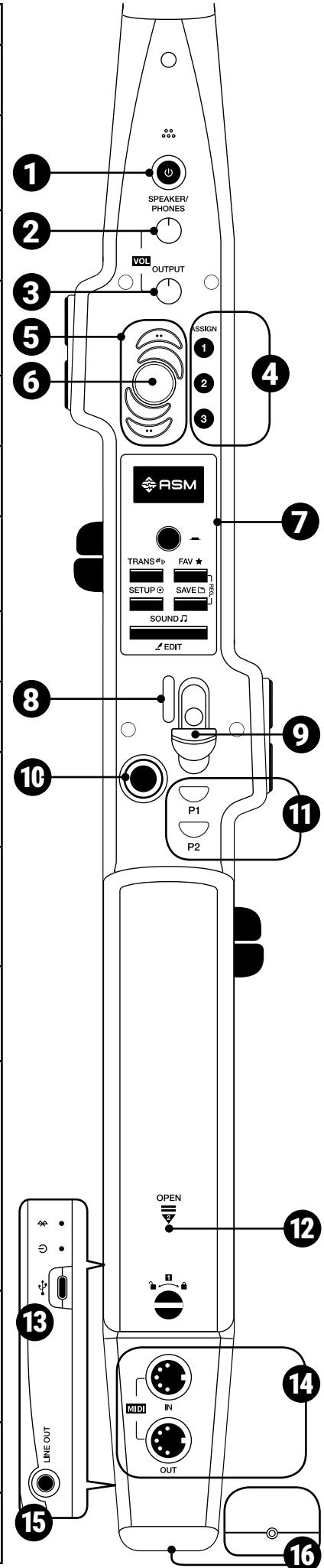
DIOSYNTH LAYOUT

Front Panel	
1	Mouthpiece Blow into the mouthpiece to play Diosynth.
2	Built-in speaker The sound output can be heard from the built-in speaker.
3	Customizable light The light will “breathe” as you play louder and softer
4	STAND SUPPORT POINT This is the area of the Diosynth that should be positioned on the support arms of the included stand. This will ensure proper balance on the stand.
5	[PHONES] (1/8" [3.5 mm]) For connecting headphones.
6	Performance keys <ul style="list-style-type: none">• Keys for left-hand fingering: L2, L4, L5, L6, L7• Keys for right-hand fingering: R1, R2, R4, R5, R6• Key function depends on the fingering mode: L1, L3, LS1, LS2, RS1, RS2, R3.



Rear Panel

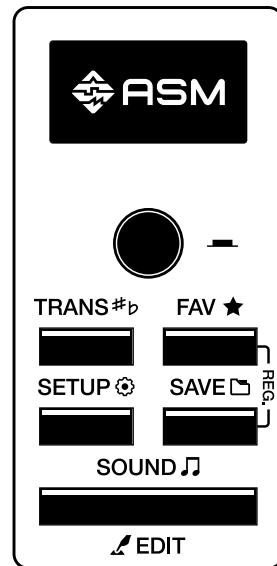
1	Power Button Turns Diosynth power on or off.
2	[SPEAKER/PHONES] Knob Adjusts the volume of the stereo headphones and the built-in speaker.
3	[OUTPUT] Knob Adjusts the volume of stereo line output.
4	ASSIGN [1], [2], [3] Buttons Operate these with your left thumb. Each button can be assigned an independent function. See [SAVE] (p. 35) for more information.
5	[OCTAVE] Buttons Shift the octave register up or down while you are playing.
6	Thumb Rest Your left thumb rests in the middle of the four [OCTAVE] buttons
7	Control Panel & Display This is the menu interface. The display will show the corresponding information on two lines.
8	Strap Ring For attaching the included neck strap.
9	Thumb Hook Place your right thumb under the thumb hook for added stability.
10	Joystick Operate it with your right thumb to bend the pitch, apply vibrato or other effects. See [SETUP] (p. 22) for more information.
11	[P1], [P2] Pressure Pads Operate them with your right thumb. You can assign functions to these two pressure-sensitive buttons. For information, please refer to the Controller Settings (p. 22) .
12	Battery compartment For rechargeable lithium batteries (not included). See Power (p. 16)
13	Status Indicators and the [USB-C] Port From top to bottom: <ul style="list-style-type: none"> Bluetooth indicator (blue): lights up when Bluetooth is connected. Power indicator (red): lights up when the power is turned on. [USB-C] port: for connecting to the dedicated power adapter or a computer.
14	[MIDI IN], [MIDI OUT] <ul style="list-style-type: none"> [MIDI In]: For receiving MIDI data from other MIDI devices. [MIDI Out]: For sending MIDI data from Diosynth to other MIDI devices.
15	[LINE OUT] (1/4" [6.35 mm]) A stereo output for connecting Diosynth to external speakers.
16	Water Drain This drains any moisture that accumulates during performance.



Control Panel

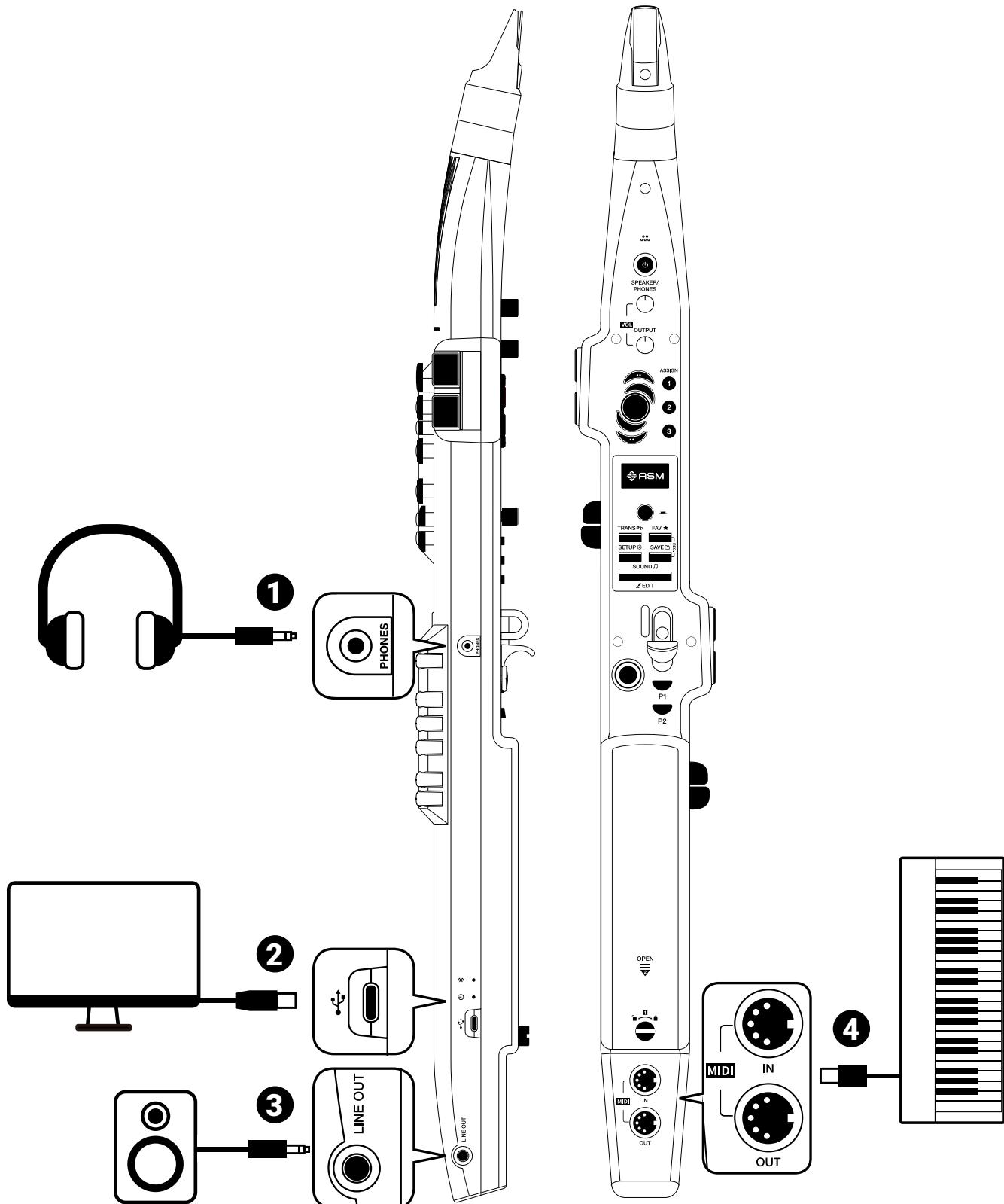
Refer to the diagram and table below as you learn about the control panel.
Please refer to the specific settings of each function for more details.

Encoder	Turn the encoder to select an option or adjust parameters. Press it to move the cursor inside the display or to confirm a choice.
[TRANS]	Press to adjust the transpose, octave or scale.
[FAV]	Enter the Favorites list.
[SAVE]	Enter the Save menu.
[FAV]+[SAVE]	Press both buttons at the same time to add the current sound to the Favorites list.
[SETUP]	Press to enter the Settings menu
[SOUND]	Press to enter the Sound menu. Hold it for two seconds to enter Sound Edit mode.



PLUG IT IN

1	Headphones Connection
2	USB MIDI/Power Connection
3	External Audio Device Connection
4	DIN MIDI Connection



Power

There are two options for powering Diosynth: You can use the included power supply, or you can use rechargeable batteries (optional). In either case it is essential to use only the recommended sources.

Power Supply

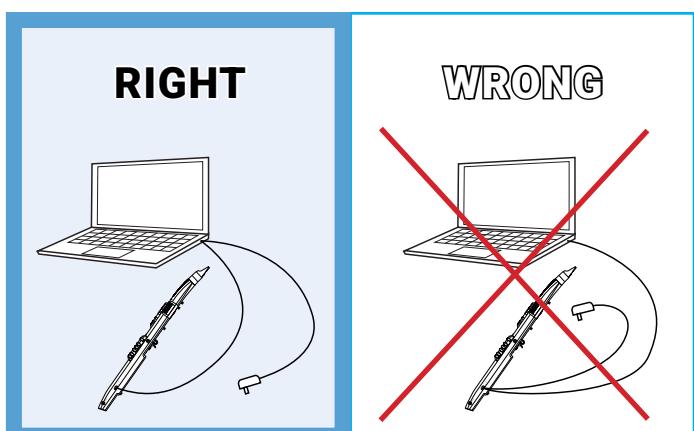
Diosynth comes with a dedicated power supply (5V DC, 2A). Do not use any other power supplies with Diosynth. Ours provides a selection of AC plug adapters that allow Diosynth to be used in multiple countries.

1. Please select the plug adapter for your country's power and attach it to the power supply unit.
2. Plug the included USB power cord into the power supply and then plug the other end into the USB-C connection on Diosynth.
3. The unit is now ready to power up: Hold the power button for 3 seconds until you see the ASM logo on the screen.
4. To power down, hold the power button briefly until "Shut Down" appears on the screen. To avoid any data loss or corruption, do not disconnect from any power until the unit has fully shut down.

Connecting to a computer

The USB ports on many computers do not provide enough power for Diosynth. When connecting to a computer, there are two options:

1. Use Diosynth with battery power and a USB cable to the computer
2. Use Diosynth with our power supply and the Y cable adapter, as shown in the diagram.



As you can see in the diagram above, the Y cable should be connected directly to the computer, with separate cables leading from the Y adapter to the Diosynth and the Diosynth power supply.

Battery Power

- Batteries (optional): Use two high-quality 18650 Li-ion rechargeable batteries. **IMPORTANT:** Use the "button-top" type with a nib on the end, not the kind that are flat on both ends.



- When batteries are used, an icon in the upper right corner of the display indicates the amount of charge remaining in the batteries. When the battery level is low, the icon will flash.
- **DO NOT MIX BATTERY TYPES:** Both batteries should be the same brand and power rating.
- A separate device must be used to recharge the batteries. Diosynth does not have a built-in charger due to regulatory issues.
- Insert all batteries according to the +/- polarity markings inside the battery compartment.
- Always remove the batteries once they are depleted, or if you do not plan to use the Diosynth for an extended period of time. (We know; that's hard to imagine!)
- Battery life depends on two factors:
 1. The screen needs power, so having it "sleep" sooner will extend battery and screen life. Choose the optimal time in the SETUP menu. See [\[SETUP\] \(p. 22\)](#).
 2. The built-in speaker requires the most amount of power. Using headphones or the main audio outputs and turning down the Speaker/Phones volume control will extend battery life.

Powering On

Turn on Diosynth by holding the power button for 3 seconds until you see the ASM logo on the screen. Diosynth is ready to play as soon as you turn it on and turn up the volume.

Turn the encoder to select the patches. They will load instantly, and you can audition them right away.

See [Selecting Sounds \(p. 20\)](#) for more information about Factory presets, patch banks, and patch categories.

Audio

Speakers/Headphones

Diosynth has an internal speaker, a $\frac{1}{8}$ " (3.5 mm) headphone output and $\frac{1}{4}$ " (6.35 mm) stereo audio output (the Line Out). It has two separate knobs for controlling the Speaker/Phones volume and the Line Out volume.

Before switching the unit on, please lower the volume of your speakers or mute the input channels on your mixer. This will help prevent any damage to your speakers or ears.

Using the internal speaker

If playing Diosynth using the internal speaker, use the Speaker/Phones volume control. Start with the volume low and adjust after you have produced your first sounds. Plugging in headphones disables the speaker.

Using headphones

Diosynth includes a $\frac{1}{8}$ " (3.5 mm) stereo headphone jack on the left side. When using headphones, turn the unit on first and then connect the headphones. Start with the Speaker/Phones knob low and adjust after you hear sound in the headphones.

Using a mixer or audio interface

Diosynth's Line Out uses a stereo $\frac{1}{4}$ " jack. For stereo sound, use the included $\frac{1}{4}$ " TRS to dual $\frac{1}{4}$ " TS splitter cable. If using a mono (TS) guitar cable, set the [Output Mode \(p. 29\)](#) to mono in the Setup menu to avoid any loss of sound. You'll find a picture that shows the difference between TRS and TS connectors on that page.

After muting the channel inputs or lowering the volume of your speakers, connect an audio cable from the Line Out jack on Diosynth to an input of your mixer or audio interface. With the Output knob in the lowest position, push the Diosynth power switch. After unit powers up, carefully adjust the Output level as needed.

USB Audio

Diosynth supports two channels of audio out and two channels of audio in over USB. The audio outs let you connect directly to your computer's recording software via USB and send stereo audio to the

computer, and your computer's stereo audio can be sent into Diosynth through its stereo USB audio input. This lets you to hear the audio on your headphones or built-in speaker.

WARNING! It is possible to set up a USB audio feedback loop accidentally when you are routing the USB audio into and out of a DAW at the same time. Please refer the documentation for your computer and recording software for information about configuring your setup.

Please refer the documentation for your computer and recording software for information about configuring your setup.

Bluetooth® Audio

Diosynth is equipped with Bluetooth functionality. This lets you pair with external devices such as a smartphone, tablet, or computer, and send that audio into Diosynth and listen to it via headphones, the built-in speaker, or the external audio output while you are playing the instrument. Perfect for jam sessions on the go!

When using Bluetooth on Diosynth, do not place the external device too far away from the Diosynth. Bluetooth connections can become unstable, interrupted, or even disconnected if there are walls or other obstacles between the instrument and the device, or when the distance between them is too great.

Bluetooth for Audio-input-only streaming

To enable/disable Bluetooth:

1. Go to your sending device (i.e., a Bluetooth-equipped phone) and make sure Bluetooth is on.
2. Next scroll to the "BT Enable" page in the Diosynth SETUP menu and select "ON/OFF".
3. You will then need to choose "Diosynth WS-1" from the sending unit's list of devices.
4. Adjust the Bluetooth audio input level on the "BT Audio In" page. The value range is 0-127 (default value is 64).

USB MIDI

Diosynth is a USB class-compliant device, so there are no drivers to install. Just plug it into your computer and it will be available immediately as a MIDI input/output device. Two ports will be visible:

1. Use this device for most applications:
Diosynth WS-1
2. Use this device for the Diosynth Manager application:
 - macOS: Diosynth WS-1 Editor
 - Windows: MIDIIN2 (Diosynth WS-1)

5-pin DIN MIDI

Diosynth has two 5-pin DIN MIDI jacks so you can connect other MIDI devices. MIDI Out sends data from Diosynth and MIDI In receives data from other MIDI devices. This enables you to use Diosynth with other MIDI-equipped computer software, synthesizers and sound modules.

Bluetooth MIDI

Diosynth can send and receive MIDI data over a Bluetooth connection. For more information about this feature, see [What is MIDI? \(p. 26\)](#).

PLAYING DIOSYNTH

This section explains how to hold Diosynth correctly and how to play it.

Mouthpiece and Neck Strap

Attaching the Mouthpiece

When attaching the mouthpiece, pay attention to its orientation. Ensure that it firmly attaches to the body of the instrument. Be careful not to use excessive force, or you might bend the bite sensor. (Image 1)

Attaching the Neck Strap

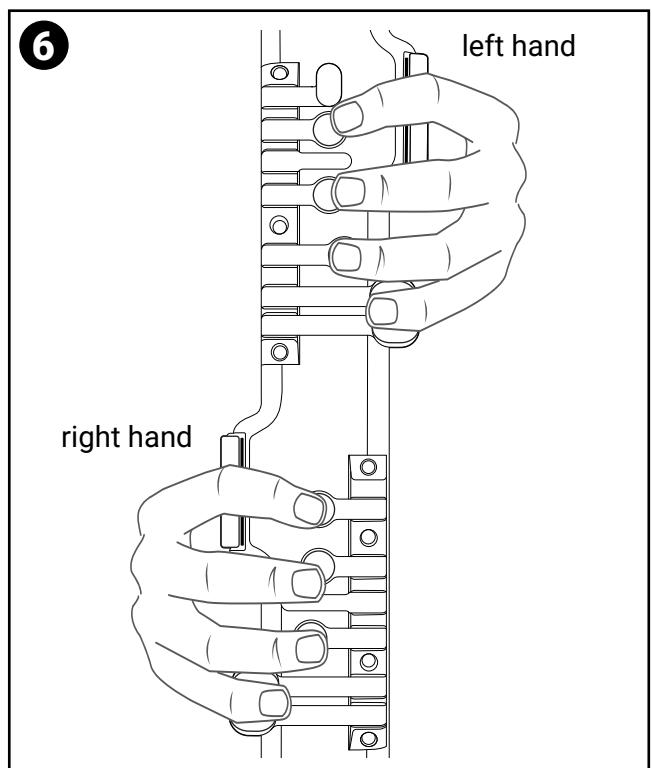
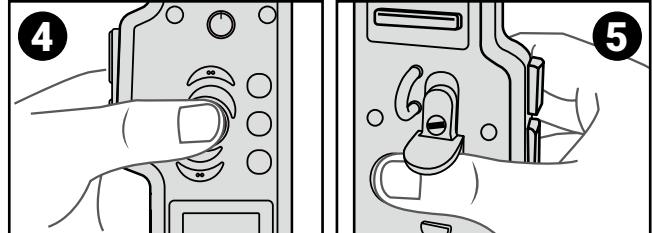
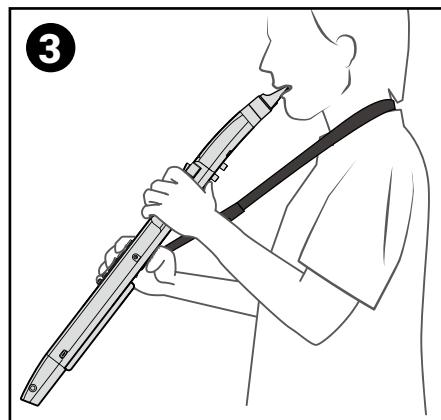
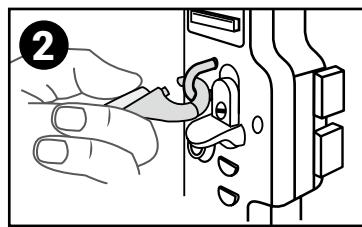
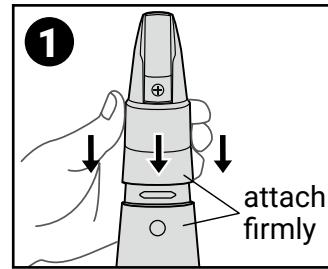
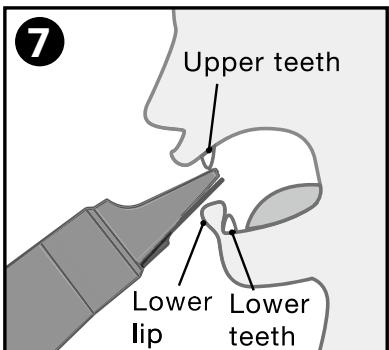
Attach the included neck strap to the strap ring on the rear panel. Adjust the length of the strap if necessary. Note: Be careful not to pinch your fingers when attaching the neck strap. (Image 2)

Performing Posture

1. Hold Diosynth vertically, with the front panel (performance keys) facing outward.
2. Place the neck strap around your neck. (Image 3)
3. Place your left thumb in the middle of the four [OCTAVE] buttons (Image 4) and place your right thumb under the thumb hook (Image 5).
4. Position the other fingers comfortably on the front panel keys and hold the instrument as shown (Image 6).

Embouchure

1. Place your upper front teeth about 1 cm (3/8") from the tip of the Diosynth mouthpiece. Let your lower lip slightly cover the lower front teeth, and rest against the reed at the bottom of the mouthpiece. (Image 7)
2. Close your mouth to create a seal and prevent air from leaking out while blowing.
3. The sound volume will change depending on how hard you blow: The harder you blow, the louder the sound, and vice versa.
4. This instrument can detect wind pressure and bite strength. You can adjust these parameters to suit your playing style. See [\[SETUP\] \(p. 22\)](#) for more details.



SELECTING SOUNDS

Navigating Patches

Diosynth comes loaded with hundreds of preset patches. These were designed by professional sound designers to showcase Diosynth's abilities and allow you to find suitable patches without the need to program your own.

Patches are sorted into categories and banks to make navigation easy. You can specify whether you want to scroll through patches by Categories or Banks in the SETUP menu (see below). Turn the encoder until you reach [Sort By \(p. 29\)](#), then use the encoder to select Bank or Category. The default setting is Banks.

Categories

Categories are a way to group the patches into similar instrument types. This helps you locate sounds of a specific type quickly. Some example Category names could be Clarinets, Flutes, Harmonicas, Saxes, Synth Bass, Synth Brass, Trumpets, etc.

The categories are in alphabetical order, and the patches are listed alphabetically inside each one. There may be different numbers of patches within each category.

Select the Sort By Category option in the SETUP menu as described above. Then press [SOUND] and turn the encoder to move through the patches within each category. Press the encoder to reach the top line and select a specific category.

New categories can be created for your patches using our Diosynth Manager application for Windows and Mac computers.

Patch Banks

When patches are sorted by Bank, they appear in numerical order from 1-128. There are six banks total (A-F) with 128 patches in each bank. Banks A-C contain the Factory patches, and Banks D-F are empty, waiting to be filled with your own creations!

Select the Sort By Bank option in the SETUP menu as described above. Then press [SOUND] and turn the encoder to move through the patches within each bank. Press the encoder to reach the top line and select a specific bank.

The patches in each bank can be replaced and rearranged using our Diosynth Manager application.

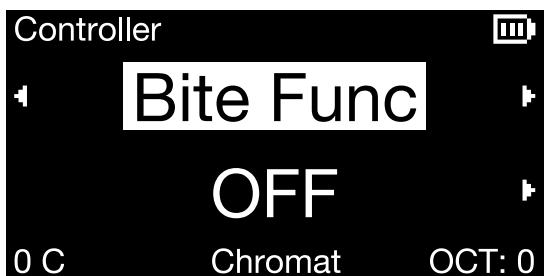
MENU SYSTEM

You can personalize the playability of Diosynth and adjust the effects for each patch inside the unit. You'll use the three menu buttons (TRANS, SETUP, SOUND) and the encoder to select and edit the parameters.

Navigating the menus

The menus are described later. Let's look at how to use them first, using the [SETUP] menu as an example.

1. Press the [SETUP] button to enter the menu.
2. Press the encoder to switch between the upper and lower lines on the screen. The current choice is highlighted.
3. Turn the encoder to select a parameter (upper line) or change its value (lower line).
4. To exit, press the [SOUND] button or another menu button.



Reading the display

As you move around in the menu pages, notice that the words in the display have arrows on either side. If there is only an arrow on the right side, you are at the beginning of the list and can only scroll right; an arrow on the left side means you are at the end of the list and can only scroll left. If there are arrows on both sides, you are in the middle of the list.

The corners of the display sometimes show icons that provide important information. In the Rename graphic, the following icons are used:

Folder = ✓ (upper left side)

This means "Press [SAVE] when you're ready to save the patch to the selected location."

Battery level (upper right side)

This shows the remaining level of battery power. It will flash when the batteries are running low.

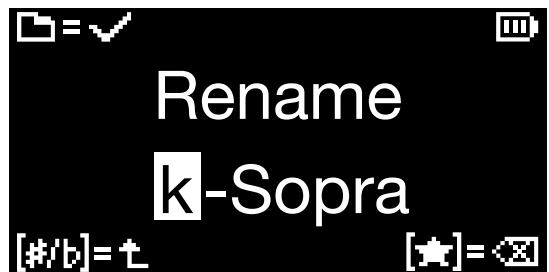
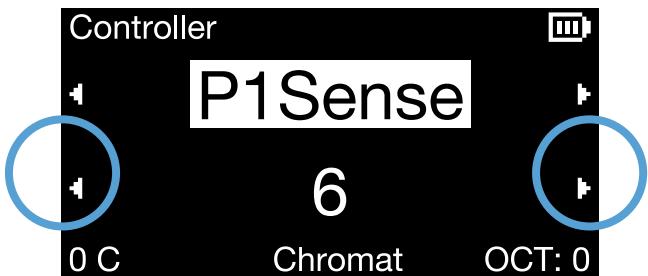
[#/b] = escape arrow

This means "Press [TRANS #/b] to back out of this page or cancel the operation."

[★] = delete previous character

This means "Press [FAV (star) to move the cursor to the left and delete the previous character.

Let's explore each of the menus now.



[SETUP]

The Settings menu contains all of the control parameters for Diosynth—these are global settings that will apply to all patches. The SETUP functions can be divided into three categories: Controller Settings, MIDI, and System.

- **Controller Settings** define how you play and physically interact with Diosynth. This includes settings to customize the breath sensitivity, set the bite sensor response, and assign the controller functions to your liking.
- **MIDI settings** include all the parameters for connecting Diosynth to external devices, such as computers and other hardware synthesizers.

- **System parameters** include background functions that typically only need to be set once, or infrequently. Here is where you will set Audio Input levels, Bluetooth settings, find your current firmware version, etc.

Note: Any changes you make in the Settings menu are saved automatically when you turn off the power.

Controller Settings

Key Delay

Key Delay lets you set how quickly the keys respond to your playing. Depending on your technique, you might find some errant notes are generated while you play. This parameter can be adjusted to slow down the key response and limit note glitches. The range is 0–64 (default value is 36). Higher ranges are more forgiving of inconsistencies in finger-ing technique, with the trade off being that faster passages of music might not be able to be played. Lower ranges will be less forgiving but will allow faster playing.

Breath Minimum

This sets the minimum breath force needed to make Diosynth produce sound. The range is 1–127 (the default value is 5). Most users will probably want to leave this value at 5. However some players who play with a hard reeds and more air pressure, might want to raise this value.

Breath Gain

This controls the amount of air required to go from minimum to maximum levels. Players who play with a lot of air pressure might want to use lower gain settings. For players who don't play as hard, higher gain settings should be used. Think of this as setting your reed strength on a sax or clarinet. Here's how the values work relative to levels:

- Settings from 0–19 will not allow you to hit the full value of 127.
- A value of 20 is “unity gain”; it provides the widest dynamic range.
- From 21–127 adds gain to the breath amplitude, making it easier to reach full level. This will also reduce your full dynamic range.

Breath Curve

This parameter selects the shape of the curve that defines how breath force controls various parameters. Most people like Linear, Exp1, Exp2, or Exp3. If you want to experiment, start with those settings. Try them until you find the one that offers you the best response.

The following is a list of all breath curves:

- Exponential 5 (Exp5)
- Exponential 4 (Exp4)
- Exponential 3 (Exp3)
- Exponential 2 (Exp2, the default)
- Exponential 1 (Exp1)
- Linear
- S-curve
- Logarithmic 1 (Log1)
- Logarithmic 2 (Log2)
- Logarithmic 3 (Log3)
- Logarithmic 4 (Log4)
- Logarithmic 5 (Log5)

THE BITE SENSOR

The bite sensor can detect the strength of your bite on the Diosynth mouthpiece. By default, the bite function is set to Patch, which means it can respond differently on every patch. You can assign various functions to the bite sensor, such as pitch bend up, pitch bend down, volume, vibrato, or even playing techniques. For detailed settings, please refer to Controller Settings.

Bite Mode

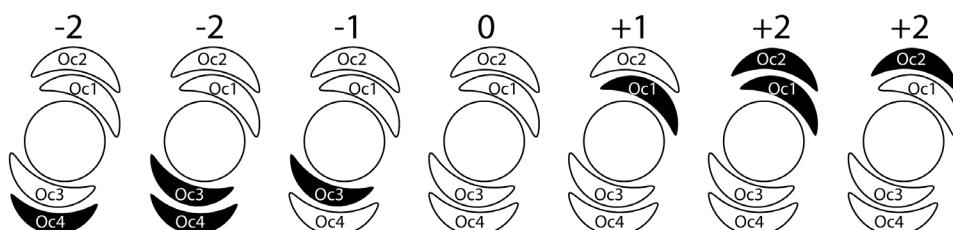
The reed sensor can be used for pitch bend and vibrato effects. There are four modes available (the default is "EWI"):

- Off: No modulation data is sent from the bite sensor.
- Sax: This simulates the embouchure required for a saxophone or clarinet. The player is required to have a tight embouchure. By dropping your jaw, you can drop the pitch and bend the note back up to zero. The modulation effect only goes negative.
- Loose: This simulates the looser embouchure required for a recorder or fipple-based instrument. By biting on the reed, you can bend the pitch upward. The modulation effect only goes positive.
- EWI: Any bite movement will create an effect of the pitch going positive or negative and will automatically return to zero. It simulates how vintage electronic wind instruments worked. In this mode you cannot bend a pitch, but you can create a very controllable vibrato.

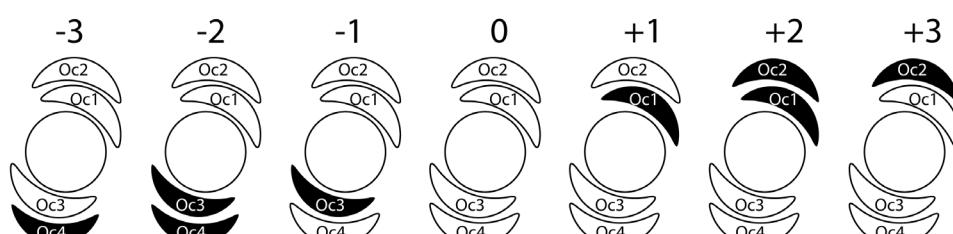
Octave Range

This controls whether the octave buttons can shift the octave up or down +/- 2 octaves or +/- 3 octaves (the default range is +/- 2 octaves). In +/- 2 octave mode, button 1 shifts +/- 1 octave, and button 2 shifts +/- 2 octaves. If you press both buttons at one time, the pitch still only shifts by 2 octaves. In +/- 3 octave mode, the buttons have a different logic: button 1 = 1 octave, buttons 1+2 = 2 octaves, button 2 = 3 octaves.

2 OCTAVE RANGE



3 OCTAVE RANGE



Bite Zero

This parameter sets how much dead range the reed has before the bite will output modulation data. At 0, it will output any change that is sensed; at 127, it will only start to output modulation data at the very end of the movement range (default value is 20).

Bite Depth

The Bite Depth parameter sets the amount of effect from the bite sensor. It will control how wide the effect of each Bite Mode is. The range is 0–127 (default value is 40). Higher numbers will mean a wider range of pitch bend.

Bite Function

This determines what the bite modulation function will do. Options include:

- Off: No data is sent at all. This includes any modulations set up in the patch/mod matrix settings.
- Patch: This sets the bite function to whatever is programmed in each patch. Note that some patches may not have anything assigned to this, so if you find a patch where the bite does nothing, it is not broken! It is probably just not assigned in that patch.
- PB: This is pitch bend. It routes the bite function to bend the pitch on all patches. You can still use the bite parameter to do other things in the patch via the modulation matrix. This mode guarantees you always have some vibrato or pitch bend modulation available. But there are many instruments that do not have a pitch vibrato, which could make them seem less realistic.

Assignable buttons

There are two types of assignable buttons on Diosynth: Assign buttons and Press Pads. We'll describe how to use them in the next few sections.

Assign Function 1–3

There are three user-assignable buttons on Diosynth. These can be assigned to a variety of destinations for extra control and expression. The default setting of Patch means the button will do what has been programmed and stored with each patch.

These buttons also can be assigned globally to any of the following functions:

- Off
- Patch (settings may vary per patch)
- Next Patch
- Previous Patch
- Next Favorite
- Previous Favorite
- Glide On/Off

Suggested use case: One good way to use these buttons is to change patches easily. Try setting Assign button #1 to PREV PATCH or PREV FAVORITE. Then set Assign button #3 to NEXT PATCH or NEXT FAVORITE. When you get used to where they are, you can change patches without looking.

Assign Mode 1–3

Note: Assign Mode is hidden when the Assign Function = Next Patch, Previous Patch, Next Favorite, or Previous Favorite.

The Assign Mode determines the behavior of the Assign Function buttons when the selected option is Patch or Glide.

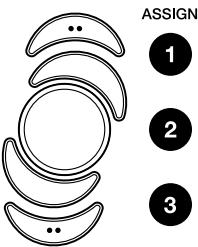
When Mode = Latch, the Assign function remains active (lit) after it is pressed, and will only turn off after the button is pushed again.

When Mode = Momentary, the Assign function is only active while the button is held down, and will stop when the button is released.

Press Pads 1–2

There are two pressure-sensitive buttons under the thumb rest. They can be assigned to a variety of destinations for extra control and expression. These let you fade in different effects based on how hard you press them. When set to Patch, the functions are determined based on what has been programmed in those parameters for the selected patch.

The Press Pads can be assigned to one of the following destinations:



- Off
- Patch
- Vibrato
- Growl
- Glide (on/off)
- Glide Rate

P1 Sense / P2 Sense (Sensitivity)

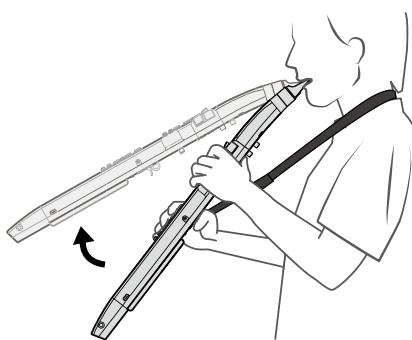
This determines the value of the Press Pad when assigned to modulation parameters. Higher values will create a larger effect, i.e., more Growl or Vibrato. The range is Off, 1–10 (default value is 6). Note: Glide Rate is variable, but the Glide setting can only be toggled on and off.

P1 Mode / P2 Mode

This determines the behavior of the selected Press Pad button. If the assigned destination is a modulation parameter (e.g., Growl), the Latch option holds the last value until the pad is pushed again. When Mode = Momentary, modulation stops when the pad is released.

Gyro Control

Diosynth has the unique ability to use the instrument position, vertical through horizontal, as a modulation source. The built-in gyro control can detect the motion of the instrument and will activate an assigned function by detecting Diosynth's tilt angle (upward only).



Gyro Mode

If the unit is held vertically, it will not output a modulation value. As you lift the bottom of the instrument up, it can bring in a programmed effect.

This positional modulation can be assigned to a variety of destinations for extra control and expression (the default destination is Patch). When set to Patch, the response is based on what has been programmed into the selected patch for those parameters.

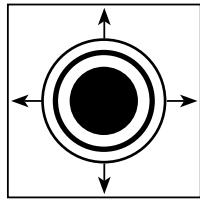
Gyro mode can be assigned to one of the following destinations:



- Off
- Patch
- Vibrato
- Growl
- Glide (on/off)
- Glide Rate
- Tone

Joystick

Diosynth has a versatile joystick next to the thumb hook. You can use it with your right thumb and move it up, down, left or right to enable various functions. The joystick will automatically return to the central (neutral) position when you release it.



Joystick Pitch Bend Mode

This parameter determines whether the joystick responds to the Global or patch-specific settings, or none (default setting is global). The three options are:

- Off
- Global—the function will be used only as a pitch bend effect and all patches will use the value you have set in the next two menus.
- Patch—the bend amount can be different for each patch. This is useful for instruments that are not able to bend the pitch, or have limited ability to do so. For example, you might want a Bass Recorder to have much less pitch bend ability than a Tenor Sax. For a synth sound, on the other hand, you might want to have very wide pitch bend range.

Joystick Up Amt

Vertical movement on the joystick can be used to bend the pitch above the note being played. The range is 0–1200 cents (1 octave); the default setting is 100 cents, or one semitone.

Joystick Down Amt

Vertical movement on the joystick can be used to bend the pitch below the note being played. The range is 0–1200 cents (1 octave); the default setting is 100 cents, or one semitone.

Joystick \leftarrow/\rightarrow

The horizontal range of the joystick can be assigned to a variety of destinations for extra control and expression (the default is Patch). When set to Patch, the response is based on what has been programmed into the selected patch for those parameters.

The left / right motion of the joystick can be assigned to one of the following destinations:

- Off
- Patch
- Vibrato
- Growl
- Glide Rate
- Tone

Vibrato

Vibrato Rate

This parameter determines the global vibrato rate and will apply to all patches. The range is 0.30–10 Hz (1 Hz = 1 cycle per second; the default value is 4.1 Hz).

Vibrato Amount

This determines how much vibrato is applied when Vibrato is the destination for any of the assignable functions (e.g., Press Pad). The range is 0–12.0 semitones (1 octave); the default is 0.4.

What is MIDI?

MIDI stands for Musical Instrument Digital Interface. It's a communication protocol that helps electronic musical instruments work together. MIDI-capable devices can send and receive various types of music-related information, such as pitch and velocity, sound selection, and effect settings, without the need for physical audio signals. Most modern electronic music instruments are equipped with some form of MIDI connectivity, and Diosynth is no exception.

Diosynth offers 3 ways to connect via MIDI:

MIDI DIN – these are the big 5 pin connectors at the bottom. They are good for long distance wired connections, and let you connect with other devices or computers that have hardware MIDI interfaces. These are also a good option for connecting to a Wireless MIDI device (WIDI) for longer ranges than Bluetooth allows. If you'd like to learn more about MIDI basics, check out this helpful overview: <https://midi.org/about-midi-part-1-overview>.

MIDI USB – This is the standard way to connect to a laptop. You will need to use USB MIDI to work with our Diosynth Manager app due to the higher speed that USB MIDI has over MIDI DIN and Bluetooth MIDI.

Note: Using computer USB and an audio interface on that same computer can result in audio ground loops. If you hear a lot of noise that goes away when you disconnect the USB cable, you might have a ground loop. The best option is to use a laptop on battery power (the power adapters can

create this ground loop). There are also companies that make USB ground isolators; these can be found online.

Bluetooth MIDI – This can be useful with a computer to enable wireless communication. Note that Bluetooth has a limited range, so it is not ideal for stage performances, where you would want a reliable longer distance connection.

Note: Using Bluetooth MIDI with iOS devices can be problematic. Apple™ has set Bluetooth MIDI to a low priority, so it can introduce significant delays into your signal.

If you'd like to learn more about cables and connectors, including Bluetooth, this site has a helpful overview: <https://midi.org/about-midi-part-2midi-cables-connectors>

MIDI Continuous Controllers

In the description of MIDI functions below you will see the term Continuous Controllers (or CCs). These are special MIDI controller numbers (0–127) that can be assigned to any of the performance functions on Diosynth (e.g., the joystick or the assignable buttons). When you move the joystick or push an Assign button, these can send out specific MIDI CC information that can go to a sound module, a hardware sequencer, or a DAW (Digital Audio Workstation) on your computer. MIDI CCs make it possible to record every nuance of your performance, beyond just capturing the pitch and note on/off information.

Diosynth as a MIDI Controller

Diosynth can be used as a MIDI controller and send MIDI messages to other devices. You can connect Diosynth to the MIDI jacks on another instrument, or connect the instrument's USB-C port directly to a computer. In the DAW on your computer you can select Diosynth as a MIDI input/output device, record your performance into the DAW, and then play it back from the DAW using Diosynth as the target device. You can also use Diosynth to trigger other software instruments in the DAW. You can then use the DAW for additional processing, such as arranging and mixing. See the next section to learn how to customize the Diosynth MIDI settings.

MIDI Settings

Local On/Off

This setting determines whether or not Diosynth will produce sound when played from the instrument's own breath and key controls (i.e., locally). This feature is needed to prevent MIDI feedback loops, which is what happens when a MIDI instrument like Diosynth is being fed the same data on the MIDI input that it is sending to the MIDI output. For example, if you are playing notes into a DAW via the MIDI Out and the DAW is connected to Diosynth through the MIDI In, Diosynth will end up playing the same notes twice (once locally and once via MIDI), which can sound terrible. Turning Local Off prevents this from happening.



NOTE!! – *If you play Diosynth and don't hear any sound, check the Local On/Off setting.*

Remember, Diosynth saves the changes you make in the Settings menu when you shut down. So if you set Local to Off while working with a DAW, power down, and power up again, Local will still be set to Off.

MIDI Enable

This setting determines if Diosynth will send and receive MIDI information. It must be set to On if you want to control external devices via MIDI or let them control Diosynth. The default setting is On.

MIDI Rx Channel

This determines the MIDI channel on which Diosynth will receive MIDI information. If you are controlling Diosynth using an external keyboard or some other MIDI-equipped device, Diosynth must be set to receive on the same MIDI channel (1–16) as that instrument. The default setting (Omni, i.e. "all") enables Diosynth to receive incoming MIDI information on any MIDI channel.

MIDI Tx Channel

This sets the MIDI channel on which Diosynth will send MIDI information. If you are controlling an external synthesizer or sound module with Diosynth, this parameter must be set to the same channel (1–16) as that instrument. The default setting is MIDI channel 1.

ProgramCh Tx

Program change numbers are used to select specific sounds (patches) on MIDI devices. This parameter determines whether Diosynth will send Program change information to an external synthesizer or sound module. The options are On/Off, and the default setting is On.

ProgramCh Rx

This determines whether Diosynth will receive Program change information from an external MIDI-equipped device. The options are On/Off, and the default setting is On.

Diosynth sends and receives Bank Select and Program Changes in the following format:

- Bank Select MSB: MIDI CC 0, Value = 0 (fixed)
- Bank Select LSB: MIDI CC 32, Values = 0-5 (Banks A-F)
- Program Change values = 0-127

Velocity Tx

This parameter determines at what level Diosynth will send Velocity information to an external synthesizer or sound module. Velocity is determined by how fast you articulate a note on the breath sensor. The default setting is On, which allows the full velocity range of 1–127 to be transmitted. But you can set a fixed velocity value of 60, 80, 100, 110, or 127 if needed.

MIDI Breath Control standards

Diosynth has the ability to send breath controller information using two separate parameters. Some devices will receive MIDI CC 2 (Breath) and some will not. Many that do not receive MIDI CC 2 will receive Channel Aftertouch data, which can then be used in a similar way as breath control. Diosynth sends both types of information by default, which will cover most of the situations you might encounter.

Breath 1 Tx

This parameter determines the first of two types of MIDI breath control data Diosynth will send. The default setting is Breath, which happens to be MIDI CC 2. Here's the full list:

- Off
- Breath (MIDI CC 2)
- Aftertouch
- Volume (MIDI CC 7)
- Expression (MIDI CC 11)
- Mod wheel (MIDI CC 1)
- MIDI CC 1–127

Breath 2 Tx

This parameter determines the second of two types of MIDI breath control data Diosynth will send. The default setting is Aftertouch, but you can set it to any one of the following:

- Off
- Breath (MIDI CC 2)
- Aftertouch
- Volume (MIDI CC 7)
- Expression (MIDI CC 11)
- Mod wheel (MIDI CC 1)
- MIDI CC 1–127

Bite Tx

This parameter determines what type of MIDI control data Diosynth will send via the Bite sensor. The default setting is Pitch bend, and the available settings are as follows:

- Off
- Pitchbend
- Mod wheel (MIDI CC 1)
- MIDI CC 1–127

Gyro Tx

This parameter determines what type of MIDI control data Diosynth will send via the Gyro control. The default is MIDI CC 27, but you can set this to any of the following values:

- Off
- Breath (MIDI CC 2)
- Aftertouch
- Volume (MIDI CC 7)
- MIDI CC 1–127

Joystick ← / Joystick →

These parameters determine what type of MIDI control data Diosynth will send via the left/right Joystick control. The defaults are MIDI CC 21 and 22, respectively, with the following options available:

- Off
- Breath (MIDI CC 2)
- Aftertouch
- Volume (MIDI CC 7)
- Pitchbend +
- Pitchbend -
- MIDI CC 1–127

PressPad 1 / PressPad 2 Tx

These parameters determine what type of MIDI control data Diosynth will send from the Press Pad 1 and 2 controls (the options are the same for both pads). The default settings are MIDI CC 25 and CC 26, respectively, but the following options are available:

- Off
- Breath (MIDI CC 2)
- Aftertouch
- Volume (MIDI CC 7)
- Pitchbend +
- Pitchbend -
- MIDI CC 1–127

Assign 1–3 Tx

This determines what type of MIDI control data Diosynth will send from the three Assign buttons (the options are identical for all three). Note that the buttons can also send Program changes, which lets you select specific sounds on external MIDI devices. The default setting is MIDI CC 27, but the following options are available:

- Off
- MIDI CC 1–127
- Program change 0–127

SYSTEM

Clock Source

Diosynth has many parameters that can be synchronized to a tempo. Most hardware sequencers, drum machines, and DAWs are able to send out their own clock. This parameter determines the clock source from which Diosynth's tempo will be derived. The tempo source can be internal (from Diosynth itself) or external (via MIDI). Selecting the clock source to USB MIDI, for example, will sync Diosynth's effects to the tempo of the DAW on your computer.

- Internal
- USB MIDI
- DIN MIDI

Tempo

This parameter sets the tempo when Diosynth is the Clock Source (Internal). The range is 30–240 beats per minute (BPM), with a default tempo of 120. For any other clock source setting, the tempo will be controlled by that external clock source.

Bluetooth Audio In

This sets the volume of incoming Bluetooth Audio. The range is 0–127, and the default value is 100.

USB Audio In

This sets the volume of incoming USB audio. The range is 0–127, and the default value is 127.

USB Audio Out

This sets the volume of outgoing USB audio. The range is 0–127, and the default value is 100.

Output Mode

This parameter determines whether the Line Out audio output is in mono or stereo (default). For mono output, use a TS cable (i.e. a standard guitar cable); for stereo output, use a TRS cable. Using a TS cable when the unit is set to stereo (or a TRS cable when set to mono) will not harm the instrument, but it may cause degradation of the audio signal due to phase issues.

1/4" TS connector (Mono)



1/4" TRS connector (Stereo)



Master Reverb

When you are recording you will often want to record a sound without any reverb. For example, if you have nice reverb pedal or rackmounted effect you would rather use with Diosynth, you can use this parameter to disable the reverb for all Diosynth patches. The default setting is On.

Master FX1 and 2

As with reverb, you might want to record without the internal master effects so we made it easy to disable them. This parameter is the global on/off control for Master FX 1 and 2. The default setting is On. For a list of all Master FX see [Table A: Effects List \(p. 33\)](#).

Sort By

This parameter determines whether patches will be sorted by Bank or Category.

Sorting by Bank is probably more useful in live situations, where you might want to organize a group of patches in a specific order.

There are six banks (A–F), and each bank is a collection of 128 patches. Banks make it easy to organize patches into large groups; for example, you could use Diosynth Manager to fill Bank A with your favorite factory patches, and fill Bank B only with your edited patches.

Sorting by Category makes it easy to scroll between patches of a similar style or instrument.

Patch Protect

This will enable or disable Patch Protect. When set to On (the default), you won't be able to save an edited patch on the unit itself; you must set it to Off first. However, Diosynth Manager WILL save the patch to the unit, whether Patch Protect is On or Off.

Fingering

This parameter sets the fingering style of Diosynth. See [Fingering Charts \(p. 50\)](#) These are the available fingering styles:

- Sax (default)
- Recorder
- Flute
- Trumpet

Bluetooth Enable

This parameter enables Bluetooth so MIDI and audio can be sent and received from external Bluetooth devices. The default setting is Off.

Note: If you don't need Bluetooth, leave it set to Off. This will extend the time between battery charges.

BT Pairing

This parameter is hidden unless Bluetooth Enable is set to On. If your phone or computer is not paired with Diosynth, first set Bluetooth Enable to On and then select BT Pairing. Press the control knob to put Diosynth into Pairing mode, then choose Diosynth from the list on the other device.

Note: Diosynth will eventually time out and exit the Pairing routine if the devices have trouble connecting. You can cancel the operation at any time by pressing [TRANS].

BT Reset

This parameter is hidden unless the Bluetooth Enable parameter is set to On. It will reset the Bluetooth pairing in the event of a lost or interrupted connection.

Theme Color

This lets you select the color theme of the LED light on the front of the instrument. These are the color options:

- Off
- Red
- Orange
- Yellow
- Green
- Indigo
- Blue (default)
- Violet
- White

LCD Contrast

This controls the contrast (brightness) of the LCD screen to improve readability in different lighting conditions. The range is 1–5, with a default contrast of 3.

LCD Sleep

When there is no screen activity for a set period of time, Diosynth can put the screen to sleep. This will increase the screen's longevity and lengthen the time between battery charges. You can still play the unit when the screen is dark. To wake up the screen, press one of the menu buttons or turn the control knob.

There are seven sleep time options:

- Off (LCD sleep mode disabled)
- 10 Sec
- 30 Sec
- 1 min
- 5 min (default)
- 10 min
- 30 min

Shutdown

If Diosynth hasn't been played for a while, it can shut itself down after a certain amount of time. This helps preserve the battery life and increases the screen's longevity.

There are five shutdown timing options:

- Off (automatic shut down disabled)
- 5 min
- 10 min
- 15 min (default)
- 30 min

Factory Patch Reset

WARNING! This action will reset ALL Diosynth

patch banks (A-F) to their factory state. This means any patches you have created, edited, or added to any bank will be replaced with the Factory patches. We also might include new factory patches as part of a firmware update, and they will not show up unless you perform this action.

This action cannot be undone, so you will need to confirm the process before it can happen. Please be absolutely sure that you want to reload the factory patches before doing this. If you have any doubts about what is in the unit, use our free Dio-synth Manager application to back up the patches.

Init All Patches

WARNING! This action will reset ALL patches in banks A-F to an initialized state. It will wipe the entire patch memory clean. This means any patches you have created, edited, or added to any bank **will be replaced** with a very simple patch.

Doing this makes Diosynth a blank slate, if you feel like building your own patches rather than using someone else's patch as a starting point.

You will be asked to confirm this process before it can happen. If you have any doubts, please use our free Dio-synth Manager application to back up the patches before you do this.

Setup Reset

This parameter resets every item in the SETUP menu to its default state. This includes all Controller settings, MIDI settings, and System settings. You will be asked to confirm this process before it can happen. This action may be needed after loading a new operating system.

Note: Setup Reset does not erase the patch banks.

Language

This lets you set the instrument language to English (default) or Chinese.

System Info

This page displays the current OS version of the instrument. This is useful to know before you update to the latest OS (or revert to a previous one, if needed). You'll also want to have this number ready if you need to contact our product support department.

Serial Number

This screen displays the unique serial number for your instrument. Please write this number down somewhere else for use in case of a lost or damaged instrument.

Panic

Sometimes an interrupted MIDI signal can cause a note to become stuck on an external device, or even on the Diosynth if you accidentally set up a MIDI loop (see the Local On/Off section for an explanation). If this happens, navigate to this page and press the control knob. This will send an All Notes Off command over MIDI.

EDITING A PATCH

To keep things simple, Diosynth lets you edit the performance functions on the instrument itself (Controller Settings, etc.). These global changes are described in [\[SETUP\] \(p. 22\)](#).

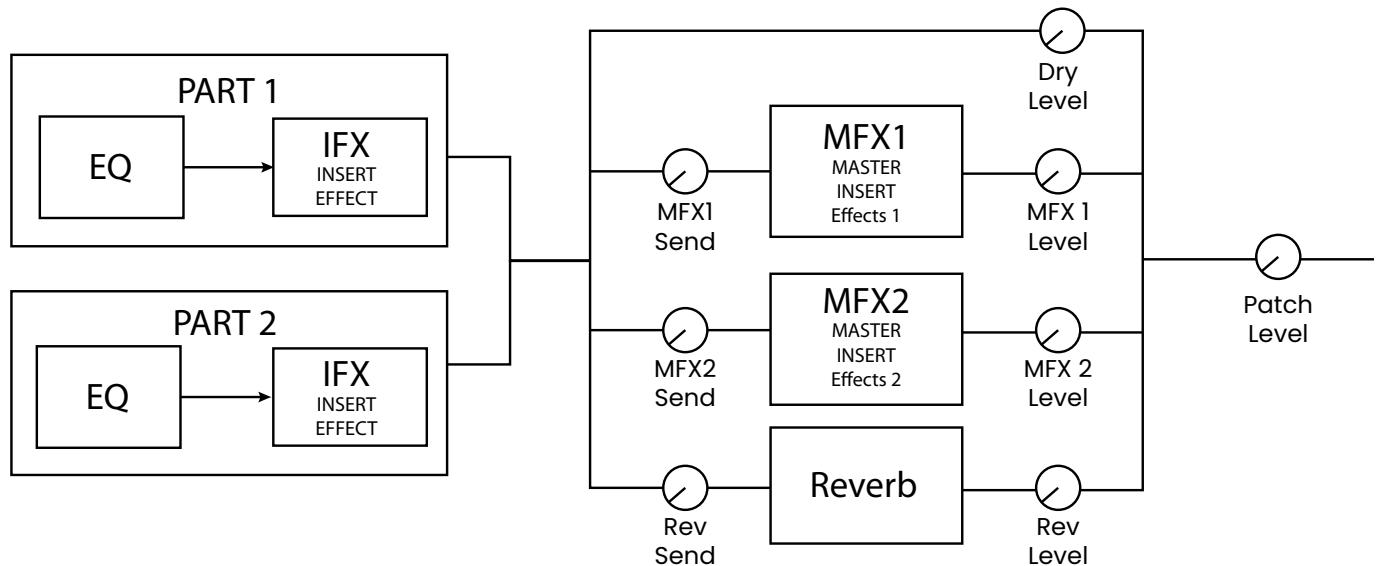
You can also make simple changes to each patch without using a computer. For example, you can increase or reduce the reverb amount, change an effect type, or adjust the EQ settings, etc.

Before you dig into that, here are some things to know:

- If you want to keep the changes you have made to a patch, be sure to save it before selecting another patch.
- If Patch Protect is On when you edit a patch, an asterisk (*) appears in the display to the left of the battery icon.
- If you see the “edited” asterisk, when you try to exit to another mode you will be asked if you want to save the changes. If you select “No” your changes will be lost, so be sure that’s what you want to do.
- To learn more about saving a patch, see [\[SAVE\] \(p. 35\)](#).
- [Patch Protect \(p. 29\)](#) is located in the [SETUP] menu.
- You’ll need our Diosynth Manager application for in-depth editing (change a waveform, adjust the filters, etc.).

[SOUND / EDIT]

Below is a simplified version of the [Diosynth Voice Path \(p. 55\)](#). These are the patch parameters you can edit inside the Diosynth EDIT menu. For full editing control, download the free Diosynth Manager application from our website (www.ashunsoundmachines.com).



To enter the onboard Edit menu, hold down the [SOUND/EDIT] button for 2 seconds. Navigation is the same here as elsewhere:

- To switch between the upper and lower lines, click the control knob.
- To make a change, turn the control knob.
- To exit, push [SOUND] or any other menu button quickly.

Patch Parameters

Part 1/2

Each Diosynth patch is made from two layers known as "Parts". This option lets you select between them when making patch-level changes in the EDIT menu. The menus are identical for each Part.

EQ-Low Gain

This lets you adjust the low-end EQ, or "bass". The range is -12 dB to +12 dB, and the default value is 0.

EQ-Mid1 Gain

This lets you adjust the low mid-range EQ. The range is -12 dB to +12 dB, and the default value is 0.

EQ-Mid2 Gain

This lets you adjust the high mid-range EQ. The range is -12 dB to +12 dB, and the default value is 0.

EQ-Hi Gain

This lets you adjust the high-range EQ. The range is -12 dB to +12 dB, and the default value is 0.

IFX Type

This parameter lets you select an effect for the Insert Effect. This effect is specific to each patch and will only be saved with that patch. The IFX is set to Bypass by default.

IFX parameters 1 and 2

Each insert effect has two adjustable parameters that are specific to that effect. The parameters and their ranges are listed next to their effect type in [Table A: Effects List \(p. 33\)](#).

Reverb Type

This selects the reverb type. It can be switched on/off for all patches with the Master Reverb parameter in the System menu. The options are Room, Standard, Hall, and Church. Standard is the default setting.

Reverb Time

This sets the duration of the reverb effect. The range is 10 ms to 30 s. The default is 2.42 s.

Rev-LoCut

This sets the amount of low-end frequency reduction as the reverb decays. The range is Thru (no roll-off) up to 8 kHz. The default is 60 Hz.

Reverb Send

This controls the level of the signal being sent to the Reverb. The range is 0–127. The default is 14.

Reverb Return

This controls the output level of the reverb effect. The range is 0–127, and the default is 127.

MFX Type 1 and 2

These parameters let you select one of many different effect types for the two Master effects. The difference is that the Master effects have independent Send and Return level controls, which the Insert effects do not have.

The Master effect Types and parameters are otherwise identical to the IFX effects (see [Table A: Effects List \(p. 33\)](#)). The MFX can be switched on/off for all patches using the Master Effect 1 / Master Effect 2 parameters in the System menu.

MFX parameters 1 and 2

Each Master effect has two adjustable parameters that are specific to that effect. These are identical to the IFX effects (see [Table A: Effects List \(p. 33\)](#) for a description of each).

MFX Send 1 and 2

This controls the level of the signal being sent to the selected Master effect. The range is 0–127; the default is 0.

MFX Return 1 and 2

This parameter controls the output level of the selected Master effect. The range is 0–127; the default is 127.

Dry Level

This parameter controls the level of the instrument without the Reverb or Master effects applied. The range is 0–127, with a default value of 127.

Here's an example of how to use this: If you want the patch to have a heavy amount of Reverb and Delay and hear very little of the original sound (or none), set up the Reverb and Master Effect(s) the way you want and set the Dry Level to a very low value, or zero. These settings can make it sound like you're way in the back of a cathedral, for instance.

Note: The Dry Level does not affect the Insert effect. If you have a Reverb, Chorus, or Delay selected as the Insert effect, for example, those effects will still be heard even if the Dry Level parameter is set to zero.

Patch Level

This parameter controls the overall output level of the selected patch, including the effects and everything else. The range is 0–127.

Table A: Effects List

MFX/IFX effect descriptions and parameter controls

Effect	Description	Parameter 1 (range)	Parameter 2 (range)
Bypass			
Room reverb	Small room-type reverb	Reverb time (10 ms to 30 s)	Reverb Lo-Cut (Thru to 8 kHz)
Hall 1 reverb	Large hall reverb	Reverb time (10 ms to 30 s)	Reverb Lo-Cut (Thru to 8 kHz)
Hall 2 reverb	Large hall reverb, decays more slowly than Hall 1	Reverb time (10 ms to 30 s)	Reverb Lo-Cut (Thru to 8 kHz)
Real reverb	Acoustic-space type reverb	Reverb time (10 ms to 30 s)	Reverb Lo-Cut (Thru to 8 kHz)
Tempo Delay	Tempo-synced delay	Subdivision of tempo (1/64Dot, 1/32, 1/32T, 1/32Dot, 1/16, 1/16T, 1/16Dot, 1/8, 1/8T, 1/8Dot, 1/4, 1/4T, 1/4Dot, 1/2, 1/2T, 1/2Dot, 4–16 bars)	Feedback +/- (-64 to +64)
Tempo Echo	Tempo-synced delay where the delayed signal tone becomes darker over time	Subdivision of tempo (1/64Dot, 1/32, 1/32T, 1/32Dot, 1/16, 1/16T, 1/16Dot, 1/8, 1/8T, 1/8Dot, 1/4, 1/4T, 1/4Dot, 1/2, 1/2T, 1/2Dot, 4–16 bars)	Feedback +/- (-64 to +64)
Cross Delay	Stereo delay	Delay time Left (1 ms to 1.45 s)	Delay time Right (1 ms to 1.45 s)
Chorus 1	Classic chorus effect, deeper than Chorus 2	Modulation speed (0.10–20 Hz)	Modulation depth (0–127)
Flanger	Classic flanger effect	Modulation speed (0.10–20 Hz)	Modulation depth (0–127)
Chorus 2	Classic chorus effect, more subtle than Chorus 1	Modulation speed (0.10–20 Hz)	Modulation depth (0–127)
Ensemble	Classic ensemble effect, with more harmonic content than Chorus 1 or 2	Modulation speed (0.10–20 Hz)	Modulation depth (1–127)
Dual Rotary	Stereo rotary speaker effect	Rotary speed (0–50 Hz)	Rotary Drive (0–127)
Phaser	Classic phaser effect	Modulation speed (0.10–20 Hz)	Modulation depth (0–127)
Tempo Phaser	Tempo-synced phaser effect	Subdivision of tempo (1/64Dot, 1/32, 1/32T, 1/32Dot, 1/16, 1/16T, 1/16Dot, 1/8, 1/8T, 1/8Dot, 1/4, 1/4T, 1/4Dot, 1/2, 1/2T, 1/2Dot, 4–16 bars)	Modulation depth (0–127)
Classic OD	Classic mild distortion effect	Drive amount (0–127)	Low-gain EQ cut/boost (-12–12 dB)
Overdrive	Strong distortion effect	Drive amount (0–127)	Low-gain EQ cut/boost (-12–12 dB)
AMP 1	Amp simulator, cabinet 1	Drive amount (0–127)	Amp type (None, Stack, Combo, Tube)
AMP 2	Amp simulator, cabinet 2	Drive amount (0–127)	Amp type (None, Stack, Combo, Tube)
Clas Metal	Classic pedal distortion effect	Pedal type (MT2, DS1, JC120, TS808)	Presence (0–127)
Clas Hard	Classic pedal distortion effect, less drive than Metal effect	Pedal type (MT2, DS1, JC120, TS808)	Presence (0–127)

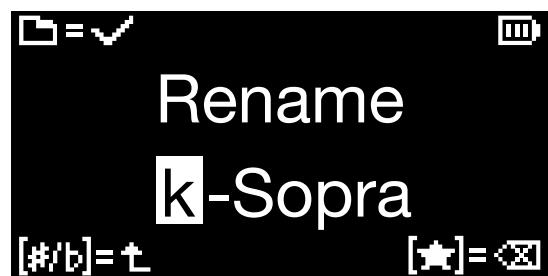
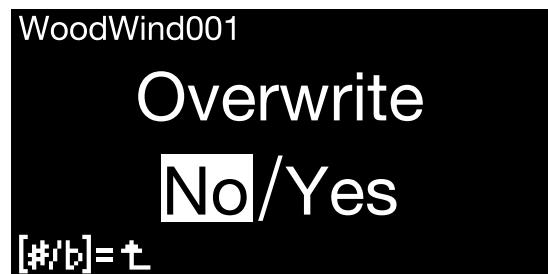
Hard Dist	Hard rock distortion effect	Distortion amount (0–127)	Presence (0–20)
Metal Dist	Heavy metal distortion effect	Distortion amount (0–127)	Presence (0–20)
EQ [1]	EQ preset with “flat” settings	MidGn1 cut/boost (-12 to +12 dB)	MidGn3 cut/boost (-12 to +12 dB)
EQ Hi-Fi	EQ preset with reduced low-mid frequencies	MidGn1 cut/boost (-12 to +12 dB)	MidGn3 cut/boost (-12 to +12 dB)
EQ Rock	EQ preset with enhanced low and high frequencies	MidGn1 cut/boost (-12 to +12 dB)	MidGn3 cut/boost (-12 to +12 dB)
Comp	Compressor preset with neutral settings	Compression ratio (1–20 [limiter])	Compressor threshold (-48–0 dB)
Comp Standard	Compressor preset with gentle settings	Compression ratio (1–20)	Compressor threshold (-48–0 dB)
Comp Limiter	Limiter effect with extreme compression	Compression ratio (1–20)	Compressor threshold (-48–0 dB)
Comp Attack	Compressor preset to reduce attack transients	Compression ratio (1–20)	Compressor threshold (-48–0 dB)
Vibrato	Classic vibrato effect	Vibrato/Tremolo Speed (0.10–20 Hz)	Vib/Trm PMD (0–127)
ClS Tremolo	Classic tremolo effect	Tremolo/Pan Speed (0.10–20 Hz)	Tremolo/Pan AMD (0–127)
AutoPan	Stereo panning effect	Tremolo/Pan Speed (0.10–20 Hz)	Tremolo/Pan AMD (0–127)
AutoWah	Auto wah-wah effect	Speed (0.10–20 Hz)	Cutoff Frequency (0–127)
BPMAutoWah	Tempo-synced autowah effect	Subdivision of tempo (1/64Dot, 1/32, 1/32T, 1/32Dot, 1/16, 1/16T, 1/16Dot, 1/8, 1/8T, 1/8Dot, 1/4, 1/4T, 1/4Dot, 1/2, 1/2T, 1/2Dot, 4–16 bars)	Cutoff Frequency (0–127)

[1] The Diosynth Manager application provides three adjustable Mid Gain bands for each Master/Insert EQ effect. Since only 2 parameters are available on the unit, Mid Gain bands 1 and 3 were chosen to allow greater flexibility in the EQ settings.

[SAVE]

This button lets you save any changes you make to a patch. Here's the process:

1. When you are satisfied with the changes you have made to a patch, push the SAVE button.
2. The screen will show "Save Patch No/Yes". Make your choice and push the control button.
3. If you select No you will be taken back to the last page you were on. You can also cancel the Save process by pressing [TRANS #/b].
4. If you choose Yes, you will see the Save location select page. You will be given a choice of banks and patch locations in which to save your patch.
5. Rotate the control knob until you are on the bank and patch slot you want to save in and then push the control button.
6. You will then be prompted with an Overwrite No/Yes in the screen. This indicates that you will be writing over an existing patch's data. Choose a blank Init patch if you do not want to overwrite any existing patch data.
7. If you choose Yes, you will then be on the Rename screen, where you can choose the new name for your patch.
8. In the Rename page, the control knob selects and changes the various letters and characters.
 - a. Turn it to move the cursor across the screen.
 - b. Push it to select a specific letter or character to be changed.
 - c. Turn it to select a different letter or character.
 - d. Press it again to confirm the letter/character selection.
 - e. During steps a-d you can use the FAV (star) button to backspace through the name and delete whatever is in the space to the left of the cursor.
 - f. Repeat steps a-e until you've created the name you want.
9. Once you are happy with the new patch name, push the SAVE button and the patch save will be complete.



If you wish to back up at any time during the patch save process, push the TRANS button. If you wish to exit the patch saving menu altogether, push the TRANS button until you are on one of the main menu screens.

[TRANS #/b]

In this menu you will find all tuning, transpose, and scale controls for Diosynth.

Global / Patch Mode

This menu selects whether you are applying tuning changes to the whole instrument (Global) or at the individual patch level (Patch). Being able to choose between global tuning and per patch tuning allows for different use cases.

For example, if you will be playing sheet music for various instruments, like B♭ Tenor sax, F horn, C Flute, then you will probably want to have transpose values per patch. This way you will not have to sight-transpose your music. If you are a user who will be mostly playing your own music or will be doubling from another instrument like E♭ alto sax or B♭ Clarinet, you will probably want to choose a concert key like C or B♭ or E♭ for all the sounds, so choose the Global mode.

To summarize, when one or more of the Master tuning parameters is set to Global, they affect ALL patches. Changes to Global settings are saved automatically.

However, when one or more of the Master tuning parameters is set to Patch, settings can be different for each patch and must be saved as part of the patch. If you make any patch-level tuning changes you will be prompted to save your changes (yes/no) before exiting.

1. After you press [TRANS], push the control knob to switch between the upper and lower lines and then select "Global" or "Patch" mode on the Master Tuning page.
2. Push the control knob again to return to the top line. You can then scroll through the other Master tuning parameters and change them between Global and Patch as desired.
3. If you choose the Patch mode for any Master tuning parameters, the choices you make on the bottom line can be the original default value, or you can select from the available values and apply them to the current patch.
4. Once you have made any patch-level tuning changes, push the Save button to save your altered patch in the same location or to a different bank/patch (see [\[SAVE\] \(p. 35\)](#) for more details).

Master / Patch Tuning

The Master or Patch tuning range is 380Hz–500Hz. The default pitch is 440Hz.

Master / Patch Transpose

The Master or Patch transpose range is -11 (C♯) to +11 (B), or almost 2 octaves. The default is 0.

Master / Patch Scale

Scale tuning is a system that precisely regulates the pitch of each key in the scale. Diosynth includes some classical temperaments that are useful when playing older music, such as music from the Renaissance period. It also includes Eastern scales, useful for playing traditional music from Japan or China, along with more experimental non-traditional scales. Scroll through this menu to try out the various scales. The default scale is Chromatic.

User (see below)	HarmMin	Blues	Dekany 1 3 5 7 11
Chromatic	Algerian	PentaMin	Diaphnic 12 tone
Major	Gypsy	Hirajosh	Eikosany 13-11
Bebop Maj	Hungarian	1/4 Tone	Greek Aeolic
Bebop	Ukrian	19 Tone	H.Patch 43 Note
Mixolydn	DimWhole	31 Tone	Harmonic A 1-60
HarmMaj	Locrian	AllFarabiSynChrom	Hexany 1 3 5 9
Lydian	NeapMaj	Arabic 12 Tone	Hexany 1 3 7 11
LydnAug	NeapMin	ArchytasChromatic	Hexany 13 11 13
Acoustic	Phrygian	ArchytasEnharmonic	India Raga
PentaMaj	Flamenco	BalafonSingapor	Japanese Koto
LocrMaj	Persian	BalafonW.Africa	Just Major C
Promeths	PhryDom	BendelerWellTempared	Just Min C
Whole Tone	Enigmat	Bohlen 11-tone	Meantone C
MeloMin	Tritone	Chinese 300 B.C.	Pelog / Slendro
HalfDim	In	Chinese DiziFlute	Sk8board 17-65 Tune
Aeolian	Insen	CrysntosByzantine	W.CarlosHarmonic
Dorian	Augment	Dekany 1 3 5 11-3	

User Scale

The very first option in the Chromatic Scale list is "User". This allows you to select and define your own scale. If this option is selected, the next 8 pages will pertain to setting up your own user scale (menu pages "Master Scale Note 1-8"). If any other scale is chosen, you will not see these pages.

Master Scale Note 1-8

On this page you can create your own 8-note scale using any combination of notes. Move through each of the eight note pages (1-8), then click the control button to move to the next page and define the note. You will need to save the patch to preserve the scale you have created.

Patch Octave

The octave transposition value can be different for each patch. The range is -3 to +3, and the default octave is 0.

FAVORITES [FAV]

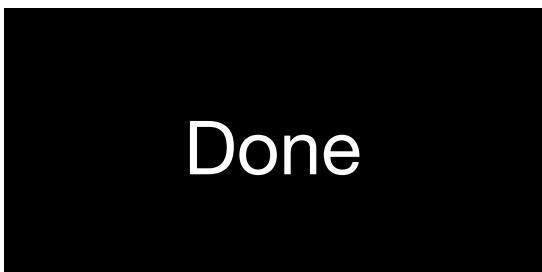
Diosynth lets you store up to 128 of your favorite patches that you can quickly access from this menu page. To access a favorite patch, press the FAV button and scroll to your desired patch.

Favorites Registration

To assign your currently selected patch to the Favorites, push the FAV + SAVE buttons together. This will bring you to the “Register Slot” page where you can choose one of the 128 Favorite slots to save your patch.



Once you have selected the correct slot, push the control knob and you will see “Done”, confirming the favorite has been saved.



TROUBLESHOOTING

Problem	Possible Cause and Solution
Cannot turn on the power.	The battery power may be low. Please replace the batteries with new ones.
	USB power is not connected.
	USB power source is not on.
Diosynth shuts down automatically.	Diosynth will automatically shut down after a specified period of standby time. You can change the standby time or disable this function in System settings.
No sound.	Check the Local On/Off setting.
Diosynth produces no sound or the volume is very low.	Check if the [SPEAKER/PHONES] knob is set too low. If so, turn it clockwise to increase the volume.
	Check if headphones are plugged into the [PHONES] jack. If so, unplug it.
The sound is not audible or the volume is very low on the connected audio device.	Check if the instrument's [LINE OUT] jack is connected to the input jack of the external audio device correctly.
	Is Diosynth output set to Mono? Use a TS cable.
	Is Diosynth output set to Stereo? Use a TRS cable.
	Check if the volume of the external device is set too low.
	Check if the audio cables used for connection are reliable.
The sound is distorted or intermittent.	The battery power may be low. Please replace the batteries with new ones.
	If it's playing audio from a connected Bluetooth device, please ensure distance between the device and Diosynth is appropriate.
The sound is noisy.	The battery power may be low. Please replace the batteries with new ones.
	Fingering conflicts may cause abnormal sound. Do not frequently press/release multiple keys at the same time.
The pitch is not accurate.	Check if the keys or controllers which can shift pitch in real-time are accidentally pressed.
	Check if the master tuning/transpose/octave are set to non-defaults. If so, reset them to the defaults.
	In case the above procedures do not work, please execute Setup Reset.
Cannot play some specific notes.	Check if the scale tuning is set appropriately.
No MIDI input/output	Check the setting of the MIDI Enable parameter in the Setup menu. It needs to be set to ON or MIDI data cannot be sent or received.
Cannot find this instrument's Bluetooth ID on a smart device.	Ensure the "Bluetooth" function is turned on in the System settings.
Bluetooth audio pairing is not successful.	Ensure you have completed the "BT Pairing" procedure in System settings, and the instrument's screen shows "Pairing".
	Remove Diosynth's Bluetooth audio ID from the Bluetooth device list of the external device. Restart the Bluetooth function on the smart device, then try pairing again.
When connecting to computer, the instrument cannot be recognized.	Check if the USB cable is firmly connected. Try connecting to another USB port on the computer. This instrument is plug-and-play, and should work without installing a driver.
Control buttons are not responding.	Some buttons are disabled in certain operations. Please complete or cancel current operation, then go to the Sound menu, Favorites menu, or the Setup menu so the buttons are available again.
The breath sensor does not respond correctly to breath pressure.	The breath sensor may be affected by the water accumulated inside the instrument. Place the instrument at an angle, with the water drain facing down, to let the water drain out.

The bite sensor does not respond correctly to the bite strength.	<p>Ensure the mouthpiece is tightly attached to the body of the instrument.</p> <p>Ensure the “Bite Mode” is not set to OFF in Controller settings.</p>
Cannot turn off a real-time effect, such as vibrato, with the assigned controller.	<p>You may have accidentally changed the function assigned to the controller while this effect was active (for example, changed from “Vibrato” to “Patch”). If this happens, change the assignment back to “Vibrato” in Controller settings, then use the corresponding controller to turn this effect on/off to regain normal control.</p>

DIOSYNTH PATCH LIST BY BANK

No.	Patch Category	Short Name	
Bank A			
A001	Synth Saw	Sawpressive GD	A047 Fipple
A002	Synth Squ	PureSquares MM	A048 Brass
A003	Synth Sine	SineAhead BK	A049 Chord
A004	Chord Rotate	LeonardB8 BK	A050 Synth FX
A005	Brass	MuteTrumpet	A051 SaxophonesFX
A006	Distorted	Girtha GD	A052 Section Duos
A007	Saxophones	BalladTenor	A053 ChineseFlutes
A008	Split-SeqLead	BassSeq-Lead1GD	A054 Distorted
A009	Synth Lead	TriOctvs MM	A055 Flutes
A010	Bass Synth	Bloomin ES	A056 Chord
A011	Flutes	AltoFltDarkVib	A057 Saxophones
A012	Chord	Thickness GD	A058 Synth Pulse
A013	Saxophones	Bass Sax	A059 Flutes Synth
A014	Synth Saw	SoulSaws MM	A060 Synth Lead
A015	Synth Stack	BigSaws GD	A061 Flutes Wood
A016	Brass	Trumpet	A062 ChineseReed
A017	Synth Sine	TriSawSolo MM	A063 Fipple
A018	Chord	DreamPad MM	A064 Fipple
A019	Saxophones	AltoSaxCool	A065 Section Duos
A020	Synth Pulse	BreckTronic BK	A066 Saxophones
A021	Split-SeqSyn	DroneZone_TO	A067 Synth FX
A022	Flutes Synth	GoogleGlass GD	A068 Vocal
A023	Flutes	AltoFlute+~	A069 Split-DroLead
A024	Chord Rotate	VocalRoto7 BK	A070 Clarinets
A025	Flutes	Jazz Flute	A071 Distorted
A026	Syn Ambient	SynSawsEcho BK	A072 Flutes
A027	Chord 4th	Fl4thsOrNot MM	A073 Synth Vox
A028	Flutes Wood	BambooFlute	A074 Saxophones
A029	Syn Ambient	Atreides MM	A075 Bass Synth
A030	Double Reeds	BassoonVib	A076 ChineseString
A031	Synth Lead	ChendomLead BK	A077 Misc Winds
A032	Harmonica	BluesHarm	A078 Synth Saw
A033	Split-SeqSyn	Didj&FluteTO	A079 Flutes FX
A034	Flutes	ContraBasFlut ~	A080 Brass
A035	Section Duos	Flute&Clar BK	A081 Chord Rotate
A036	ChineseString	ErHuW/Slide	A082 Synth Lead
A037	Hybrid SynAcc	CrfulWhsprTO	A083 Accordion
A038	Accordion	FrenchMusete	A084 Distorted
A039	Funky	FunkFrog1 GD	A085 Fipple
A040	Clarinets	BbBassClarnt	A086 Synth Squ
A041	Synth Vox	ClusterVox MM	A087 Synth Lead
A042	Synth Wave	HydrasCousin GD	A088 Brass
A043	Flutes	Piccolo	A089 Brass Synth
A044	Synth FX	TwinkleSawsGD	A090 Split-SeqSyn
A045	Saxophones	RockTenorVelo	A091 Strings
A046	Bass Synth	SquareBass GD	A092 ChineseFipple
			A093 Hybrid SynAcc
			A094 Strings

A095	Chord	HouseChord BK
A096	Sequence	LightBike_TO
A097	Saxophones	Jazz Sop Sax BK
A098	Synth Pulse	NeutronLead BK
A099	Section Duos	PopHorns MM
A100	Bass Acc	AccBass_TO
A101	Bass Synth	RipperBass BK
A102	Hybrid SynAcc	Sawprano_TO
A103	Flutes	ClasicalFlute
A104	Synth Sine	SoulLeader MM
A105	Flutes	SneakyFlute MM
A106	Synth FX	WaveRider BK
A107	Funky	OttoWahLead BK
A108	Saxophones	AltoSaxVelo
A109	Brass Synth	SawBrass_TO
A110	ChineseFlutes	Xiao Vel
A111	Synth Sine	theBroken_TO
A112	SaxophonesFX	BariSaxGrowl
A113	Chord	Bohlen11tone BK
A114	Syn Ambient	CaveFlute_TO
A115	Vocal	ChoirOohs
A116	Hybrid SynAcc	CoughDrop_TO
A117	Accordion	MasterAccord
A118	Synth Sine	HappyWinds MM
A119	Strings Synth	StringXFd_TO
A120	Harmonica	ODHarmOcts MM
A121	Synth Stack	SawSax ES
A122	Distorted	Schizoid BK
A123	Double Reeds	OboeEngHorn
A124	Synth Saw	SpectSaw ES
A125	Synth Squ	SqrHouseLead BK
A126	Saxophones	SopranoSaxVelo
A127	Synth Lead	SynSineSaw BK
A128	Synth Squ	TotalSquare GD

Bank B

B001	Flutes	Bass Flute
B002	Synth Saw	SimplySaw BK
B003	Flutes FX	FunkinFluteGD
B004	Misc Winds	PanFlute
B005	Chord	Big Sus9 BK
B006	Synth Lead	longSaw_TO
B007	Strings	PizzicatoStr
B008	Bass Synth	Flux 5 Bass BK
B009	Saxophones	JazzTenorVib
B010	Synth Sine	ForestSaw_TO
B011	Brass	ClasTrumpet
B012	Synth Vox	VoxOcts MM
B013	Chord Rotate	ChrdFlute GD
B014	Harmonica	Harmonica
B015	Distorted	BrknBottleTO

B016	Funky	DistortRezo BK
B017	Strings	VibratoCello
B018	Section Duos	PpBrSection
B019	SaxophonesFX	SaxFade_TO
B020	Saxophones	BariSaxJazz
B021	Split-SeqLead	BluesAlley BK
B022	Synth FX	AngelXfd2_TO
B023	Clarinets	ContraltoClr
B024	Synth Lead	ShineOn_TO
B025	Sequence	StetsFugueTO
B026	Flutes	Tull Flute
B027	Chord	SynthSoli MM
B028	Double Reeds	CbassoonVib
B029	Chord Rotate	ChrdStrings GD
B030	Flutes	FlutasaurusVb
B031	Distorted	TriAmbineceGD
B032	Saxophones	SopranoSaxRk
B033	Flutes Synth	SawFlute GD
B034	Section Duos	SopBlueBox BK
B035	Pad	A-Frame_TO
B036	Synth Lead	DioSynHorn BK
B037	Flutes Wood	BmbooHouseTO
B038	Rhythmic	Pow_VEL_TO
B039	Bass Synth	Ereeser_TO
B040	Saxophones	AltoSaxVibVelo
B041	Synth Lead	FltrSyntHorn BK
B042	Chord	Ilm7&V7-MidC BK
B043	Misc Winds	kindaFujarTO
B044	Rhythmic	LngDstXiaoTO
B045	Synth Pulse	LonePulse MM
B046	ChineseReed	LuSheng2
B047	Syn Ambient	MagicIsReal MM
B048	Accordion	ParisianEve MM
B049	Synth FX	Shimmer BK
B050	Hybrid SynAcc	WaterXun_TO
B051	Flutes	AltoFltBrite
B052	Fipple	BassRecorder
B053	Bass Synth	BigFatBass BK
B054	Flutes	ContraAltoFltV
B055	Synth FX	ChonkaLead ES
B056	ChineseFlutes	QuDi grace
B057	Chord	NeutonChord BK
B058	Synth Wave	Wavemorph1 GD
B059	Brass	VibrTuba
B060	Syn Ambient	AmbientSus BK
B061	Brass Synth	BlueDream MM
B062	Flutes	ConBassFlute
B063	Synth Pulse	Emersonian BK
B064	Double Reeds	Obassoon
B065	Hybrid SynAcc	Expanse_TO

B066	Flutes Synth	FluteSaber MM
B067	ChineseString	VibratoErHu
B068	Synth Vox	FormantSyn BK
B069	Brass Synth	HerbSynth MM
B070	Misc Winds	Shakuhachi
B071	Synth Lead	LaserTag MM
B072	Bass Synth	LowEndmov_TO
B073	Saxophones	SoprSaxVibRock
B074	Chord	Magnifisense MM
B075	Accordion	TangoAccord
B076	Distorted	Plop_TO
B077	Synth Pulse	ReedValleyTO
B078	Chord Rotate	Rotoary2025 BK
B079	Saxophones	SoprSaxVibVelo
B080	Distorted	Smoke_TO
B081	Synth Lead	SoulDragon MM
B082	Fipple	TenorRecorder
B083	Double Reeds	Bassoon
B084	Split-DroLead	SpaceCwboyTO
B085	Brass	RomanticTrpt MM
B086	Synth Sine	Stasis BK
B087	Sequence	StetsonHat1TO
B088	Vocal	4musiciansTO
B089	SaxophonesFX	80sBldSop MM
B090	Bass Synth	BusySqrSaw ES
B091	Saxophones	CleanSopSax MM
B092	Chord	Clustars MM
B093	Syn Ambient	DuneBuggy MM
B094	Synth Stack	EDM Envy BK
B095	ChineseFlutes	BangDi
B096	Chord 4th	eSteppes_TO
B097	Synth Lead	FiltrClassic BK
B098	Funky	GoldTooth ES
B099	Section Duos	FatHorns MM
B100	Hybrid SynAcc	HybridErhuTO
B101	Synth FX	Klangon_TO
B102	ChineseReed	GuanZi
B103	Synth Squ	Lurker MM
B104	Synth Saw	MBsentiment BK
B105	Section Duos	CannonTrane MM
B106	Flutes Synth	PanMan MM
B107	Hybrid SynAcc	QuDIBells_TO
B108	Strings	ClassicStr
B109	Chord 4th	Sans4ths MM
B110	Chord	SawsMinor BK
B111	Flutes	RockFlutter
B112	Synth Squ	SquareRoot BK
B113	Synth Stack	SynthPopEns BK
B114	Synth FX	T_minus_TO
B115	ChineseReed	HuLuSiQiChan

B116	Section Duos	Tpt&Tenor BK
B117	Strings	TremoloStr
B118	Synth Sine	TriLead MM
B119	Sequence	WholeTony2TO
B120	Strings	Violin
B121	Brass Synth	HappyBrass MM
B122	Synth Lead	SquareSaws ES
B123	Harmonica	VibBluesHarm
B124	Strings Synth	SailAway MM
B125	Synth Vox	SingingSaw BK
B126	Vocal	3musiciansTO
B127	Synth Lead	ZippyOct MM
B128	Synth Pulse	PulsarSolo MM
Bank C		
C001	Saxophones	Tubax Eb
C002	Chord Rotate	LostSines_TO
C003	Synth Lead	ScoobyBlue MM
C004	Flutes	BassFluteVib
C005	Synth Lead	150MassAve GD
C006	Synth Sine	Thereminy GD
C007	Section Duos	2coolGuys_TO
C008	Hybrid SynAcc	BlowHard_TO
C009	Saxophones	SoprSaxBallad
C010	Synth Pulse	BuzzWindz MM
C011	Synth Vox	VoxyFlute MM
C012	Clarinets	BbClarinet
C013	Chord	SynthsIN4ths BK
C014	SaxophonesFX	DuckAnkles BK
C015	Saxophones	SoprSaxVibBld
C016	Funky	FluteySquare ES
C017	Bass Synth	dstDeepSeaTO
C018	Double Reeds	Contrbassoon
C019	Chord	HeavenSines MM
C020	Synth FX	PopDoGood_TO
C021	Flutes	AltoFltBritV
C022	Sequence	Arp&Away_TO
C023	Distorted	DangerZone MM
C024	Flutes	Hard Flute
C025	Funky	FunkyTmBass MM
C026	Syn Ambient	GalacticRays MM
C027	Saxophones	AltoSaxVibBld
C028	Synth FX	GettinCloseTO
C029	Flutes Wood	IrishSpring BK
C030	Chord	Maj/Min-MidC BK
C031	Saxophones	RockTenorSax
C032	Flutes Synth	OctaFlute MM
C033	Bass Synth	PunchBass BK
C034	Saxophones	BariRockGrowl
C035	Distorted	RipJeans_TO
C036	Flutes	TaxiFlute_TO

C037	Synth Lead	TranceLead BK
C038	Flutes	ContraAltoFlute
C039	Flutes FX	Flutter Flute
C040	Synth Sine	SitOnSQR_TO
C041	Double Reeds	Oboe
C042	Synth Lead	SawScanner ES
C043	Synth Saw	StereoSaw ES
C044	Brass	VibTrombone
C045	Synth Pulse	80sPulseScan MM
C046	Section Duos	90s Kid MM
C047	Syn Ambient	AngelXFd_TO
C048	ChineseReed	SuoNa VTrill
C049	Brass Synth	BruteTrpt MM
C050	Distorted	CrazyTinez MM
C051	Fipple	TinWhistleLow
C052	Split-SeqSyn	Edge2_TO
C053	Synth Lead	FatDual Lead BK
C054	Strings	VibrViolin
C055	Hybrid SynAcc	FloatJrny_TO
C056	Chord Rotate	GlassTwersTO
C057	Bass Synth	House Bass BK
C058	ChineseFlutes	Xiao
C059	Synth FX	HrmonicornTO
C060	Brass Synth	MilesAway_TO
C061	Syn Ambient	GhstStringTO
C062	Harmonica	RnbwHarmTO
C063	Chord	Sano4thLead BK
C064	Synth Sine	longTri_TO
C065	Pad	UnstblStrngTO
C066	Distorted	ThomsThumbTO
C067	Section Duos	Clar&String BK
C068	Accordion	ItaliMusete
C069	Synth Lead	Traveler_TO
C070	Chord	Windre3k_TO
C071	Synth Stack	3 OctaveSaws BK
C072	ChineseString	ErHu
C073	Chord 4th	4thsBeWithU MM
C074	Bass Synth	BassWah_3_TO
C075	Brass	Tuba
C076	Synth Lead	BobanabLead BK
C077	Hybrid SynAcc	ChopFlute2TO
C078	Section Duos	Crusaders BK
C079	Flutes	AltoFltDark
C080	Synth FX	Downer_TO
C081	Flutes Synth	EwokParty MM
C082	Sequence	Flock_TO
C083	Brass	FrenchHorn
C084	Funky	FunkWupWup BK
C085	Syn Ambient	Harmonics GD
C086	Saxophones	BariSaxRock

C087	Synth Vox	HarmonVox MM
C088	SaxophonesFX	HMBB Tenor GD
C089	Synth FX	LazerBreath MM
C090	Misc Winds	BlownBottle
C091	Chord 4th	LifeFormz MM
C092	Bass Synth	LowEnd_TO
C093	Flutes	ClasicFlute
C094	Synth Pulse	MovinPulse BK
C095	Chord	MysticHorn MM
C096	Saxophones	AltoSaxRock
C097	Synth Saw	Pulse It ES
C098	Synth Lead	DioSynthMain BK
C099	Vocal	AnalogVoice
C100	Synth FX	Rhythm LFO BK
C101	Bass Synth	SawBass ES
C102	Section Duos	SawSaxSect ES
C103	Accordion	Astor_TO
C104	Chord	SawsMajor BK
C105	Flutes Synth	SmallClay_TO
C106	Synth Lead	VibeLead MM
C107	Strings	Contrabass
C108	Synth Squ	SquRoot GD
C109	Section Duos	Syn&SaxStack BK
C110	Synth Vox	BoogieBoyGD
C111	ChineseReed	LuSheng1
C112	Synth Lead	SynSawsLead BK
C113	Chord 4th	Vibe+4 MM
C114	Brass Synth	7.6Trmbns_TO
C115	Synth Stack	BabylonTrio BK
C116	Misc Winds	Whistle
C117	Synth Wave	BottlesLead BK
C118	Synth Vox	JazzChoirish MM
C119	ChineseFlutes	QuDi
C120	Brass Synth	Mushroom BK
C121	Synth Stack	Screamer BK
C122	Harmonica	PureMonica MM
C123	Synth Lead	SynthSquat BK
C124	Rhythmic	TriTfluteTO
C125	Strings	Cello
C126	Synth Lead	Tremolophone BK
C127	Strings	Viola
C128	Synth Lead	BubblesLead MM

DIOSYNTH PATCH LIST BY CATEGORY

No.	Short Name
Accordion	
C103	Astor_TO
A038	FrenchMusete
C068	ItaliMusete
A117	MasterAccord
B048	ParisianEve MM
A083	SoloAccord
B075	TangoAccord
Bass Acc	
A100	AccBass_TO
Bass Synth	
C074	BassWah_3_TO
B053	BigFatBass_BK
A010	Bloopin_ES
B090	BusySqrSaw_ES
C017	dstDeepSeaTO
B039	Ereeser_TO
B008	Flux_5_Bass_BK
C057	House_Bass_BK
C092	LowEnd_TO
B072	LowEndmov_TO
A075	MgProdigy_GD
C033	PunchBass_BK
A101	RipperBass_BK
C101	SawBass_ES
A046	SquareBass_GD
Brass	
B011	ClasTrumpet
A088	ConcertTrpt_MM
C083	FrenchHorn
A005	MuteTrumpet
B085	RomanticTrpt_MM
A080	Trombone
A016	Trumpet
C075	Tuba
B059	VibrTuba
C044	VibTrombone
A048	VibTrumpet
Brass Synth	
C114	7.6Trmbns_TO
B061	BlueDream_MM
C049	BruteTrpt_MM
A089	FlumpetOct_MM
B121	HappyBrass_MM
B069	HerbSynth_MM
C060	MilesAway_TO
C120	Mushroom_BK

A109	SawBrass_TO
ChineseFipple	
A092	Xun
ChineseFlutes	
B095	BangDi
A053	BangDiW/Yi
C119	QuDi
B056	QuDi grace
C058	Xiao
A110	Xiao Vel
ChineseReed	
B102	GuanZi
A062	HuLuSi
B115	HuLuSiQiChan
C111	LuSheng1
B046	LuSheng2
C048	SuoNa VTrill
ChineseString	
C072	ErHu
A036	ErHuW/Slide
A076	MorinKhu
B067	VibratoErHu
Chord	
B005	Big Sus9_BK
A049	BigHasselTO
A113	Bohlen11tone_BK
B092	Clustars_MM
A018	DreamPad_MM
C019	HeavenSines_MM
A095	HouseChord_BK
B042	Ilm7&V7-MidC_BK
B074	Magnifisense_MM
C030	Maj/Min-MidC_BK
C095	MysticHorn_MM
B057	NeutonChord_BK
A056	RunTheBlade_MM
C063	Sano4thLead_BK
C104	SawsMajor_BK
B110	SawsMinor_BK
C013	SynthsIN4ths_BK
B027	SynthSoli_MM
A012	Thickness_GD
C070	Windre3k_TO
Chord 4th	
C073	4thsBeWithU_MM
B096	eSteppes_TO
A027	Fl4thsOrNot_MM
C091	LifeFormz_MM

B109	Sans4ths_MM
C113	Vibe+4_MM
Chord Rotate	
A081	5PartROTO_BK
B013	ChrdFlute_GD
B029	ChrdStrings_GD
C056	GlassTwersTO
A004	LeonardB8_BK
C002	LostSines_TO
B078	Rotoary2025_BK
A024	VocalRoto7_BK
Clarinets	
A040	BbBassClarnet
C012	BbClarinet
B023	ContraltoClr
A070	EbClarinet
Distorted	
B015	BrknBottleTO
A084	BrownBag_TO
C050	CrazyTinez_MM
C023	DangerZone_MM
A071	EIDistorto_GD
A006	Girtha_GD
B076	Plop_TO
C035	RipJeans_TO
A054	Riptide_TO
A122	Schizoid_BK
B080	Smoke_TO
C066	ThomsThumbTO
B031	TriAmbineceGD
Double Reeds	
B083	Bassoon
A030	BassoonVib
B028	CbassoonVib
C018	Contrbassoon
B064	Obassoon
C041	Oboe
A123	OboeEngHorn
Fipple	
A064	AltoRecorder
B052	BassRecorder
A063	LlamaWhistle
A085	SoprRecorder
B082	TenorRecorder
A047	TinWhistle
C051	TinWhistleLow
Flutes	
B051	AltoFltBrite

C021	AltoFltBritV
C079	AltoFltDark
A011	AltoFltDarkVib
A055	AltoFlute+
A023	AltoFlute+~
B001	Bass Flute
C004	BassFluteVib
A103	ClasicalFlute
C093	ClasicFlute
B062	ConBassFlute
B054	ContraAltoFltV
C038	ContraAltoFlute
A034	ContraBasFlut ~
A072	Flutasaurus
B030	FlutasaurusVb
C024	Hard Flute
A025	Jazz Flute
A043	Piccolo
B111	RockFlutter
A105	SneakyFlute MM
C036	TaxiFlute_TO
B026	Tull Flute
Flutes FX	
C039	Flutter Flute
B003	FunkinFluteGD
A079	SingingFlute
Flutes Synth	
C081	EwokParty MM
B066	FluteSaber MM
A022	GoogleGlass GD
C032	OctaFlute MM
B106	PanMan MM
B033	SawFlute GD
C105	SmallClay_TO
A059	TrioOfFlutes MM
Flutes Wood	
A028	BambooFlute
B037	BmbooHouseTO
C029	IrishSpring BK
A061	WhyWorry_TO
Funky	
B016	DistortRezo BK
C016	FluteySquare ES
A039	FunkFrog1 GD
C084	FunkWupWup BK
C025	FunkyTmBass MM
B098	GoldTooth ES
A107	OttoWahLead BK
Harmonica	
A032	BluesHarm

B014	Harmonica
A120	ODHarmOcts MM
C122	PureMonica MM
C062	RnbowHarmTO
B123	VibBluesHarm
Hybrid SynAcc	
C008	BlowHard_TO
C077	ChopFlute2TO
A116	CoughDrop_TO
A037	CrfulWhsprTO
B065	Expanse_TO
C055	FleetJrny_TO
A093	HarmoFluteTO
B100	HybridErhuTO
B107	QuDI Bells_TO
A102	Sawprano_TO
B050	WaterXun_TO
Misc Winds	
C090	BlownBottle
B043	kindaFujarTO
A077	Ocarina
B004	PanFlute
B070	Shakuhachi
C116	Whistle
Pad	
B035	A-Frame_TO
C065	UnstblStrngTO
Rhythmic	
B044	LngDstXiaoTO
B038	Pow_VEL_TO
C124	TriTfluteTO
Saxophones	
A019	AltoSaxCool
C096	AltoSaxRock
A108	AltoSaxVelo
C027	AltoSaxVibBld
A066	AltoSaxVibFusn
B040	AltoSaxVibVelo
A007	BalladTenor
C034	BariRockGrowl
B020	BariSaxJazz
C086	BariSaxRock
A013	Bass Sax
B091	CleanSopSax MM
A097	Jazz Sop Sax BK
A074	JazzTenor
B009	JazzTenorVib
C031	RockTenorSax
A045	RockTenorVelo
A057	ShineBari_TO

B032	SopranoSaxRk
A126	SopranoSaxVelo
C009	SoprSaxBallad
C015	SoprSaxVibBld
B073	SoprSaxVibRock
B079	SoprSaxVibVelo
C001	Tubax Eb
SaxophonesFX	
B089	80sBldSop MM
A112	BariSaxGrowl
C014	DuckAnkles BK
C088	HMBB Tenor GD
A051	RaucyTenor
B019	SaxFade_TO
Section Duos	
B034	SopBlueBox BK
C007	2coolGuys_TO
C046	90s Kid MM
A065	BrassSection
B105	CannonTrane MM
C067	Clar&String BK
C078	Crusaders BK
B099	FatHorns MM
A035	Flute&Clar BK
A052	HORNsALOT BK
A099	PopHorns MM
B018	PpBrSection
C102	SawSaxSect ES
C109	Syn&SaxStack BK
B116	Tpt&Tenor BK
Sequence	
C022	Arp&Away_TO
C082	Flock_TO
A096	LightBike_TO
B025	StetsFugueTO
B087	StetsonHat1TO
B119	WholeTony2TO
Split-DroLead	
A069	IntrvlDroneTO
B084	SpaceCwboyTO
Split-SeqLead	
A008	BassSeq-Lead1GD
B021	BluesAlley BK
Split-SeqSyn	
A033	Didj&FluteTO
A021	DroneZone_TO
C052	Edge2_TO
A090	FluteShrtiTO
Strings	
C125	Cello

B108	ClassicStr
C107	Contrabass
A091	FullStringz BK
B007	PizzicatoStr
A094	StrEnsembles
B117	TremoloStr
B017	VibratoCello
C054	VibrViolin
C127	Viola
B120	Violin
Strings Synth	
B124	SailAway MM
A119	StringXFd_TO
Syn Ambient	
B060	AmbientSus BK
C047	AngelXFd_TO
A029	Atreides MM
A114	CaveFlute_TO
B093	DuneBuggy MM
C026	GalacticRays MM
C061	GhstStringTO
C085	Harmonics GD
B047	MagiclsReal MM
A026	SynSawsEcho BK
Synth FX	
B022	AngelXfd2_TO
B055	ChonkaLead ES
C080	Downer_TO
C028	GettinCloseTO
A050	GlassXFd_TO
C059	HrmonicornTO
B101	Klangon_TO
C089	LazerBreath MM
A067	Orbits_TO
C020	PopDoGood_TO
C100	Rhythm LFO BK
B049	Shimmer BK
B114	T_minus_TO
A044	TwinkleSawsGD
A106	WaveRider BK
Synth Lead	
C005	150MassAve GD
A082	BERNZILLA BK
C076	BobanabLead BK
A031	ChedomLead BK
A087	Clssic80sSaw MM
B036	DioSynHorn BK
C098	DioSynthMain BK
C053	FatDual Lead BK
B097	FiltrClassic BK

B041	FltrSyntHorn BK
B071	LaserTag MM
B006	longSaw_TO
C042	SawScanner ES
C003	ScoobyBlue MM
B024	ShineOn_TO
B081	SoulDragon MM
B122	SquareSaws ES
C112	SynSawsLead BK
A127	SynSineSaw BK
C123	SynthSquat BK
C037	TranceLead BK
C069	Traveler_TO
C126	Tremolophone BK
A009	TriOctvs MM
A060	TriSawSax BK
C106	VibeLead MM
B127	ZippyOct MM
C128	BubblesLead MM
Synth Pulse	
C045	80sPulseScan MM
A020	BreckTronic BK
C010	BuzzWindz MM
B063	Emersonian BK
B045	LonePulse MM
C094	MovinPulse BK
A098	NeutronLead BK
B128	PulsarSolo MM
B077	ReedValleyTO
A058	SynPulseTpt BK
Synth Saw	
B104	MBsentiment BK
C097	Pulse It ES
A078	RoundSaw ES
A001	Sawpressive GD
B002	SimplySaw BK
A014	SoulSaws MM
A124	SpectSaw ES
C043	StereoSaw ES
Synth Sine	
B010	ForestSaw_TO
A118	HappyWinds MM
C064	longTri_TO
A003	SineAhead BK
C040	SitOnSQR_TO
A104	SoulLeader MM
B086	Stasis BK
A111	theBroken_TO
C006	Thereminy GD
B118	TriLead MM

A017	TriSawSolo MM
Synth Squ	
A086	Clockwork_TO
B103	Lurker MM
A002	PureSquares MM
A125	SqrHouseLead BK
B112	SquareRoot BK
C108	SquRoot GD
A128	TotalSquare GD
Synth Stack	
C071	3 OctaveSaws BK
C115	BabylonTrio BK
A015	BigSaws GD
B094	EDM Envy BK
A121	SawSax ES
C121	Screamer BK
B113	SynthPopEns BK
Synth Vox	
C110	BoogieBoyGD
A041	ClusterVox MM
A073	FluteyVowel ES
B068	FormantSyn BK
C087	HarmonVox MM
C118	JazzChoirish MM
B125	SingingSaw BK
B012	VoxOcts MM
C011	VoxyFlute MM
Synth Wave	
C117	BottlesLead BK
A042	HydrasCousin GD
B058	Wavemorph1 GD
Vocal	
B126	3musiciansTO
B088	4musiciansTO
C099	AnalogVoice
A068	ChoirAahs
A115	ChoirOohs

DIOSYNTH SAMPLE LIST

NO	FULL NAME	SHORT NAME
Saxophones		
1	Soprano Sax BW Velocity	SopranoSaxVelo
2	Soprano Sax BW Rock	SopranoSaxRock
3	Soprano Sax BW Ballad	SoprSaxBallad
4	Soprano Sax BW Vib Velocity	SoprSaxVibVelo
5	Soprano Sax BW Vib Rock	SoprSaxVibRock
6	Soprano Sax BW Vib Ballad	SoprSaxVibBallad
7	Alto Sax Rock JB	AltoSaxRock
8	Alto Sax Cool JB	AltoSaxCool
9	Alto Sax Velocity JB	AltoSaxVelo
10	Alto Sax Vib JB Velocity	AltoSaxVibVelo
11	Alto Sax Vib JB Ballad	AltoSaxVibBallad
12	Alto Sax Vib Fusion	AltoSaxVibFusion
13	Raunchy Tenor	RaunchyTenor
14	Rock Tenor Sax	RockTenorSax
15	Rock Tenor Velocity	RockTenorVelo
16	Jazz Tenor Vib CB	JazzTenorVib
17	Jazz Tenor CB	JazzTenor
18	Ballad Tenor Sax CB	BalladTenor
19	Bari Sax Rock JS	BariSaxRock
20	Bari Sax Growl JS	BariSaxGrowl
21	Bari Sax Jazz JS	BariSaxJazz
22	Bari Sax Rock Growl	BariRockGrowl
23	Bass Sax JB	Bass Sax
24	Tubax Eb	Tubax Eb
Double Reeds		
25	Bassoon BW	Bassoon
26	Bassoon Vib BW	BassoonVib
27	Contra Bassoon BW	Contrbassoon
28	Contra Bassoon Vib BW	CbassoonVib
29	Obassoon	Obassoon
30	Oboe	Oboe
31	English Horn	EnglishHorn
Flutes		
32	Jazz Flute	Jazz Flute
33	Hard Flute	Hard Flute
34	Rock Flute Velocity	RkFluteVelo
35	Flutter Flute	Flutter Flute
36	Flutter Flute Velocity	FlutFluteVel
37	Singing Flute	SingingFlute
38	Singing Flute Velocity	SingFluteVel
39	Alto Flute Velocity BW	AltoFluteVel
40	Alto Flute Vib Velocity BW	AltoFlVibVel
41	Alto Flute Bright BW	AltoFluteBrt
42	Alto Flute Dark BW	AltoFluteDrk
43	Alto Flute Bright Vib BW	AltoFluteBrtVib
44	Alto Flute Dark Vib BW	AltoFluteDrkVib
45	Bass Flute BW	Bass Flute
46	Bass Flute Vib BW	BassFluteVib
47	Contra Alto Flute BW	ContraAltoFlute
48	Contra Alto Flute Vib BW	CAltoFluteVib
49	Contra Bass Flute	ConBassFlute
50	Contra Bass Flute Vib	CBassFluteVib
51	Flutasaurus	Flutasaurus
52	Flutasaurus Vib	FlutasaurusVib
53	Flute Classical	Flute Classical
54	Flute Classical Vib	Flute Classical
55	Piccolo	Piccolo
56	Bamboo Flute JB	BambooFlute
Clarinets		
57	Bb Clarinet	Bb Clarinet
58	Eb Clarinet	Eb Clarinet
59	Bass Clarinet	BassClarinet
60	Contra Alto Clarinet	CAltoClarinet
Whistles		
61	Llama Whistle	LlamaWhistle
62	Tin Whistle D	TinWhistle
63	Tin Whistle Low D	TinWhistleLow
64	Ocarina	Ocarina
65	Whistle	Whistle
Recorders		
66	Soprano Recorder	SoprRecorder
67	Alto Recorder	AltoRecorder
68	Tenor Recorder	TenorRecorder
69	Bass Recorder	BassRecorder
Other Winds		
70	Pan Flute	PanFlute
71	Shakuhachi	Shakuhachi
72	Blown Bottle	Blown Bottle
Brass		
73	Trumpet	Trumpet
74	Vibrato Trumpet	VibTrumpet
75	Classical Trumpet	ClasTrumpet
76	Mute Trumpet	MuteTrumpet
77	Trombone	Trombone
78	Vibrato Trombone	VibTrombone
79	French Horn	FrenchHorn
80	Tuba	Tuba
81	Vibrato Tuba	VibrTuba

82	Brass Section	BrassSection
83	Pop Brass Section	PpBrSection
Harmonicas		
84	Blues Harmonica	BluesHarm
85	Vibrato Blues Harmonica	VibBluesHarm
86	Harmonica	Harmonica
Accordions		
87	Italian Musette	ItaliMusette
88	French Musette	FrenchMusette
89	Master Accordion	MasterAccord
90	Solo Accordion	SoloAccord
91	Tango Accordion	TangoAccord
Strings		
92	Vibrato Violin	Vibrato Violin
93	Violin	Violin
94	Viola	Viola
95	Cello	Cello
96	Vibrato Cello	Vibrato Cello
97	Contrabass	Contrabass
98	String Ensembles	String Ensembles
99	Classic Strings	Classic Strings
100	Tremolo Strings	Tremolo Strings
101	Pizzicato Strings	Pizzicato Strings
Vocal		
102	Choir Oohs	Choir Oohs
103	Choir Aahs	Choir Aahs
104	Analog Voice	Analog Voice

Chinese Winds		
105	Bang Di	BangDi
106	Bang Di With Yi Yin	BangDiW/Yi
107	Qu Di	QuDi
108	Qu Di With Yi Yin	QuDiW/Yi
109	Ba Wu	BaWu
110	Ba Wu Qi Chan Yin	BaWuQiChan
111	Xiao	Xiao
112	Xiao With Yi Yin	XiaoW/Yi
113	Xun	Xun
114	Guan Zi	GuanZi
115	Suo Na	SuoNa
116	Suo Na With Chan Yin	SuoNaW/Chan
117	Hu Lu Si	HuLuSi
118	Hu Lu Si Qi Chan Yin	HuLuSiQiChan
119	Lu Sheng 1	LuSheng1
120	Lu Sheng 2	LuSheng2
Chinese Strings		
121	Er Hu	ErHu
122	Vibrato Er Hu	VibratoErHu
123	Er Hu With Slide Up	ErHuW/Slide
124	Ban Hu	BanHu
125	Xi Pi	XiPi
126	Er Huang With Da Yin	ErHuangW/Da
127	Morin Khuur	MorinKhu
128	Morin Khuur With Slide	MorinKhuW/S

DIOSYNTH SAMPLE EFFECTS LIST

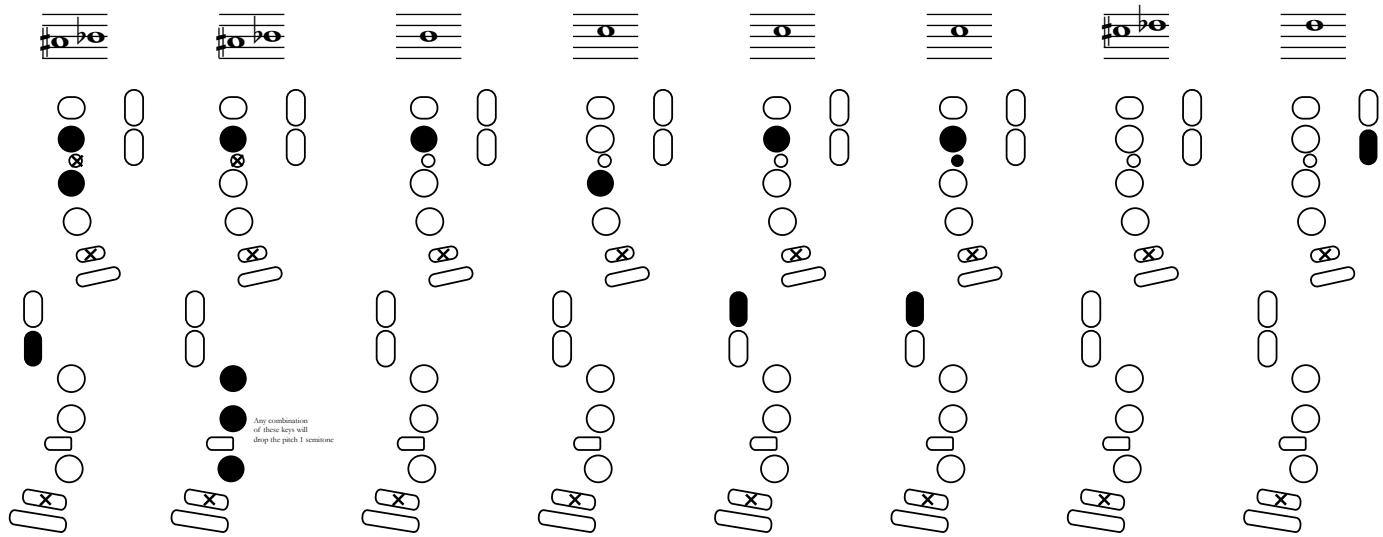
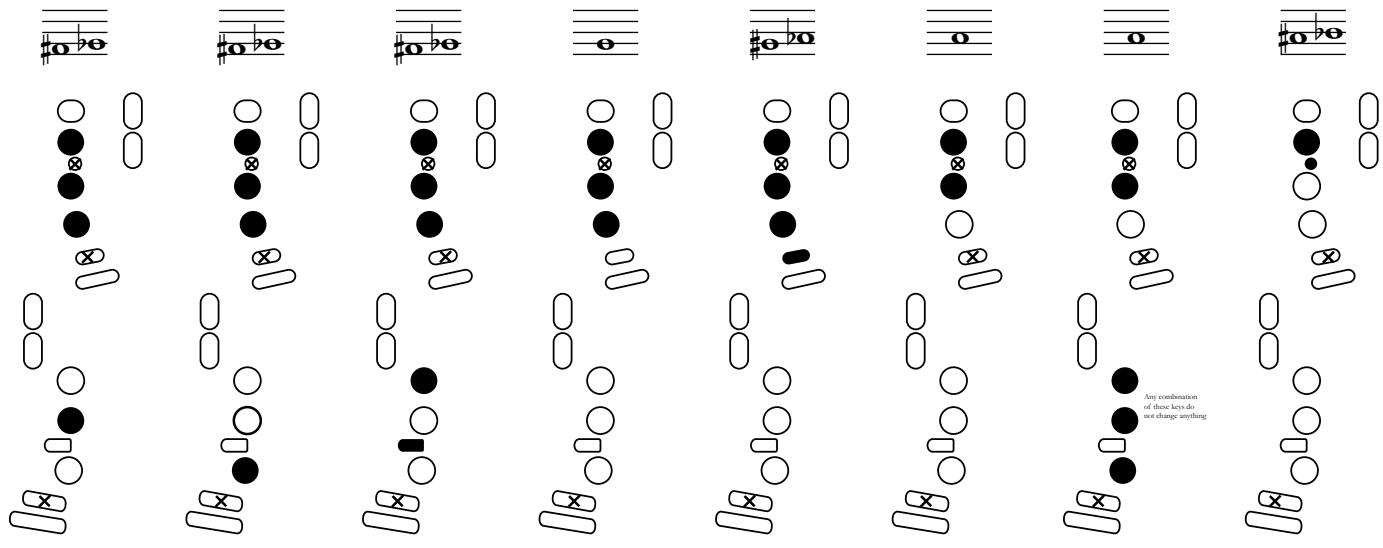
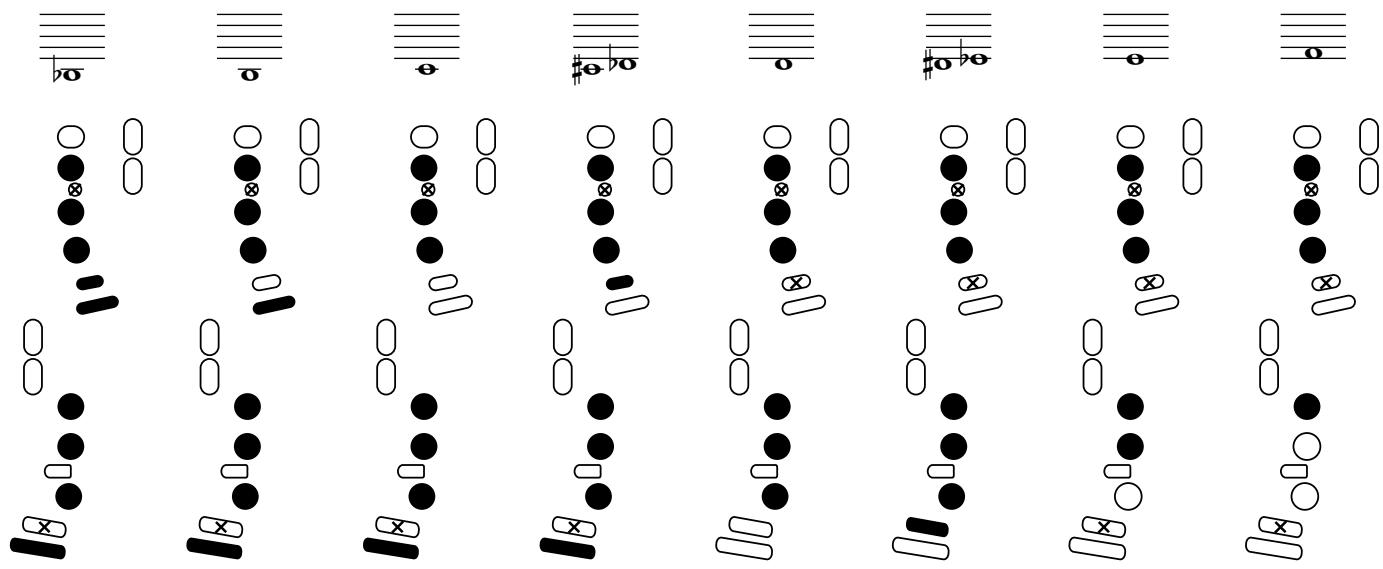
Key Off		
NO	FULL NAME	SHORT NAME
1	Brass Key Off	Brass KeyOff
2	Sax Key Off	SaxKeyOff
Attack Noise		
1	Soprano Sax Head	SoprSaxHead
2	Flute Head	FluteHead
3	Piccolo Head	PiccoloHead
4	Oboe Head	OboeHead
5	English Horn Head	EnglishHnHead
6	Ocarina Head	OcarinaHead
7	Soprano Recorder Head	SoprRecoHead
8	Alto Recorder Head	AltoRecoHead
9	Tenor Recorder Head	TenorRecoHead
10	Bass Recorder Head	BassRecoHead
11	Pan Flute Head	PanFluteHead
12	Shakuhachi Head	ShakuhacHead

13	Blown Bottle Head	BwBottleHead
14	Whistle Head	WhistleHead
Breath Noise		
1	Brass Noise	BrassNoise
2	Bang Di Noise	BangDiNoise
3	Xun Noise	XunNoise
4	Sax Noise	SaxNoise
5	Flute Noise	FluteNoise

FINGERING CHARTS

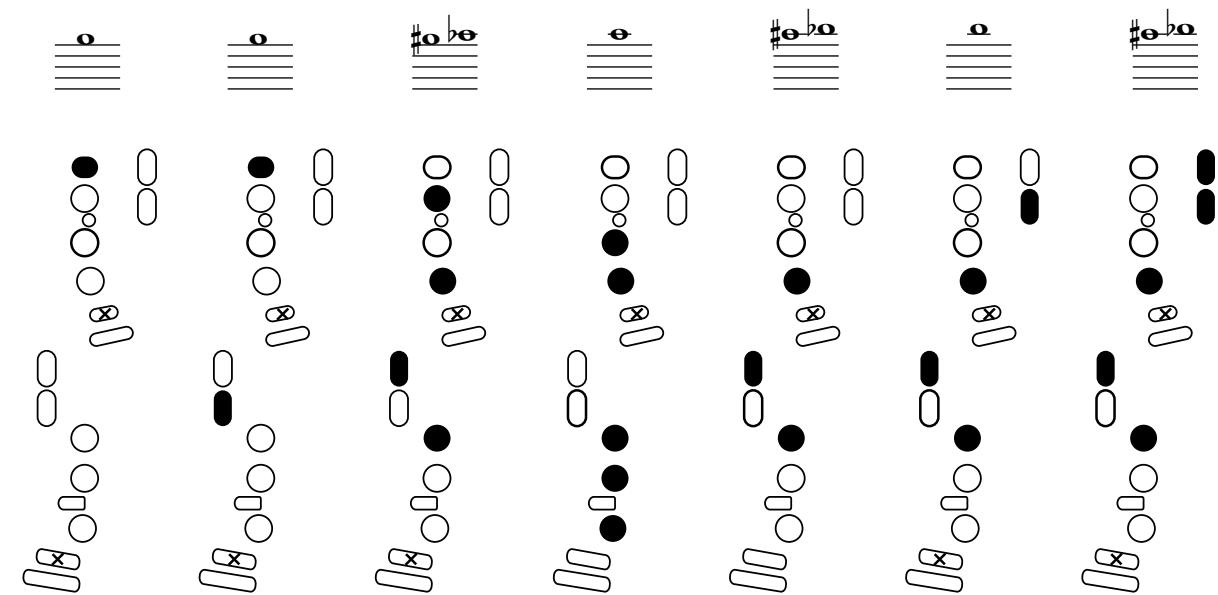
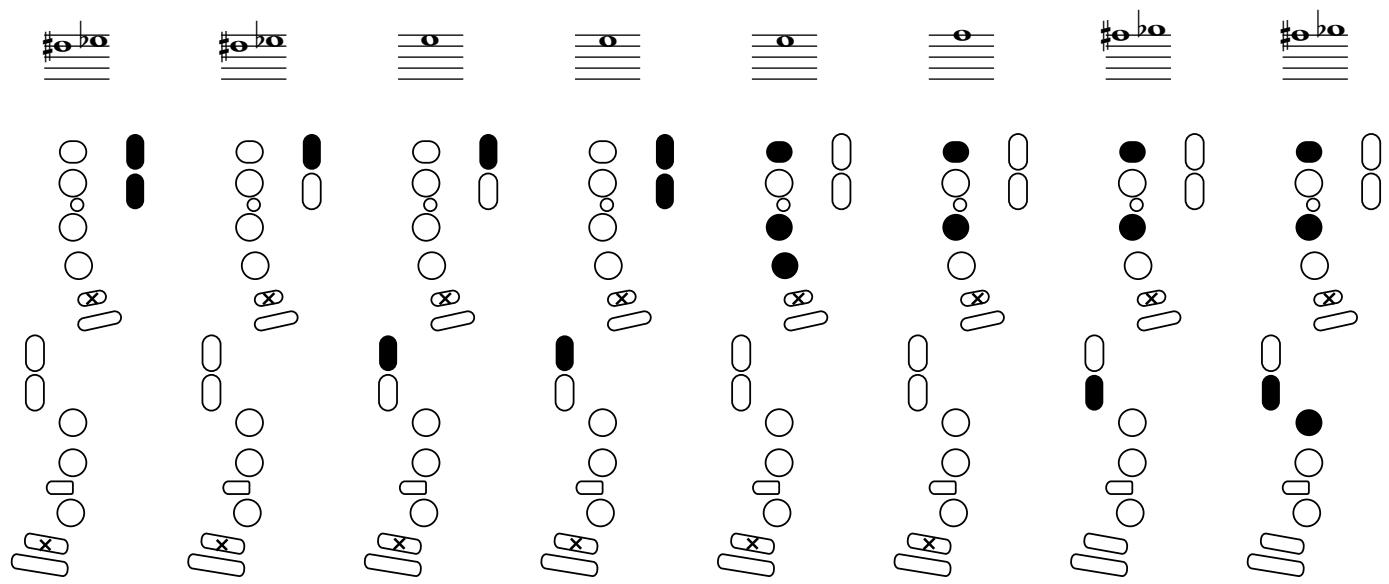
Sax

X = Playing these keys will not change the pitch. They are typically held down when playing in certain keys.



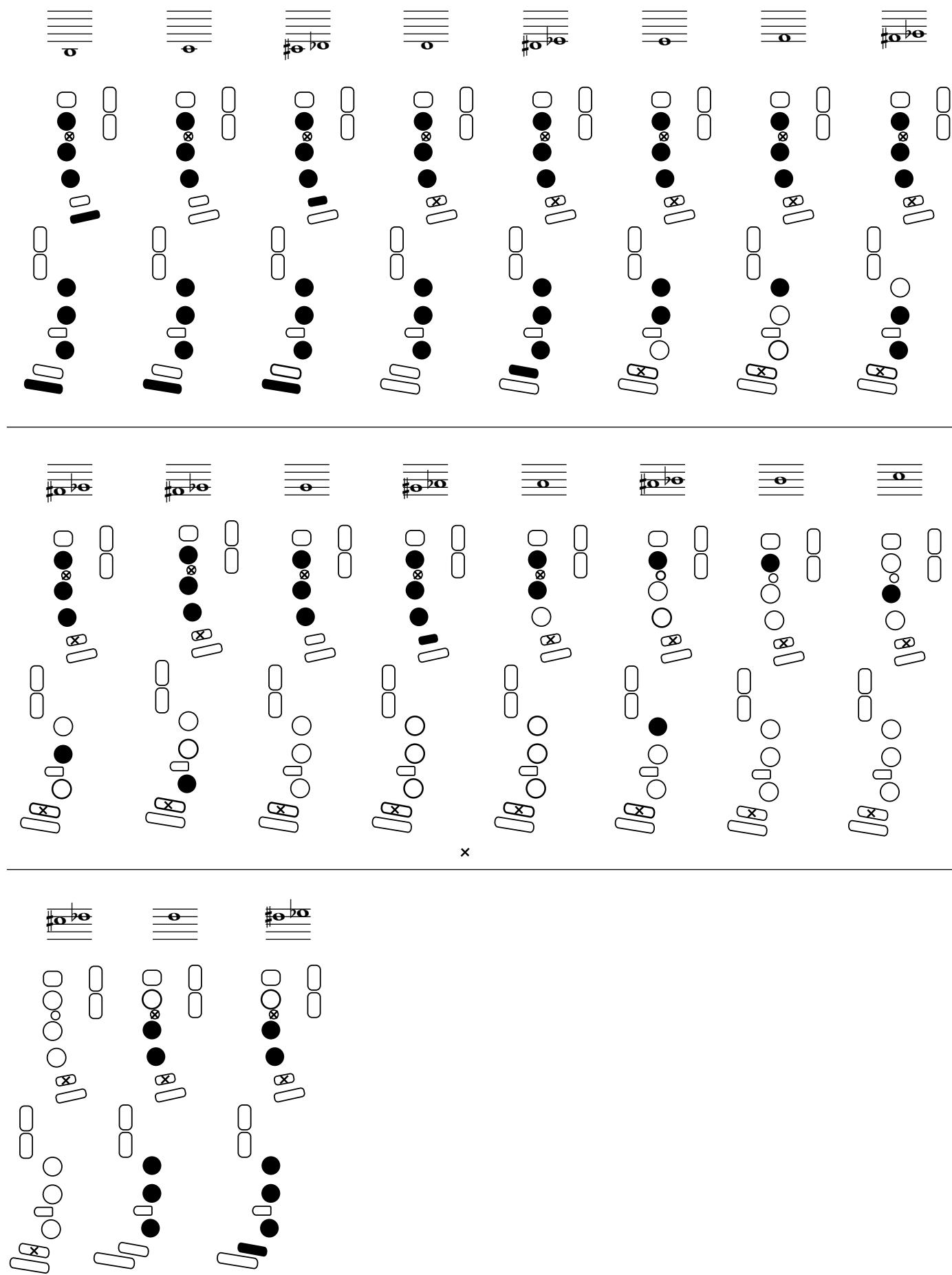
Sax (continued)

X = Playing these keys will not change the pitch. They are typically held down when playing in certain keys.



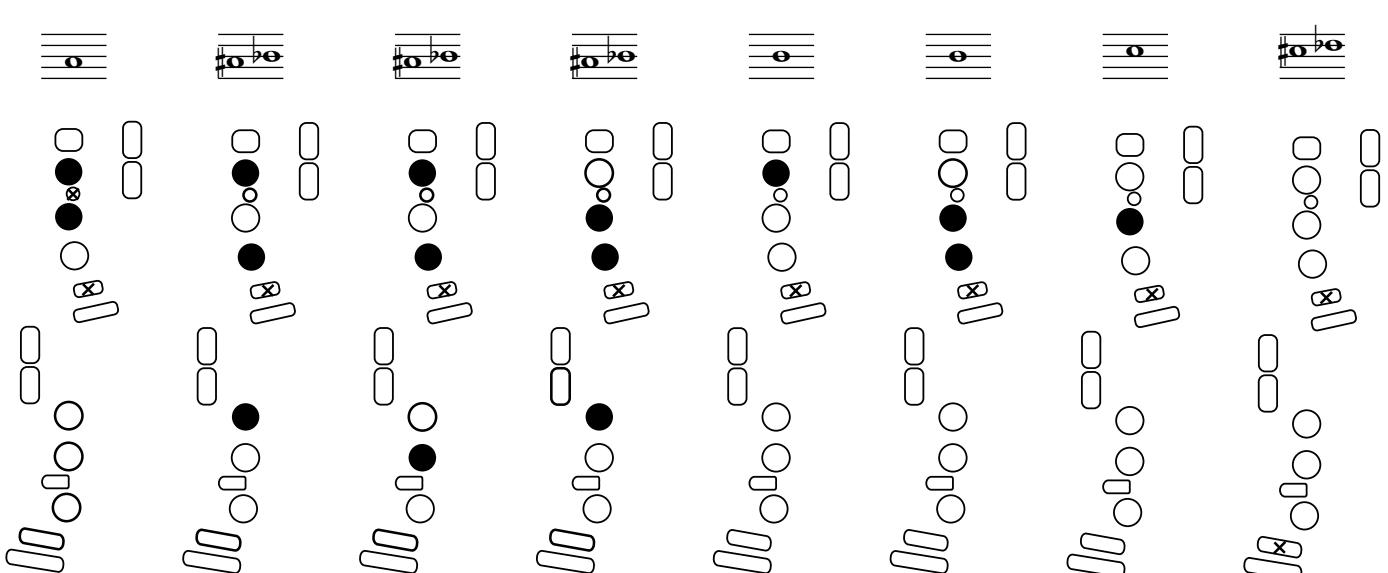
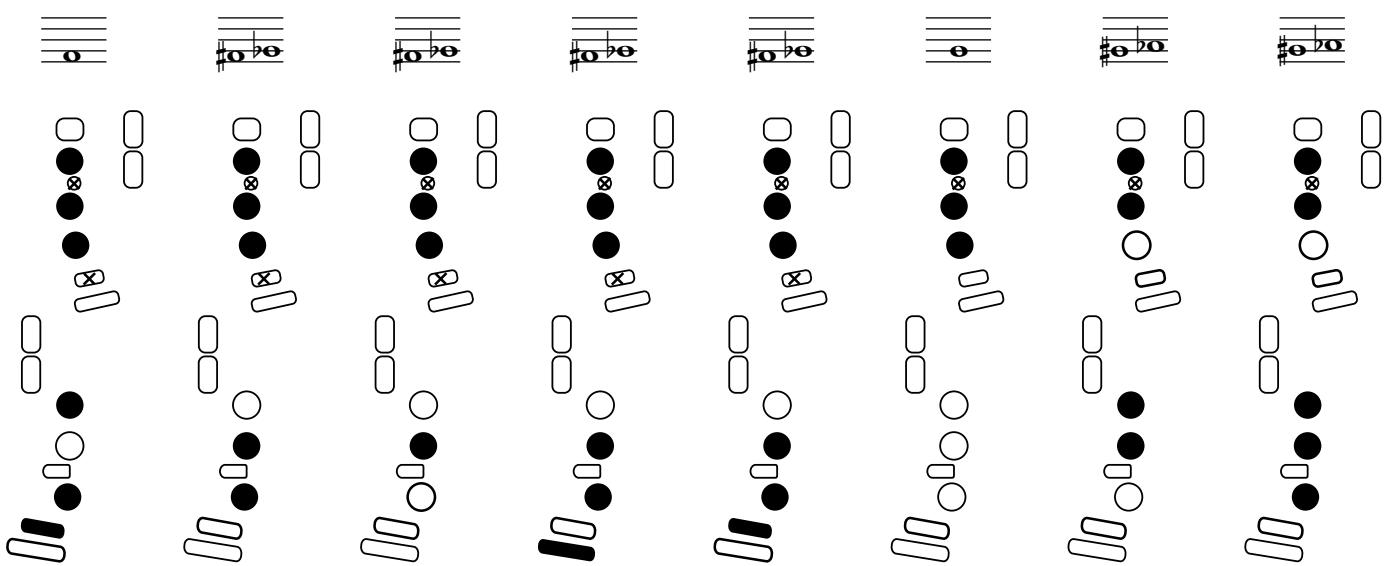
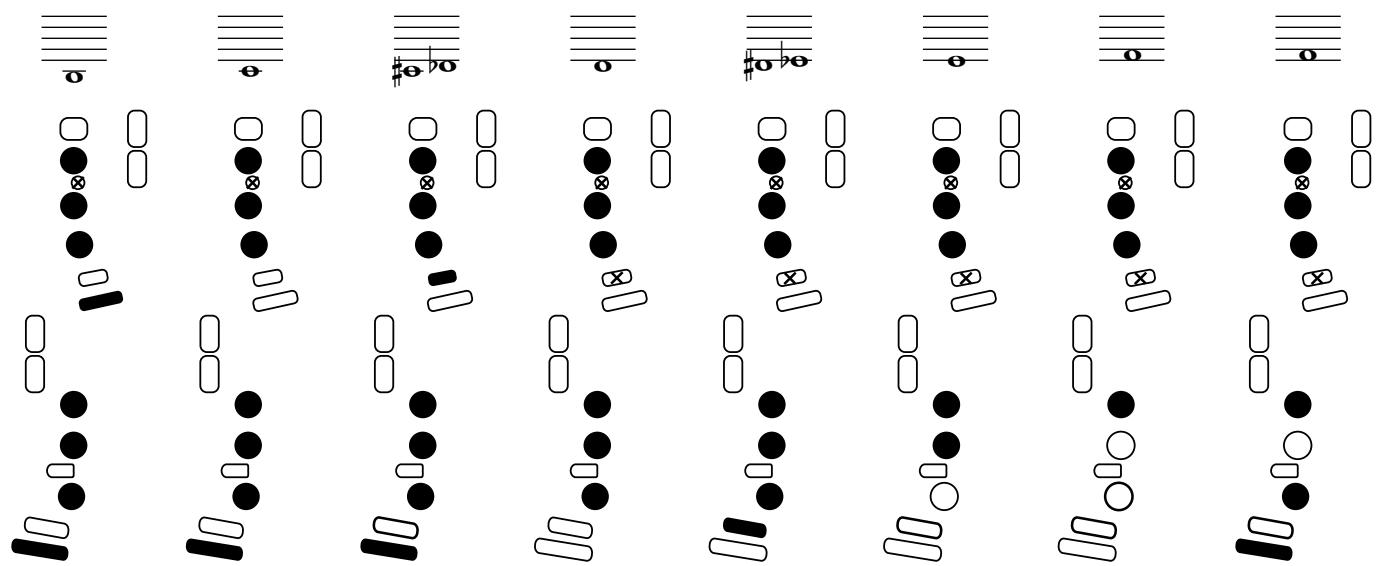
Flute

X = Playing these keys will not change the pitch. They are typically held down when playing in certain keys.

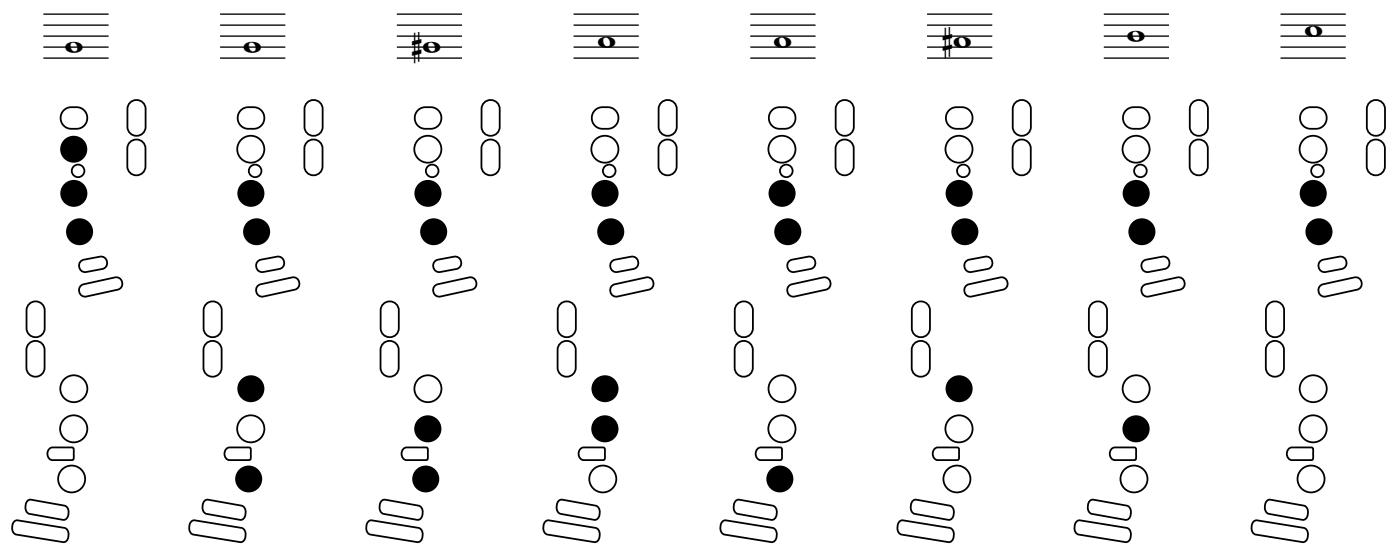
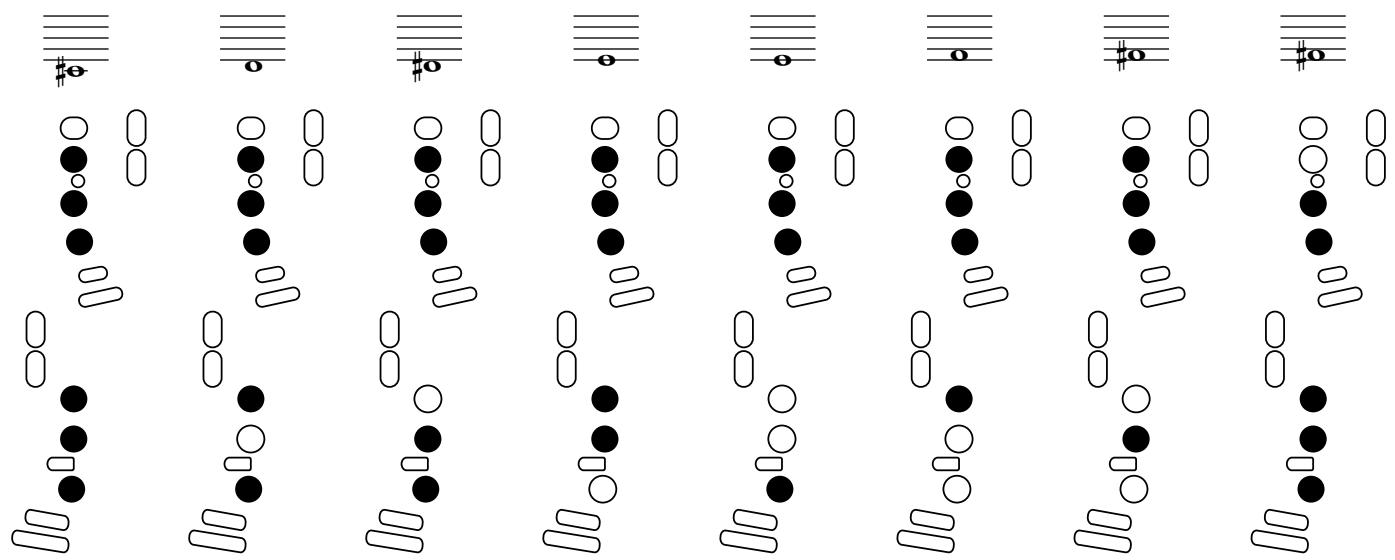


Recorder

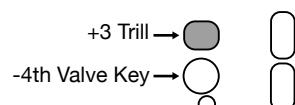
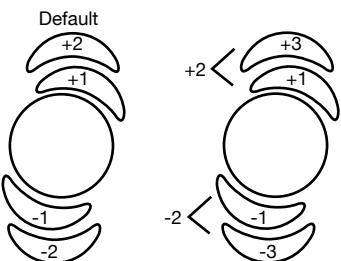
X = Playing these keys will not change the pitch. They are typically held down when playing in certain keys.



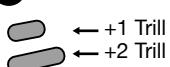
Trumpet



You can choose +/-2 Octaves or
+/-3 Octaves in the Setup menus



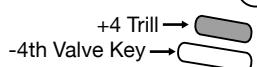
These 2 keys are normally pressed for ease of grip.
Either (or both) can be lifted to raise the pitch 1/2 step.



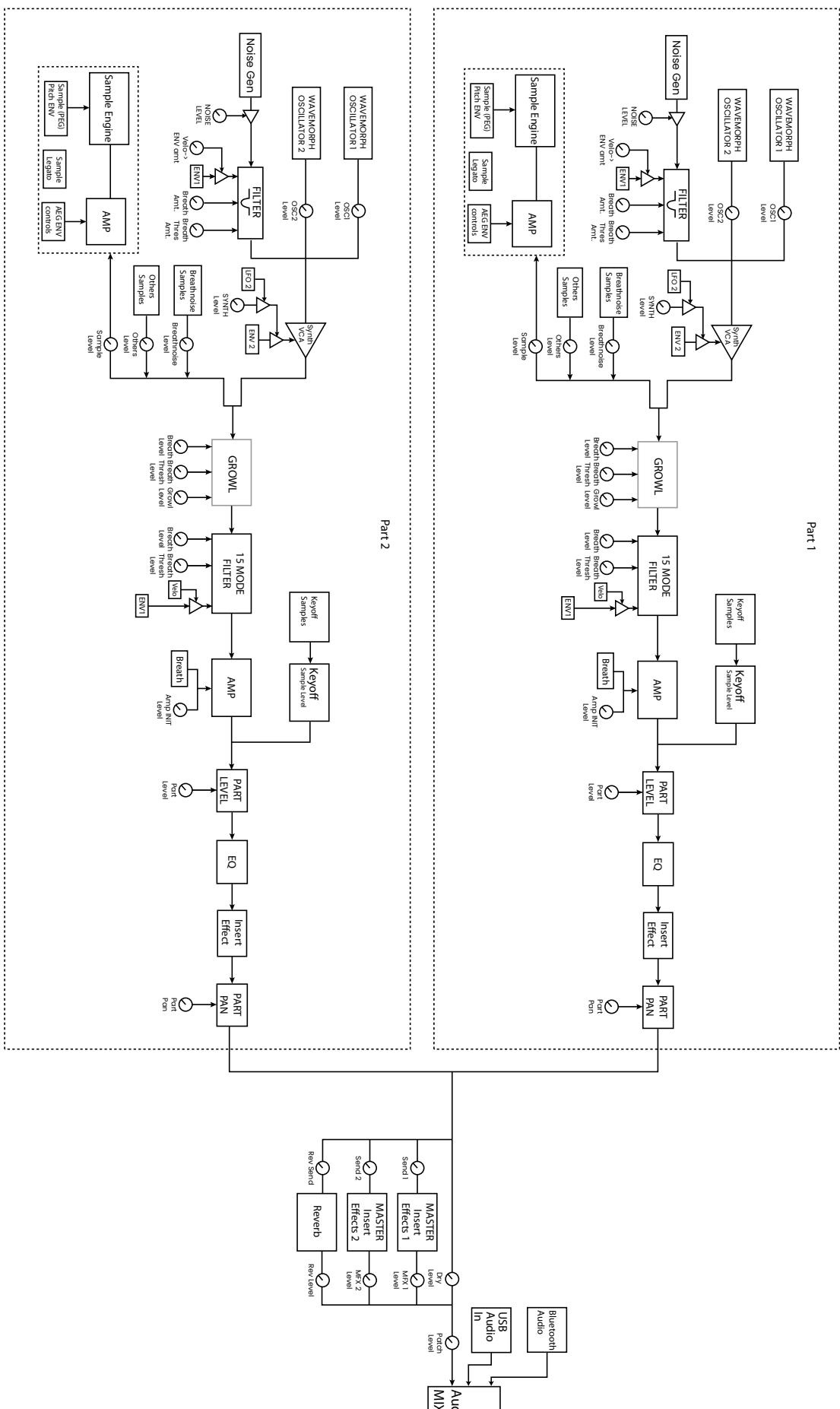
The many trill keys allow for many alternate fingering options.



These 3 keys work like
the 3 valves on a Trumpet



DIOSYNTH VOICE PATH



DIOSYNTH SPECIFICATIONS

Display		OLED display with battery level indicator
Languages		English, Chinese
Sounds	Sampled Instruments	128 (Woodwinds, brass, double reeds, strings, and more)
	Synthesizer waveforms	219
	Patch memory locations	768 (6 banks x 128 patches)
	Favorites	128 patches
Pitch Adjustment	Octave	±3
	Transpose	±11
	Scale Tuning	Yes
	Master Tuning	380 - 500Hz
Effects	Part 1	Insert Effect (see Master Send Effects), EQ
	Part 2	Insert Effect (see Master Send Effects), EQ
	Master Send Effects 1/2	Bypass, Room, Hall 1, Hall 2, Real, Tempo Delay, Tempo Echo, Cross Delay, Chorus 1, Flanger, Chorus 2, Ensemble, Dual Rotary, Phaser, Tempo Phaser, Classic OD, Overdrive, Amp 1, Amp 2, Classic Metal, Classic Hard, Hard Dist, Metal Dist, EQ, EQ Hi-Fi, EQ Rock, Compressor, Comp Standard, Comp Limiter, Comp Attack, Vibrato, Classic Tremolo, Auto Pan, Auto Wah, BPM Auto Wah
	Master Reverb	Room, Standard, Hall, Church
Controls		Breath force sensor, Reed Bite sensor, 4 x Octave buttons (9-octave range), X/Y joystick, Control panel with clickable encoder and Mode buttons (Transpose, Favorites, Setup, Save, Sound/Edit), Assignable buttons (3), Pressure-sensitive buttons (2), separate volume controls (Speaker/Phones and Output), Gyro sensor
Connectivity		Line out (1 x 1/4" [6.35 mm], mono TS or stereo TRS)
		Headphones (1 x 1/8" [3.5 mm])
		MIDI In/Out (5-pin DIN)
		USB MIDI & Audio
		Bluetooth MIDI
		Bluetooth Audio (input only)
Speaker	Built-in speaker	Yes
	Power rating	2W
Power		5V DC, 2A
Batteries (not included)		Uses two button-top 18650 lithium rechargeable batteries
Dimensions		8.3 x 6.73 x 69.75 cm (3.27 x 2.65 x 27.46 in)
Weight		0.9 kg (2.0 lb)
Accessories (included)		Hard-shell travel case, folding stand, 2 mouthpieces, neck strap, power supply with universal power adapters, USB A-C cable, USB C-C cable, USB power Y cord, spit scrunchy, cleaning cloth, printed User guide

DECLARATION OF CONFORMITY

USA

Important Notice: DO NOT MODIFY THE UNIT!

This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modifications not expressly approved by Ashun Sound Machines could void your FCC authorization to use this product in the USA.

IMPORTANT: When connecting this product to accessories and/or another product, use only high-quality shielded cables. The cable(s) supplied with this product MUST be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the USA.

NOTE: This product has been tested and found to comply with the limit for a Class B Digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide a reasonable protection against harmful interference in a residential environment. This equipment generates, uses, and may radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause interferences harmful to the operation to

other electronic devices. Compliance with FCC regulations does not guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference, which can be determined by turning the equipment off and on, please try to correct the interference by one or more of the following measures:

- Relocate either this product or the device that is affected by the interference.
- Use power outlets that are on different branch (circuit breaker or fuse) circuits or install AC line filter(s).
- In the case of radio or TV interference, relocate and/or reorient the antenna. If the antenna lead-in is a 300 ohm ribbon lead, change the lead-in to the coaxial cable.
- If these corrective measures do not achieve satisfactory results, please consult the dealer or an experienced radio/TV technician for help.

The above statements apply ONLY to those products distributed in the USA.

CANADA

NOTICE: This class B digital apparatus meets all the requirements of the Canadian Interference-Causing Equipment Regulation.

AVIS: Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

EUROPE



This product complies with the requirements of

European Directive 89/336/EEC

This product may not work correctly as a result of electro-static discharge. If that happens, simply restart the product.