

NUX

NES-1

Digital Wind Instrument



USER MANUAL

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Overview

Thank you for choosing the NES-1, a digital wind instrument featuring an integrated wireless system and much more, presented by NUX.

The NES-1 is an innovative digital wind instrument capable of producing a wide range of musical instrument sounds. With a collection of 50 meticulously sampled sounds including saxophone, brass, strings, electronic music, and Chinese folk instruments, it offers versatility and creative possibilities.

The NES-1 features a key layout that closely resembles a saxophone, making it easy to play using saxophone fingering. Additionally, it supports trumpet fingering, which you can access in the instrument's settings menu, expanding your playing options.

To enhance your control over the instrument's tone, The NES-1 is equipped with a breath sensor and an imitation reed pressure controller. These features allow you to adjust the tone by varying the intensity of your blowing and manipulate pitch, vibrato, and other tonal functions by altering the opening and closing angle of the reed.

In addition to its impressive sound capabilities, the NES-1 offers convenient connectivity options. It includes a Bluetooth audio stream function, enabling you to connect your mobile phone via Bluetooth for audio playback directly through the instrument.

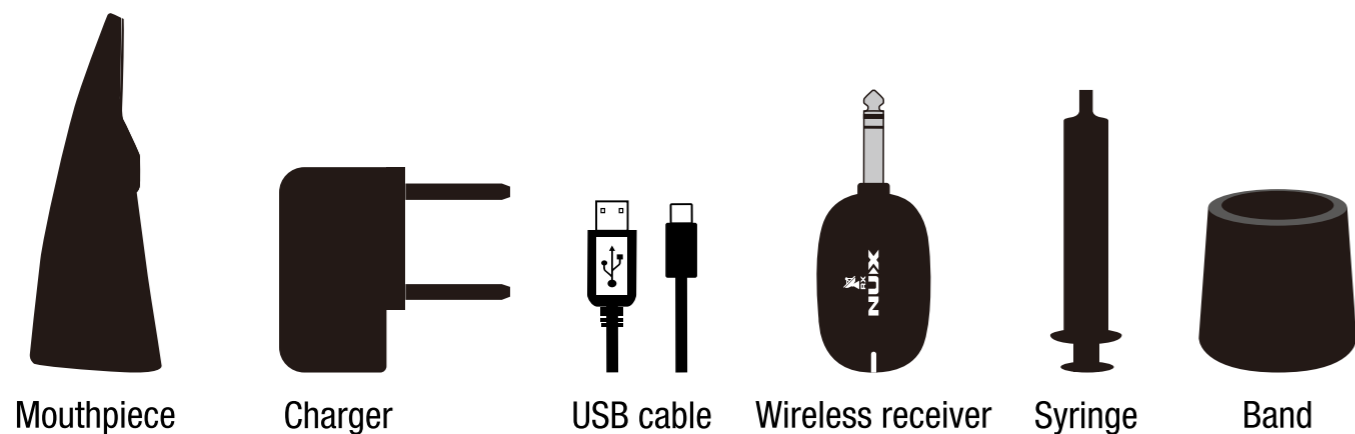
For everyday use, the instrument is equipped with a dual speaker system and when you want to go further, the NES-1's digital wireless system allows you to transmit your performance and the accompaniment from Bluetooth media playback to your sound reinforcement system with minimal latency. This feature is particularly useful whether you are practicing on your own or performing in outdoor settings.

We hope this user manual will assist you in making the most of your NUX NES-1 Digital Wind Instrument. It provides detailed instructions on how to operate and optimize the instrument's features, ensuring an enjoyable and fulfilling musical experience.



Unboxing

In addition to the NES-1 itself, the box includes the following accessories: a second mouthpiece, a charger, a USB cable, a wireless receiver unit, syringe, and a band, among others. The included second mouthpiece, offering a backup option or enabling you to share the instrument with others.



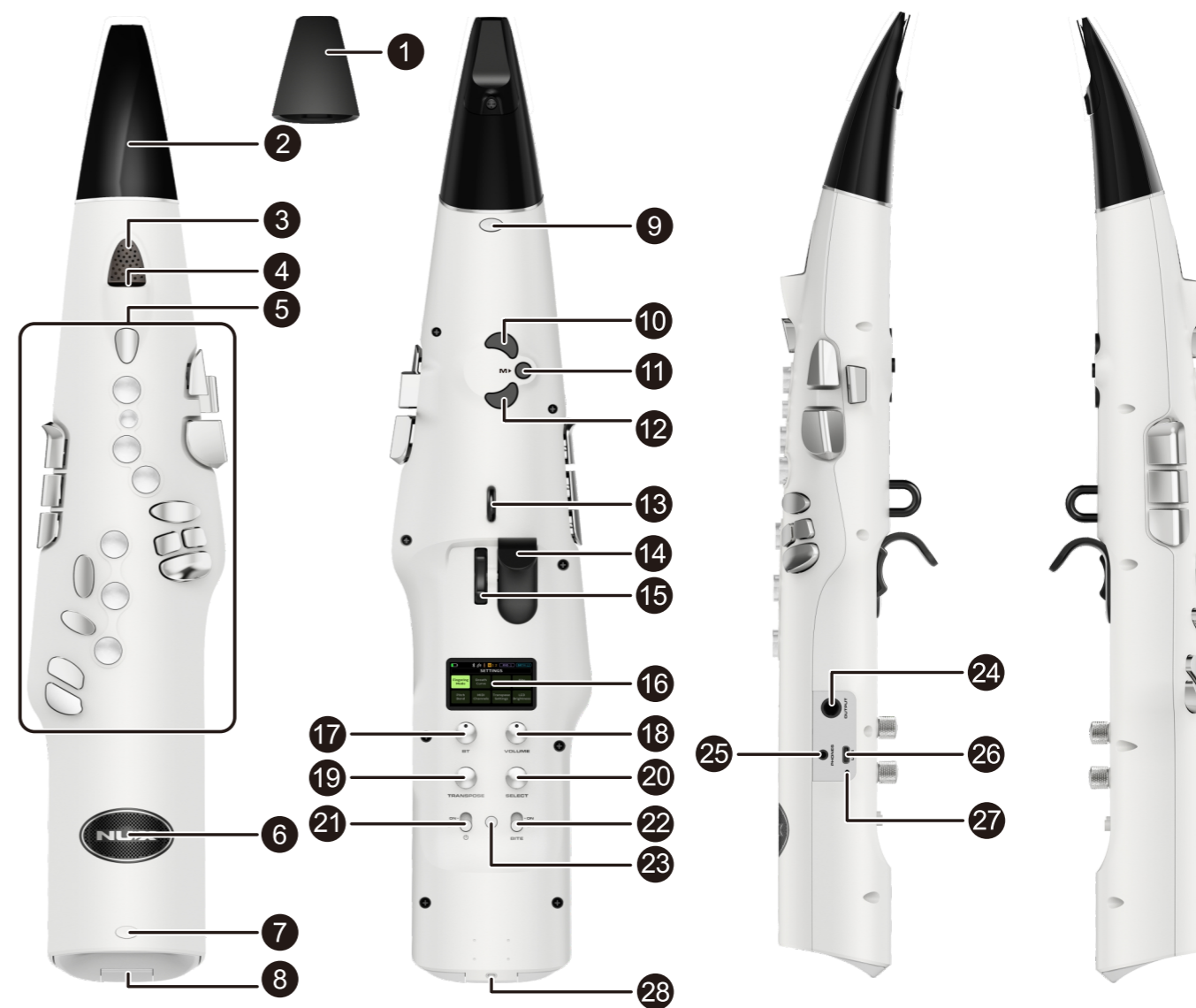
Before you start using the NES-1 for the first time, make sure to charge it fully. This ensures a longer lifespan for the built-in rechargeable lithium battery. If you anticipate not using the NES-1 for a while, remember to charge the battery at least once every three months to avoid potential issues with the lithium battery. This simple routine helps maintain optimal performance and reliability during your musical exploration.

WARNING

STRICTLY AVOID HOLDING OR DROPPING THE NES-1 WITH JUST ONE HAND, ESPECIALLY GRIPPING ONLY THE MOUTHPIECE. FAILURE TO COMPLY MAY RESULT IN THE DEVICE FALLING TO THE GROUND, CAUSING DAMAGE.



Control Panel



1 Mouthpiece Cover

When the instrument is not being used, always place the mouthpiece cover over the mouthpiece.

2 Mouthpiece

Use only the specified mouthpiece designed for the NUX NES-1, and avoid using it with any other instruments.

3 In-built Speaker 1

One of the two in-built speakers.

4 Display 1

Displays the sound number.

5 Performance Keys

These keys are specifically designed for performance, giving you the flexibility to play using saxophone fingering or, if preferred, switch to trumpet fingering for an alternative playing style.

▲ For details, refer to “Fingering Chart” part of this manual.

6 In-built Speaker 2

The other in-built speaker.

7 Receiver Unit Charging Compartment Unlock Button

Press this button to unlock the Receiver Unit Charging compartment.

8 Receiver Unit Charging Compartment

Within this compartment, you can conveniently store the receiver unit and recharge it when needed.

9 Mouthpiece Unlock Button

Press this button to unlock the Mouthpiece.

10 Octave Up Key

Bring the octave up.

11 M Key

Press this key to save your settings.

12 Octave Down Key

Bring the octave Down.

13 Neck Strap Ring

Attach your neck strap here.

14 Thumb Hook

Place your right thumb here when playing.

15 Pitch Roller

Bends the pitch up or down.

16 Display 2

Main display, displays menu.

17 Bluetooth Knob

Use this knob to turn the built-in Bluetooth on or off and adjust the volume of the Bluetooth audio.

18 Volume Knob

Use this knob to adjust the volume level of the two built-in speakers.

19 Transpose Knob

Use this knob to set the transposition when needed.

20 Select Knob

Use this knob to choose the sound.

21 ON/OFF Switch

Slide this switch to power the NUX NES-1 on or off.

22 BITE Switch

Slide this switch to enable or disable the reed simulation function.

23 Transmitter Button

Use this button to turn on or off the in-built Transmitter.

24 1/4" Output Jack

Connect your monitor speakers, PA or recording interface to this jack.

25 1/8" Phones Jack

Connect your headphone to this jack.

26 USB Port

USB Type-C port.

Please use the provided USB cable and power adapter to recharge the device.

To update the firmware, connect this port to your computer using the provided USB cable.

▲ For detailed instructions, please refer to the "Updating Firmware" and "Charging the NUX NES-1" sections of this manual.

27 Battery Indicator

Indicators the battery level during charging.

28 Water Outlet

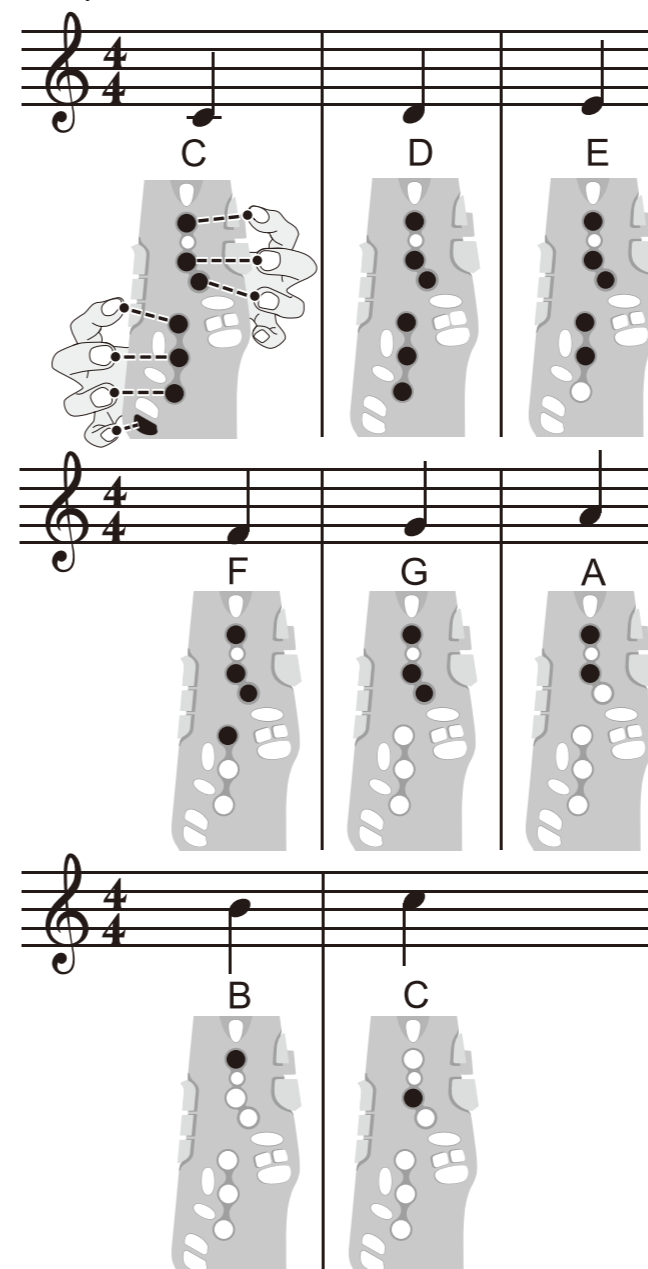
Discharge of flushing wastewater.

Get ready for Playing

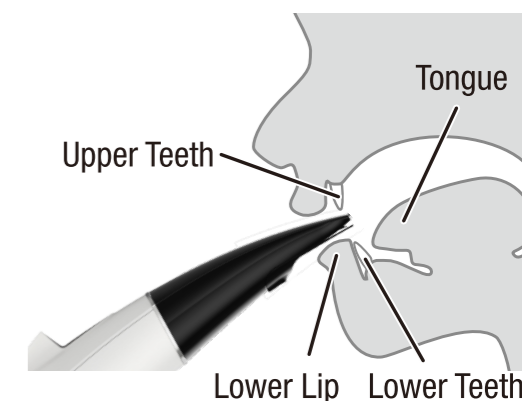
The NUX NES-1 is designed with a key arrangement that closely emulates a saxophone, ensuring easy and natural playability using saxophone fingering.

Holding the NUX NES-1

1. Securely fasten the provided neck strap onto the designated ring intended for the neck strap attachment.
2. Position your right thumb onto the thumb hook.
3. Rest your left thumb between the Octave Up Key and Octave Down Key, ensuring it is centered.
4. Place your fingers on the performance keys as depicted in the illustration below:



5. Place the mouthpiece in your mouth, approximately one-third of the way in, with the lower lip covering the teeth as shown in the illustration below.



Saxophone

Basic Fingering

A[♯]3/B[♭]3 B3 C4 C[♯]4/D[♭]4 D4 D[♯]4/E[♭]4 E4 F4

This block shows the basic fingering for notes A[♯]3/B[♭]3, B3, C4, C[♯]4/D[♭]4, D4, D[♯]4/E[♭]4, E4, and F4. Each note is represented by a musical staff with a treble clef and a single note, and a corresponding fingering diagram of a saxophone body with black dots indicating finger placement.

F[♯]4/G[♭]4 G4 G[♯]4/A[♭]4 A4 A[♯]4/B[♭]4 B4

This block shows the basic fingering for notes F[♯]4/G[♭]4, G4, G[♯]4/A[♭]4, A4, A[♯]4/B[♭]4, and B4. Each note is represented by a musical staff with a treble clef and a single note, and a corresponding fingering diagram of a saxophone body with black dots indicating finger placement.

C5 C[♯]5/D[♭]5 D5 D[♯]5/E[♭]5 E5

This block shows the basic fingering for notes C5, C[♯]5/D[♭]5, D5, D[♯]5/E[♭]5, and E5. Each note is represented by a musical staff with a treble clef and a single note, and a corresponding fingering diagram of a saxophone body with black dots indicating finger placement.

F5 F[♯]5/G[♭]5

This block shows the basic fingering for notes F5 and F[♯]5/G[♭]5. Each note is represented by a musical staff with a treble clef and a single note, and a corresponding fingering diagram of a saxophone body with black dots indicating finger placement.

Saxophone

Altissimo Fingerings

G5 G[♯]/A[♭]5 A5

This block shows the altissimo fingering for notes G5, G[♯]/A[♭]5, and A5. Each note is represented by a musical staff with a treble clef and a single note, and a corresponding fingering diagram of a saxophone body with black dots indicating finger placement.

A5 A[♯]5 B5 C6

This block shows the altissimo fingering for notes A5, A[♯]5, B5, and C6. Each note is represented by a musical staff with a treble clef and a single note, and a corresponding fingering diagram of a saxophone body with black dots indicating finger placement.

C6 C[♯]6 D6 D[♯]6/E[♭]6 E6

This block shows the altissimo fingering for notes C6, C[♯]6, D6, D[♯]6/E[♭]6, and E6. Each note is represented by a musical staff with a treble clef and a single note, and a corresponding fingering diagram of a saxophone body with black dots indicating finger placement.

F6

This block shows the altissimo fingering for note F6. It is represented by a musical staff with a treble clef and a single note, and a corresponding fingering diagram of a saxophone body with black dots indicating finger placement.

Trumpet

F#^b/G^b3 G3 G#^b/A^b3 A3 A#^b/B^b3 B3 C4 C#^b/D^b4

D4 D#^b/E^b4 E4 F4 F#^b/G^b4 G4 G#^b/A^b4 A4

A#^b/B^b4 B4 C5 C#^b/D^b5 D5 D#^b/E^b5 E5 F5

F#^b/G^b5 G5

Basic Functions

Turning the Power On/Off

Slide the [ON/OFF] switch to power on or off the NUX NES-1.

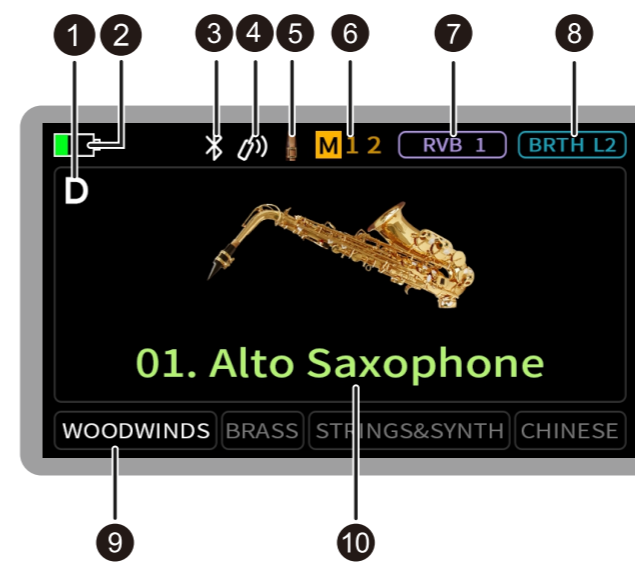


Adjusting the Volume

Rotate the [Volume] knob to control the output volume of both the built-in speaker and the PHONE/OUTPUT jack.



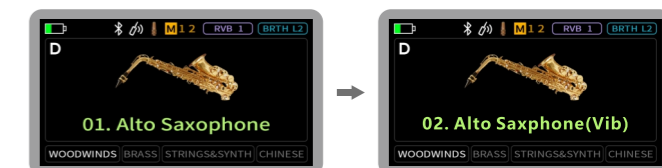
User Interface



| NO. | Name |
|-----|-------------------------|
| 1 | Key Indicator |
| 2 | Battery Indicator |
| 3 | Bluetooth Indicator |
| 4 | Wireless Indicator |
| 5 | Bite function Indicator |
| 6 | Preset Indicator |
| 7 | Reverb Indicator |
| 8 | Breath curve Indicator |
| 9 | Instrument category |
| 10 | Instrument Indicator |

Selecting the Instrument

Rotate the [SELECT] knob to switch to a different instrument. If the desired instrument isn't in the current category, quickly rotate the [SELECT] knob to move to the next instrument category.



Changing the Key

For every instrument, the factory key defaults to C. To change the key, rotate the [TRANPOSE] knob to select your desired key. Note: This setting will apply globally to all instruments.





Using the Built-In Wireless System

The NUX NES-1 is equipped with a built-in 5.8GHz wireless system, providing a 10-15 meter range for unrestricted performances. When using the built-in wireless system for your performances, be sure to avoid interference from other wireless systems and keep the receiver unit within line-of-sight of the NES-1.

Step-by-step guide:

1. Press the unlock button once to open the compartment door automatically.



2. Grasp the receiver unit with your thumb and index finger, and remove the receiver unit from the dock.



Wireless receiver

3. Gently push the compartment door to close it.
4. Press and hold the power button on the receiver unit to turn it on.



5. Press and hold the TX button on the NUX NES-1 to activate the built-in transmitter. Release the button when the wireless indicator appears.



Wireless indicator



Wait a second or two for the transmitter unit and receiver unit to pair automatically. When successfully paired, the indicator on the receiver unit will remain solid green.



Green

6. Before connecting the receiver unit to your amplifier or mixer, ensure the amplifier or mixer is turned off or the volume is set to a low level. Play the NES-1, then gradually adjust the volume on the amplifier or mixer to the desired level.

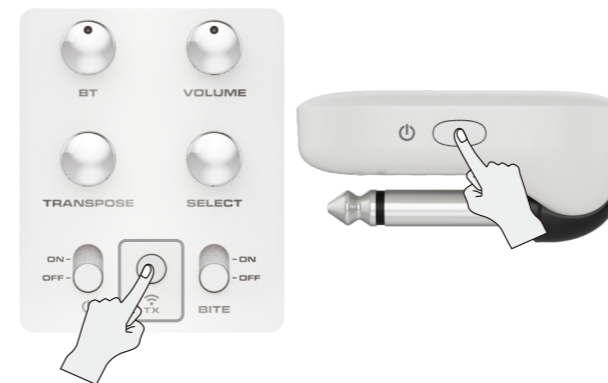


Wireless receiver

Amplifier

Tips:

1. During breaks, press [TX] once to pause wireless transmission. Press again to resume when ready to play.
2. If you encounter strong interference or are pairing the NES-1 with a new receiver unit, reset the match-ID by pressing and holding the [TX] button and the power button on the receiver unit for 8 seconds.



The wireless indicator and the receiver unit's indicator will flash during the process. Once completed, the indicator on the receiver unit will stay solid green.

Store and Recharge the Receiver unit

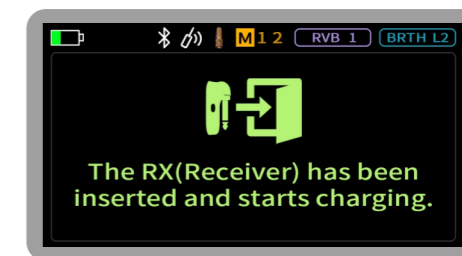
1. After your performance, turn off the amplifier or mixer, unplug the receiver unit, and power it off by pressing and holding the power button.
2. Fold the plug on the receiver unit and press the unlock button on the NES-1 once to open the compartment door automatically.
3. Grasp the receiver unit with your index finger and thumb, then place it back in the receiver dock.



Wireless receiver

4. Gently push the compartment door to close it.

5. To charge the receiver unit with the NES-1, either leave the NES-1 turned on, put it into sleep mode, or keep it plugged in for recharging.

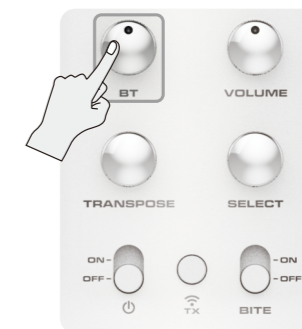


Bluetooth Audio

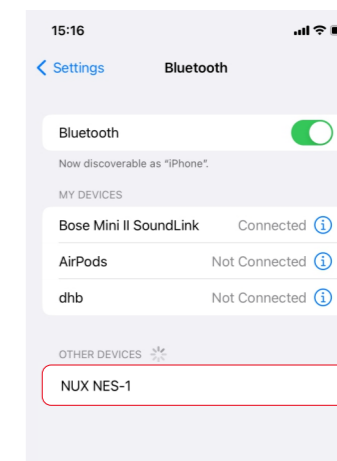
The NES-1 features Bluetooth audio Streaming. You can pair your phone or tablet with the NES-1 and stream backing tracks to play along with.

Step-by-step guide:

1. Press and hold the [BT] button to activate the built-in Bluetooth. When activated, the Bluetooth icon "BT" will appear on the display.



2. Navigate to the Bluetooth settings menu on your phone or tablet, find the NUX NES-1, and tap to establish the connection.



3. Once the connection is established, use the [BT] knob to adjust the playback volume.

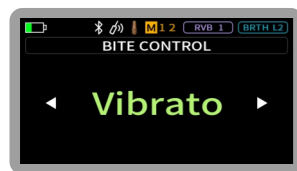
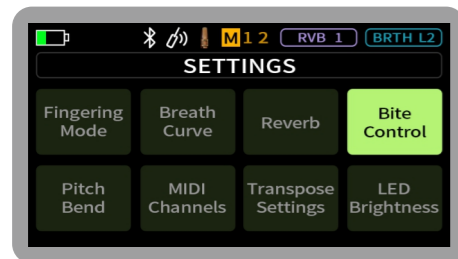
Bluetooth MIDI


In addition to Bluetooth Audio, the NES-1 also offers Bluetooth MIDI functionality. This is useful when using Bluetooth MIDI-enabled tutorial apps or connecting to your DAW software for MIDI recording.

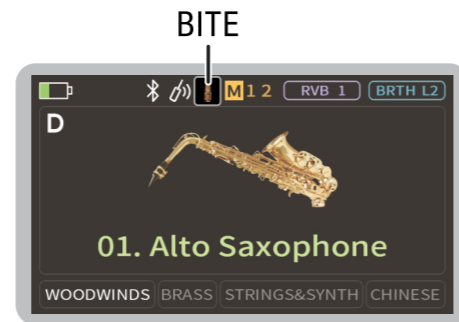
BITE Function



The NES-1 is equipped with a breath sensor and an imitation reed pressure controller. It mimics a saxophone's pitch changes based on your pressure. Activate this feature, and all instruments' pitch will automatically drop by a semitone. Keep a firm bite on the mouthpiece for consistent pitch. For portamento, adjust your bite for a smooth transition from low to standard pitch. Beyond pitch control, you can also manage vibrato. Use the pitch function to control pitch and speed or switch to vibrato mode in the settings menu for automatic vibrato.

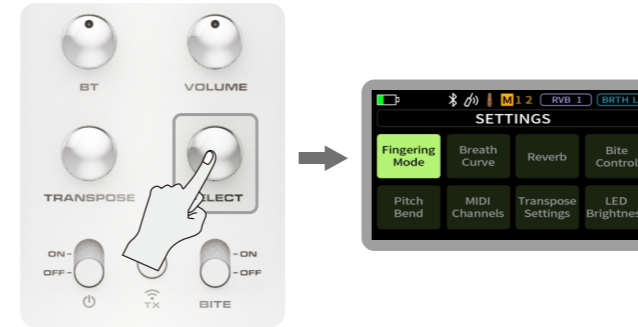


Slide the [BITE] switch to the ON position to activate the BITE function. When the BITE function is active, the BITE indicator “” will appear on the screen.



System Menu

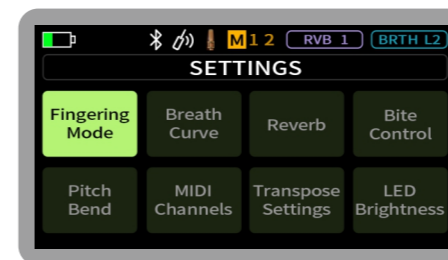
Press and hold the [SELECT] knob to access the System menu. The System menu includes options for Fingering Mode, Breath Curve, Reverb, Bite Control, Pitch Bend, MIDI Channels, Transpose Settings, LED Brightness, Language, Sensitivity, Factory Reset, and Version.



Rotate the [SELECT] knob to navigate through highlighted submenus. Press the [SELECT] button once to enter submenu configuration. Rotate the [SELECT] knob to make adjustments. After configuring, press the [SELECT] knob to save the settings. Press the [TRANPOSE] knob once to return to the previous level.

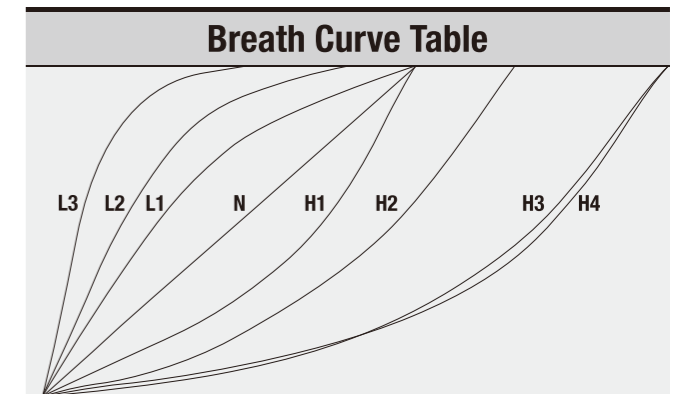
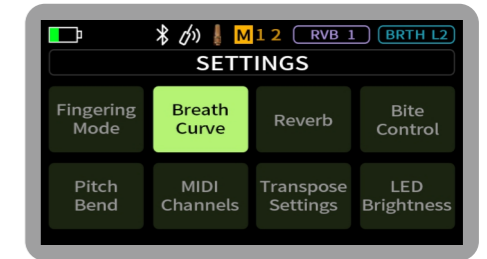
Fingering Mode

The NES-1 has two fingering modes: SAX (default) and Trumpet. To switch to trumpet fingering, go to the Fingering Mode submenu and make the change.



Breath Curve

The NES-1 offers 8 breath levels. L3 is the most sensitive, meaning even weak breath produces a loud sound, while H4 is the least sensitive, requiring a harder breath to make the sound loud. Before changing the breath level, we recommend trying each level starting from L3 and setting it to your desired sensitivity.



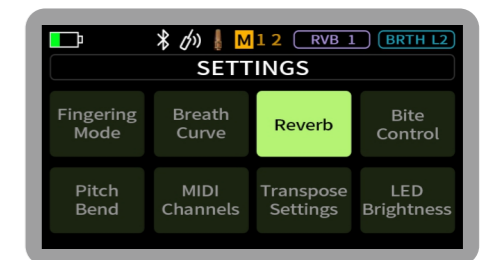
Quick Configuration:

Simultaneously press the [Octave Up] key and the [SELECT] knob to adjust the breath level.



Reverb

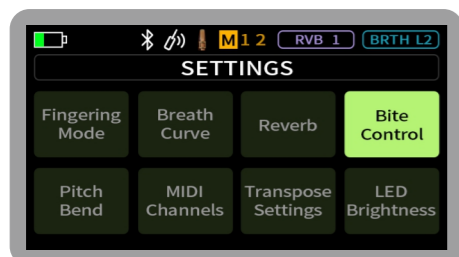
The NES-1 gives you control over 8 reverb levels.



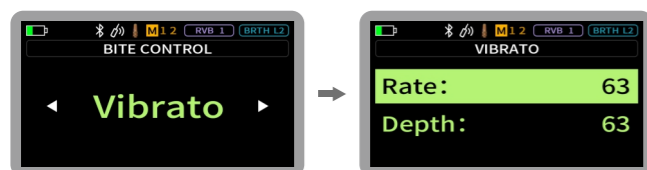
Besides adjusting it in the system menu, there's a quick way—simply press the [Octave Up] key and the [TRANPOSE] knob at the same time to fine-tune the reverb level.



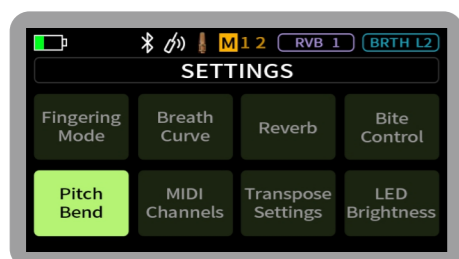
Bite Control



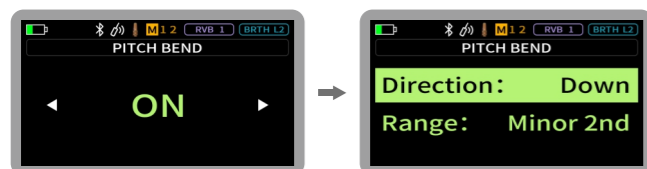
In the Bite Control menu, you can configure it to be either Half Tone or Vibrate. When set to Vibrate, you can fine-tune the rate and depth of the vibration.



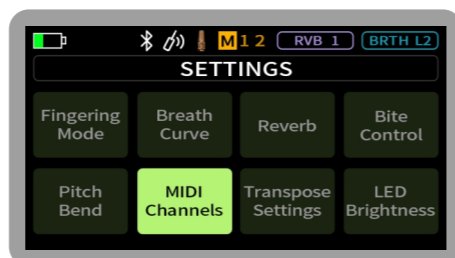
Pitch Bend



In the Pitch Bend menu, you can configure the behavior of the [Pitch Roller], including turning it ON (default) or OFF, and setting the pitch roller's direction and range. When adjusting the pitch roller's direction and range, use the [TRANPOSE] knob to make your selections.

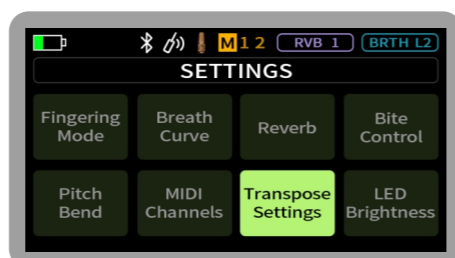


MIDI Channels



In the MIDI Channels menu, you can set the MIDI channel from 1 (default) to 16.

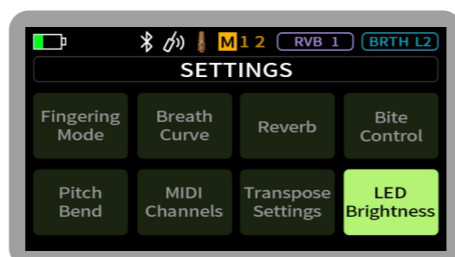
Transpose Settings



The NES-1 provides two Transpose options: 01 (default) and 02. When set to 02, all instruments' keys will be adjusted to their most common keys, while when set to 01, all instruments are in the same key.

Note: Whenever you use the [TRANPOSE] knob to change the key, the Transpose option automatically reverts to 01 (all instruments are in the same key.).

LED Brightness

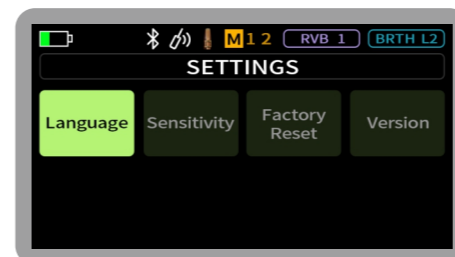


In the LED Brightness menu, you can adjust the brightness of the display 1 or choose to turn it off.

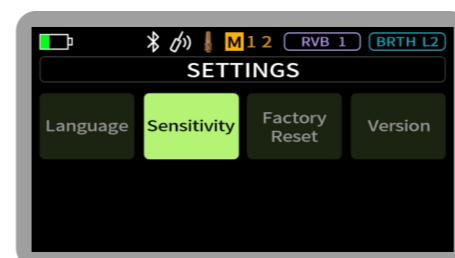


Language

As of now, there are two languages available: English and Chinese. If you are learning Chinese, you can change the language to Chinese.



Sensitivity

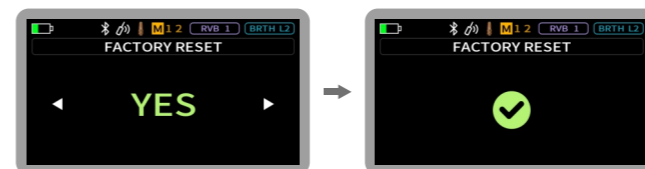


Sensitivity controls the timing gap between your playing and the produced sound. Proper configuration of the sensitivity will make your performance more flawless.

Factory Reset



To reset the NES-1 to factory settings, rotate the [SELECT] knob to YES, then press the [SELECT] knob to confirm.



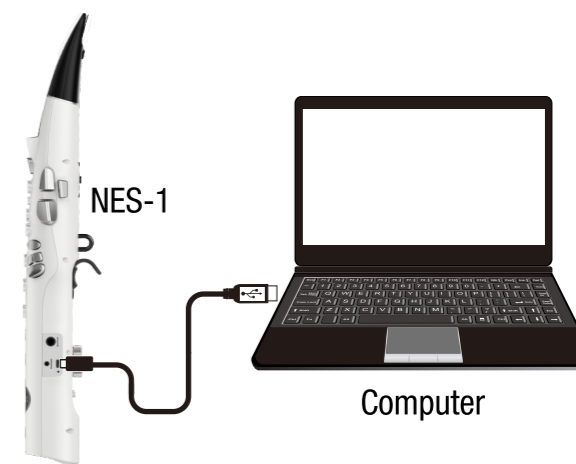
! IMPORTANT

Factory reset will restore the NES-1 to its factory state, purging all your preference settings.

Version



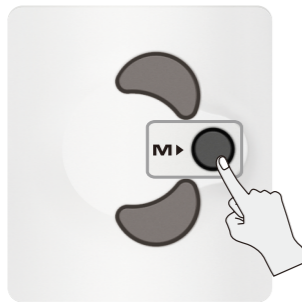
Displays the firmware version of the NES-1. Please visit the product page for information on new firmware and firmware update guides.



Advance Functions

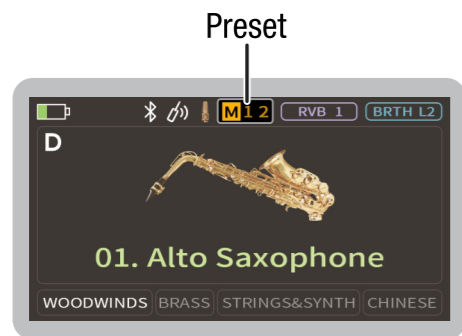
Tone Presets

The NES-1 offers 3 presets : M, 1 and 2., allowing you to save and quickly recall them during your performance. **Press and hold the [M] button, then short press the [SELECT] button to activate the preset editing function.**



Save a Tone Preset

1. When the preset editing function is activated, the Preset Indicator will flash on the display, and the highlighted one is the current preset.



2. Rotate the [SELECT] knob to choose an instrument, then press the [SELECT] button again to save it to the current preset.
3. Short press the [M] button to switch to the next preset (M → 1 → 2), then repeat step 2 to save another preset.

Delete a Tone Preset

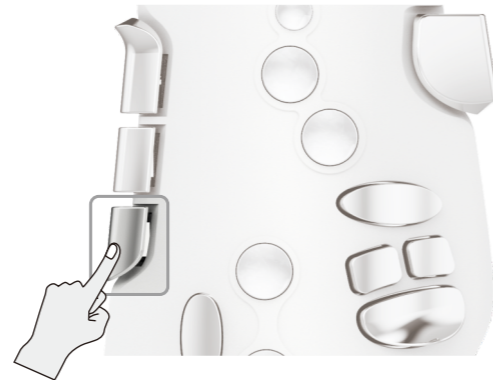
1. When the preset editing function is activated, the Preset Indicator will flash on the display, and the highlighted one is the current preset.
2. Short press the [M] button to switch to the preset that you want to delete, press the [TRANPOSE] knob once to delete the preset.

View Empty Preset Slot(s)

Press and hold the [M] button to view the saved presets. If any of the slots, such as [M 1 2], is highlighted, it indicates that the preset slot is taken.

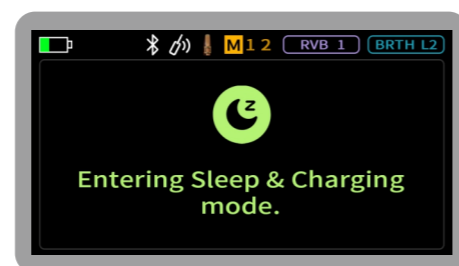
Bonus Fingering for Chinese Instruments

We have introduced several bonus fingerings for traditional Chinese instruments like Pipa and Guzheng. To enable the bonus fingering, set the instrument to Pipa or Guzheng, then press the key as indicated in the following figure.



Sleep & Recharge mode

When you're on the go between gigs, you can put the NES-1 into Sleep & Recharge mode to recharge the transmitter unit. Simply press the [SELECT] knob and the [TRANPOSE] knob simultaneously. When Sleep & Recharge mode is activated, you will see the following prompts on the display.



NOTICE:

1. When the receiver unit is fully charged, the NES-1 will shut off automatically.

2. Sleep & Recharge mode is inaccessible when the battery level of the NES-1 is less than 30% or the transmitter unit is not in the dock.



3. To exit Sleep & Recharge mode, press the [SELECT] knob and the [TRANPOSE] knob simultaneously.

Maintenance & Care for the NES-1

Regular maintenance and care are essential to ensure optimal performance and longevity of the NES-1, preserving its functionality and sound quality over time.

1. After using it, we suggest you to take off the mouthpiece, and clean it, you can clean it with running water.



Take off mouthpiece



Clean it with running water

2. Please use the provided syringe to pull in clean water, and then gently flush it into the small hole for airway cleaning. Be aware that the water will drain from the bottom water outlet of the NES-1.



Water outlet

3. Dry the mouthpiece with a cloth or paper and then place it back on.

Instrument List

Woodwind Instrument

| NO. | Name | Default tone |
|-----|---------------------|----------------|
| 1 | Alto Saxphone | E ^b |
| 2 | Alto Saxphone (Vib) | E ^b |
| 3 | Soprano Saxphone | B ^b |
| 4 | Tenor Saxphone | B ^b |
| 5 | Alto Sax Classical | E ^b |
| 6 | Sax Section | C |
| 7 | Clarinet | B ^b |
| 8 | Oboe | C |
| 9 | Bassoon | F |
| 10 | Flute | C |
| 11 | Piccolo | C |

Brass Instrument

| NO. | Name | Default tone |
|-----|---------------|----------------|
| 12 | Trumpet | B ^b |
| 13 | Mute Trumpet | B ^b |
| 14 | French Horn | F |
| 15 | Trombone | E ^b |
| 16 | Tuba | B ^b |
| 17 | Brass Section | C |

String Instrument

| NO. | Name | Default tone |
|-----|--------------------|--------------|
| 18 | Violin | C |
| 19 | Viola | C |
| 20 | Cello | C |
| 21 | Double Bass | C |
| 22 | Double Bass (Pizz) | C |
| 23 | Violin Section | C |
| 24 | String Section | C |

Electric Guitar

| NO. | Name | Default tone |
|-----|------------|--------------|
| 25 | E Guitar 1 | C |
| 26 | E Guitar 2 | C |

Synthesizer

| NO. | Name | Default tone |
|-----|----------|--------------|
| 27 | Synth 1 | C |
| 28 | Synth 2 | C |
| 29 | Synth 3 | C |
| 30 | Synth 4 | C |
| 31 | Synth 5 | C |
| 32 | Synth 6 | C |
| 33 | Synth 7 | C |
| 34 | Synth 8 | C |
| 35 | Synth 9 | C |
| 36 | Synth 10 | C |

Chinese Musical Instrument

| NO. | Name | Default tone |
|-----|----------|----------------|
| 37 | Suona | D |
| 38 | Hulusi | B ^b |
| 39 | Dizi 1 | D |
| 40 | Dizi 2 | D |
| 41 | Pipa | D |
| 42 | Chiba | D |
| 43 | Guqin | F |
| 44 | Guzheng | D |
| 45 | Xiao | F |
| 46 | Erhu | D |
| 47 | Matouqin | C |
| 48 | Bawu | G |
| 49 | Xun | G |
| 50 | Yangqin | C |

Specifications

| | |
|--------------------------------|--|
| Sensors | Pressure sensor & Air Pressure Sensor |
| Wireless Frequency Band | 5.8 GHz |
| I/O Ports | 1/4" Mono OUTPUT, 1/8" Phones, and USB-C port. |
| Charging | 5V/2A (maximum) |
| Battery Life | NES-1 - 6 hours; Receiver Unit - 4.5 hours. |
| Recharging Time | NES-1 - 2 hours (5V/2A) Receiver Unit (charged in the dock with NES-1) - 2 hours. |
| Dimensions | 515(L) x 107(W) x 88(H)mm |
| Weight | 852g |

Accessories

Carrying case, mouthpiece cover, rubber blower, USB-C cable, NUX Sticker, band, Charger, 2 mouthpieces, User manual.

*Specifications are subject to change without prior notice.

FCC Warning

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

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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

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

TX FCC RF exposure statement

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

RX FCC RF exposure statement

The equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance between 20cm the radiator your body.