

NUX OPTIMA-AIR

Nux NAI-5 Optima Air Acoustic Guitar Simulator User Manual

Model: OPTIMA-AIR

1. INTRODUCTION

The Nux NAI-5 Optima Air is an advanced acoustic guitar simulator pedal designed to provide optimal sound for electric guitarists seeking to emulate various acoustic guitar profiles. It features a powerful preamp with a 3-band equalizer, built-in impulse responses (IRs), reverb effect, and versatile connectivity options, including USB for software editing and recording. This manual provides detailed instructions for setting up, operating, maintaining, and troubleshooting your Optima Air pedal.

2. KEY FEATURES

- **Optimal Sound Quality:** Equipped with a preamp and 3-band equalizer (Bass, Middle, Treble) for precise tone shaping.
- **Impulse Response (IR) Technology:** Features 15 built-in acoustic guitar profiles and supports loading third-party IRs via USB.
- **Reverb Effect:** Integrated reverb for adding depth and ambiance to your sound.
- **Versatile Connectivity:** Includes 3.5mm input/output, 6.35mm Send/Return loop, XLR DI Out, and Micro B USB port.
- **Recording Interface:** Functions as an audio interface when connected to a computer via USB.
- **Compact and Durable Design:** Small, lightweight, and built with a metal body for reliability.
- **Preset Management:** 9 preset slots for saving and recalling your favorite settings.

3. PRODUCT OVERVIEW

3.1 Front Panel Controls

The front panel of the Optima Air features all essential controls for quick and intuitive access to its functions.



Figure 3.1: Front view of the Nux Optima Air pedal. This image displays the top surface of the pedal, highlighting the control knobs for Reverb, IR Level, Select, Gain, Bass, Middle, and Treble. The small digital display and the two footswitches (IR and AMP) are also visible, along with the NUX logo.

- **REVERB Knob:** Adjusts the level of the reverb effect.
- **IR LEVEL Knob:** Controls the volume of the selected Impulse Response.
- **SELECT Knob:** Used to navigate through and select different IR profiles or presets. Press to save.
- **GAIN Knob:** Adjusts the input gain of the preamp.
- **BASS Knob:** Controls the low-frequency equalization.
- **MIDDLE Knob:** Controls the mid-frequency equalization.
- **TREBLE Knob:** Controls the high-frequency equalization.
- **IR Footswitch:** Activates or deactivates the Impulse Response effect.
- **AMP Footswitch:** Activates or deactivates the AMP simulation.

- **Display:** Shows current IR number, preset number, and other operational information.

3.2 Side and Rear Panel Connections

The Optima Air offers various input and output options for flexible integration into your setup.

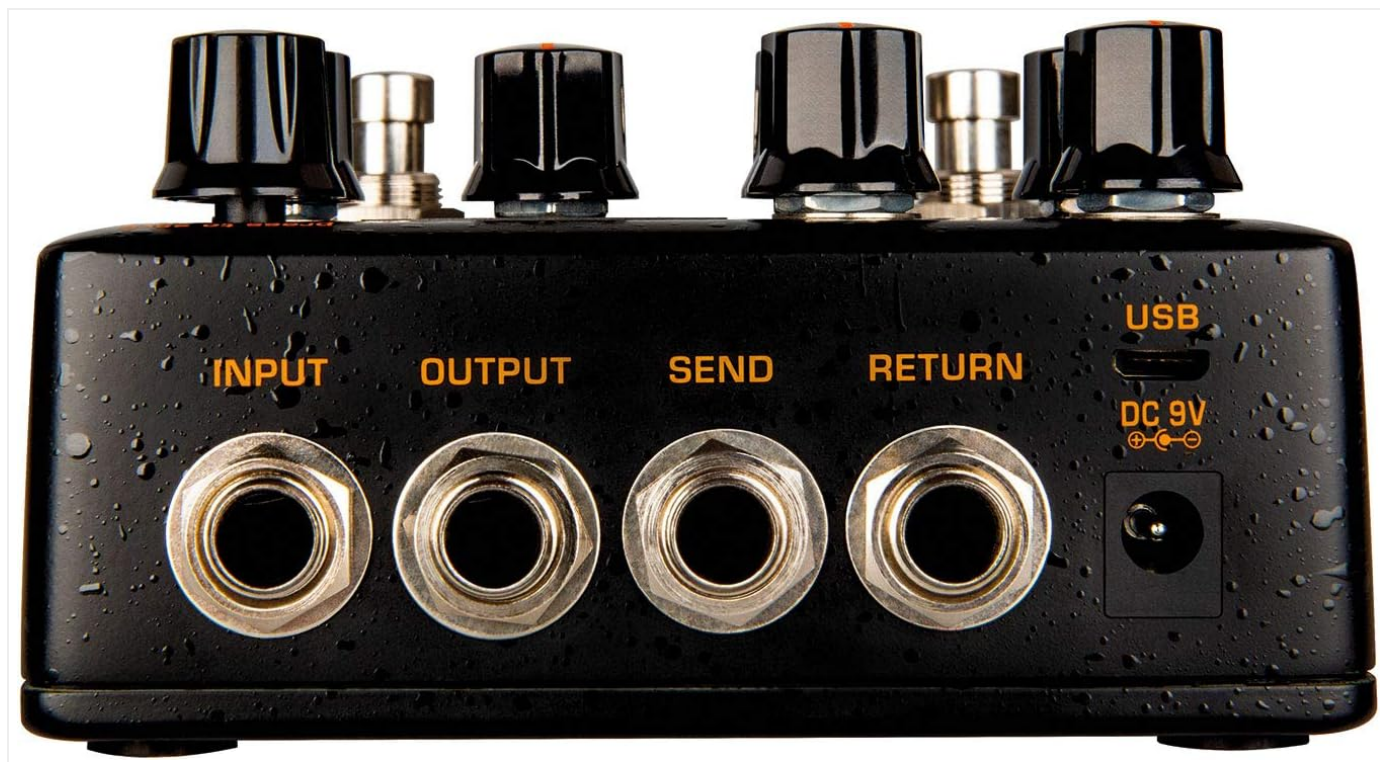


Figure 3.2: Rear view of the Nux Optima Air pedal. This image shows the back edge of the pedal with the 1/4-inch INPUT, OUTPUT, SEND, and RETURN jacks, along with the Micro B USB port and the DC 9V power input.

- **INPUT (6.35mm):** Main instrument input.
- **OUTPUT (6.35mm):** Main audio output to an amplifier or other device.
- **SEND (6.35mm):** Output for connecting to external effects pedals in an effects loop.
- **RETURN (6.35mm):** Input for returning signal from external effects pedals.
- **USB (Micro B):** Connects to a computer for firmware updates, IR loading, and using the pedal as an audio interface.
- **DC 9V:** Power input for a 9V DC power adapter (center negative).



Figure 3.3: Side view of the Nux Optima Air pedal. This image displays the left side of the pedal, featuring the XLR DI Out jack and two 3.5mm jacks labeled AUX IN and DI OUT (which also serves as a headphone output).

- **AUX IN (3.5mm):** Stereo input for connecting external audio sources like an MP3 player for practice.
- **DI OUT (XLR):** Balanced output for direct connection to a mixer or PA system.
- **3.5mm Output:** This jack serves as a headphone output for silent practice.

4. SETUP

4.1 Powering the Pedal

Connect a 9V DC power adapter (center negative, 300mA minimum) to the DC 9V input jack on the rear of the pedal. The pedal does not operate on batteries.

4.2 Basic Connections

1. Connect your acoustic or electric guitar to the **INPUT** jack.
2. Connect the **OUTPUT** jack to your amplifier, audio interface, or the input of another pedal.
3. For direct connection to a mixer or PA system, use an XLR cable from the **DI OUT** to the mixer's input.
4. For silent practice, connect headphones to the 3.5mm output jack.
5. To play along with backing tracks, connect your audio device to the **AUX IN** jack.

4.3 USB Connection for Software

Connect the Micro B USB port on the pedal to your computer using a USB cable. This allows you to:

- Load and manage third-party Impulse Responses (IRs).
- Update the pedal's firmware.
- Use the pedal as an audio interface for recording.

Download the dedicated editor software from the official NUX website for full functionality.

5. OPERATING INSTRUCTIONS

5.1 Manual Mode vs. Preset Mode

The Optima Air operates in two main modes:

- **Manual Mode:** The pedal's sound is determined by the current physical position of the knobs.
- **Preset Mode:** The pedal recalls saved settings from one of the 9 preset slots.

Toggle between Manual and Preset modes by pressing both footswitches simultaneously. The display will indicate the current mode.

5.2 Selecting IRs and Presets

- In Manual Mode, turn the **SELECT** knob to cycle through the built-in IRs (1-15) or user-loaded IRs.
- In Preset Mode, turn the **SELECT** knob to choose one of the 9 preset slots.

5.3 Adjusting Tone and Effects

- **GAIN:** Use the GAIN knob to adjust the input sensitivity and drive of the preamp.
- **EQ (BASS, MIDDLE, TREBLE):** Shape your tone using the 3-band equalizer knobs.
- **REVERB:** Adjust the REVERB knob to control the wet/dry mix of the reverb effect.
- **IR LEVEL:** Control the overall output volume of the IR simulation using the IR LEVEL knob.

5.4 Activating/Deactivating Effects

- Press the **IR footswitch** to toggle the Impulse Response effect on or off. The corresponding LED will indicate its status.
- Press the **AMP footswitch** to toggle the AMP simulation on or off. The corresponding LED will indicate its status.

5.5 Saving Presets

To save your current settings to a preset slot:

1. Adjust all knobs and footswitch settings to your desired tone.
2. Press and hold the **SELECT** knob until the display flashes, indicating it's ready to save.
3. Turn the **SELECT** knob to choose the desired preset slot (1-9).
4. Press the **SELECT** knob again to confirm and save the preset.

6. MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the pedal's surface. Avoid abrasive cleaners or solvents.
- **Storage:** Store the pedal in a dry environment, away from extreme temperatures and direct sunlight.
- **Power Supply:** Always use the correct 9V DC (center negative) power supply to prevent damage.
- **Firmware Updates:** Periodically check the NUX website for firmware updates to ensure optimal performance and access to new features.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
No sound output.	Incorrect connections, no power, volume knobs set to zero.	Check all cable connections (input, output, power). Ensure power supply is connected and functional. Verify GAIN and IR LEVEL knobs are not at minimum. Check amplifier volume.

Problem	Possible Cause	Solution
Sound is distorted or noisy.	High GAIN setting, incorrect power supply, faulty cables.	Reduce GAIN knob. Ensure you are using a regulated 9V DC (center negative) power supply. Try different cables.
IR effect not working.	IR footswitch is off, IR LEVEL is zero, no IR selected.	Press the IR footswitch to activate (LED should be on). Increase IR LEVEL. Use the SELECT knob to choose an IR.
Cannot connect to computer via USB.	Incorrect USB cable, driver issues, software not installed.	Ensure you are using a functional Micro B USB cable. Install the necessary drivers and editor software from the NUX website. Try a different USB port on your computer.
Pedal freezes or behaves erratically.	Firmware issue, power fluctuation.	Disconnect and reconnect power. Check for and install the latest firmware update from the NUX website.

8. SPECIFICATIONS

Feature	Detail
Model Number	OPTIMA-AIR
Sampling Quality	24-bit, 48 kHz
Acoustic Guitar Profiles	15 built-in
Preset Slots	9
Effects	Reverb, IR, AMP Simulation
Controls	Reverb, IR Level, Select, Gain, Bass, Middle, Treble knobs; IR, AMP footswitches
Inputs	6.35mm Input, 3.5mm Aux In, 6.35mm Return
Outputs	6.35mm Output, XLR DI Out, 3.5mm Headphone Out (shared with Aux In)
USB Port	Micro B USB
Power Supply	9V DC (center negative), 300mA minimum
Material	Metal (Body), Aluminum (Top)
Color	Black/Orange
Dimensions	105 x 115 x 58 mm (approx. 4.1 x 4.5 x 2.3 inches)
Weight	420 g (approx. 0.93 lbs)

9. WARRANTY AND SUPPORT

NUX products are designed and manufactured to the highest quality standards. For warranty information, technical support, or service inquiries, please refer to the warranty card included with your product or visit the official NUX website.

Keep your purchase receipt as proof of purchase for warranty claims.

Official NUX Website: www.nuxefx.com

© 2024 NUX. All rights reserved.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question