

NUX
Verdugo Series

Owner's Manual
使用手册



NAI-5

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Accuracy

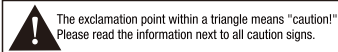
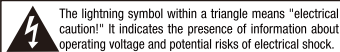
Whilst every effort has been made to ensure the accuracy and content of this manual, Cherub Technology Co. makes no representations or warranties regarding the contents.

WARNING!-IMPORTANT SAFETY INSTRUCTIONS BEFORE CONNECTING, READ INSTRUCTIONS

WARNING: To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

CAUTION: To reduce the risk of fire or electric shock, do not remove screws. No user-serviceable parts inside. Refer servicing to qualified service personnel.

CAUTION: This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of 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.



1. Use only the supplied power supply or power cord. If you are not sure of the type of power available, consult your dealer.
2. Do not place near heat sources, such as radiators, heat registers, or appliances which produce heat.
3. Guard against objects or liquids entering the enclosure.
4. Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage points or other risks. Refer all servicing to qualified service personnel.
5. Servicing is required when the apparatus has been damaged in any way, such as when the power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally or has been dropped.
6. The power supply cord should be unplugged when the unit is to be unused for long periods of time.
7. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles and at the point where they exit from the apparatus.
8. Prolonged listening at high volume levels may cause irreparable hearing loss and/or damage. Always be sure to practice "safe listening".

**Follow all instructions and heed all warnings
KEEP THESE INSTRUCTIONS!**

Overview

NUX Optima Air is a dual-switch acoustic guitar simulator with a preamp for acoustic and electric guitar players. It simulates the acoustic guitar profiles with the best-optimized sound depending on your guitar and pickup type.

IR loader combined with a preamp which is equipped with 3-band EQ and Gain controls.

And there is an additional one-knob-control Reverb effect. If you want to connect any effect pedal you can use the SEND/RETURN effects loop and add the Optima Air into your pedal chain.

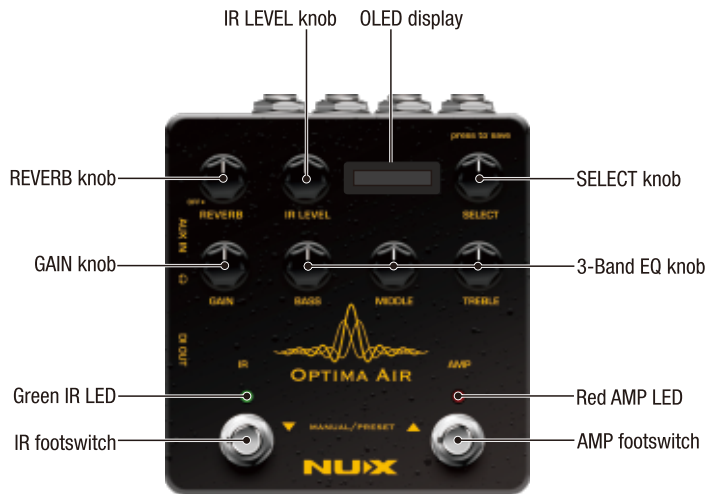
NUX Optima Air has a unique profile capture function, you can create your own acoustic guitar profile and create your own IR file by capturing your favorite acoustic guitar's sound.

There is an XLR DI output for direct line/mixer connection, headphones output for silent play and auxiliary input to connect a music player to play along.

Features

- 32bit/48kHz sampling quality
- Dual-switch Impulse Response and Pre-Amp controls
- 15 built-in acoustic guitar profiles with IR level control
- 9 preset slots
- Reverb effect
- Gain, Bass, Middle and Treble controls
- 6.35mm (1/4-inch) Mono jack input, and output
- 6.35mm (1/4-inch) Send/Return, effects loop
- 3.5mm (1/8-inch) auxiliary input
- 3.5mm (1/8-inch) headphone input
- XLR DI out
- Micro B USB port

Control Panel



Control Panel

REVERB knob



One Knob Reverb effect control. It adjusts the Dry/Wet and Decay parameters. Or you can turn it OFF by tweaking to 0.

IR LEVEL knob



Adjusts the Impulse Response file level, you can tweak it for a well balanced volume with preamp section.

OLED display

SELECT (Press to save) knob



In manual mode; you can choose the IR file. And you can save your customized preset by pushing the knob. (See: **Editing a Preset**)

GAIN knob



Adjusts the input signal level.

3-Band EQ Knob



BASS knob

Adjusts the low frequency level.

MIDDLE knob

Adjusts the selected middle frequency level.

TREBLE knob

Adjusts the high frequency level.

Green IR LED



It shows the ON/OFF status.

Red AMP LED



It shows the ON/OFF status.

Control Panel

IR footswitch



Manual Mode: Engage/disengage the selected IR file. Acoustic guitar simulation ON/OFF.

Preset Mode: Bank DOWN.

Also; if you are editing a preset, you can push the IR footswitch to **exit without saving**. (See: **Editing a Preset**)

AMP footswitch



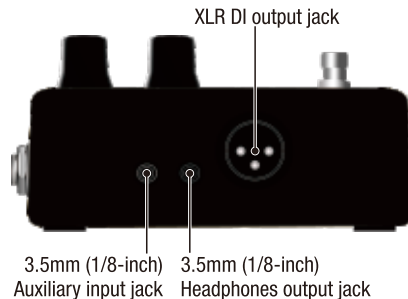
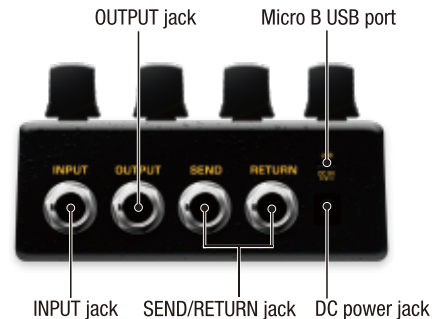
Manual Mode: Activates the pre-amp section. When you engage the AMP, you can use the Gain and the 3-band EQ.

Preset Mode: Bank UP.

Also; If you are editing a preset, while you changing the preset name you can push the AMP footswitch and move the cursor to the next selection area to choose a letter, number or symbol (See: **Editing a Preset**)

Push the **IR** and **AMP footswitches** together to switch the pedal mode to MANUAL or PRESET mode.

I/O Jacks



I/O Jacks

INPUT jack



6.35mm (1/4-inch) jack input.

OUTPUT jack



6.35mm (1/4-inch) jack output.

SEND/RETURN jack



6.35mm (1/4-inch) effects loop.

DC power jack



9V Negative TIP power adapter input.
(9V ⊕ — ⊖)

Micro B USB port



You can connect the pedal to your computer to use the Optima Air software to create, edit and save your presets. And update the pedal when a new firmware released. Visit nuxefx.com for the details.

3.5mm (1/8-inch) Auxiliary input jack



You can connect music player to play along with music.

3.5mm (1/8-inch) Headphones



For silent practice.

XLR DI Output jack

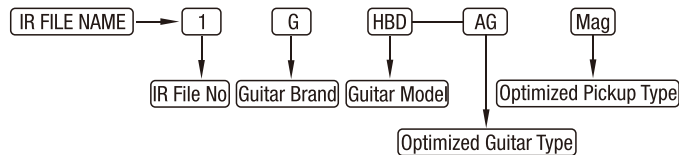


For direct connection to mixer (or PA system).

Optima Air Impulse Response (IR) Function

Optima Air is loaded with 15 impulse response files. Each impulse response file optimized for the guitar type and the pickup type. The IR file names are included the guitar profile, optimized guitar type, and the pickup type. Press the IR footswitch to activate/deactivate the IR function.

For Example:



Impulse Response Files List

IR No	Brand	Model	Optimized Guitar Type	Optimized Pickup Type
1	Gibson	Humming Bird	Acoustic	Magnetic
2	Gibson	Humming Bird	Electric	Magnetic
3	Gibson	Humming Bird	Acoustic or Electric	Piezo
4	Gibson	J15	Acoustic	Magnetic
5	Gibson	J15	Electric	Magnetic
6	Gibson	J15	Acoustic or Electric	Piezo
7	Martin	D45	Acoustic	Magnetic
8	Martin	D45	Electric	Magnetic
9	Martin	D45	Acoustic or Electric	Piezo
10	Martin	HD28	Acoustic or Electric	Piezo
11	Taylor	814	Acoustic or Electric	Piezo
12	Gibson	J200	Electric	Magnetic
13	Gibson	J45	Electric	Magnetic
14	Martin	HD28	Electric	Magnetic
15	Taylor	314	Electric	Magnetic

*All of the brand and model names mentioned on this page are Trademarks of their respective owners, which are in no way associated or affiliated with NUX Effects and Cherub Technology CO. LTD.

Optima Air Pre-Amp

NUX Optima Air equipped with a pre-amp that allows you to enhance your sound by using the 3-band equalizer. And you can adjust the input gain control to increase/decrease your guitar signal's level. Press the AMP footswitch to activate/deactivate the pre-amp function.



Manual Mode / Preset Mode

Press IR and AMP footswitches at the same time to change the pedal mode. You will see the IR file name on the screen in manual mode, and the preset name in preset mode.



In manual mode; you can adjust everything manually, and use the IR and AMP footswitches to engage the function. If you want to keep your tone, you can store it as a preset. You can create and save 9 presets and recall with BANK UP (AMP) and BANK DOWN (IR) footswitches.

Creating/Editing a Preset

In manual mode or preset mode, when you adjust any of the parameters you can save it by pushing the Select knob.

press to save



If you make any changes on the preset during the preset mode, the asterisk symbol will appear on the screen.

After you set your tone, push the select knob to choose a bank and write the preset's name.

1 My_tone

1* My_tone

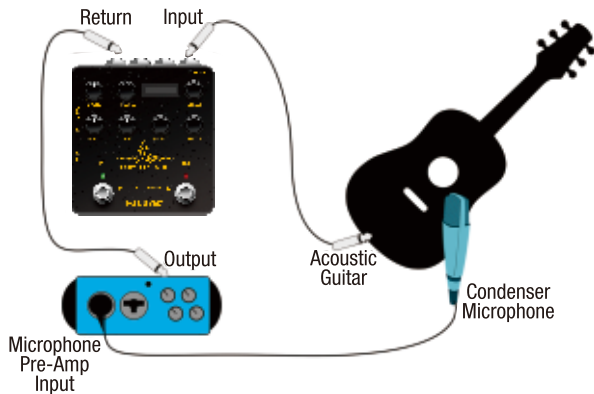
When you push the Select knob, you will see the preset name on the screen, turn the Select knob to choose a bank first. Then push the **AMP** footswitch and move the cursor to the next selection area and choose a letter, number or symbol and write the preset name. If you want to exit without saving, push the IR footswitch.

Capturing a Guitar Profile

Run the pedal in capturing mode; press the IR footswitch and hold, plug in the power cable.

You need to use a condenser microphone for better result. Connect the acoustic guitar to the Optima Air's input, place the microphone and connect to a microphone preamp. And connect the microphone preamp's output to the Optima Air's Return (Please check the picture).

Make sure everything's connected, and you are all set to capture.



Capturing a Guitar Profile

You can see the input level and the return level on the pedal screen, make sure the levels are not reaching to the MAX (Peak) level, or too low to capture it. Usually, 60% to 80% is the best level for capturing.

You can press the IR footswitch when you are ready. It will countdown from 3 to 1 then you could start to play guitar to send the audio signal to Optima Air to capture and process. Just play as clean as you can, and use finger position or chords you are playing most of the time. Capturing record will take 10 seconds, you can also see it on the screen, the RED AMP LED will start blinking when the recording is done. You can press the AMP footswitch to save, or you can press the IR button to restart the capturing.

Specifications

- Sampling rate: 48kHz
- A/D Converter: 32bit
- Signal Processing: 32bit
- Frequency Response: 20Hz~20kHz- ± 1 dB
- Maximum input level: 3.8Vrms(+13.8dBu)
- Signal Delay: 1ms
- Maximum output level: 3.8Vrms(+13.8dBu)
- Dynamic Range: 104dBu
- THD+N Ratio: 0.035% @ 1Vrms,1kHz
0.1% @ 1.5Vrms,1kHz
1% @ 3.8Vrms,1kHz
- Input Impedance: 5M Ω
- Output Impedance: 1k Ω
- Return Impedance: 5M Ω
- Send Impedance: 100 Ω
- Power: 9V DC(Negative tip,Optional ACD-006A adapter)
- Current Draw: < 200mA
- Dimensions: 105mm(L) x 115mm(W) x 58mm(H)
- Weight: 420g

Accessories: User manual, Warranty card

*Specifications and features are subject to change without notice.

请注意！重要安全说明。
在连接使用前，阅读以下说明。

警告：为减少火灾或触电的危险，请勿将本产品置于雨中或潮湿的地方。

注意：为避免火灾或触电等危险，请勿擅自拆卸本产品。维修本产品内部部件对于非专业人员来说较为困难，若有损坏请交给专业维修人员处理。

注意：本产品已经过测试，证明符合FCC规则第15部分的B级数字设备的限制规定。操作应符合以下两个条件：（1）本产品不会产生有害干扰。（2）本产品必须接受任何干扰，包括可能会导致非正常操作的干扰。

1. 建议使用NUX ACD-006A电源适配器（需另购），如需搭配其它品牌电源，请务必按照产品标识的规格搭配电源适配器。如果您不确定可用的电源类型，请咨询您的经销商。
2. 请勿放置在热源附近，如散热器、电热器，或其它产生高热量的设备。
3. 请勿让液体、灰尘及其它物体进入本产品。
4. 请勿尝试自行维修本产品。如需维修，请联系我司售后热线或交给专业的维修人员。
5. 当本产品遭遇电源线或插头损坏、不明物体进入、进水等情况时，请谨慎使用并主动联系售后维修。
6. 如果长时间不使用本产品，应拔掉电源线。
7. 避免踩踏电源线，避免过度绷紧电源线。
8. 人耳长时间接收高音量声音可能会导致无法挽回的听力损害，请始终保持“安全聆听”。

请遵守所有的指示和注意所有警告并保留这些说明！



www.nuxefx.com

Made in China

产品简介

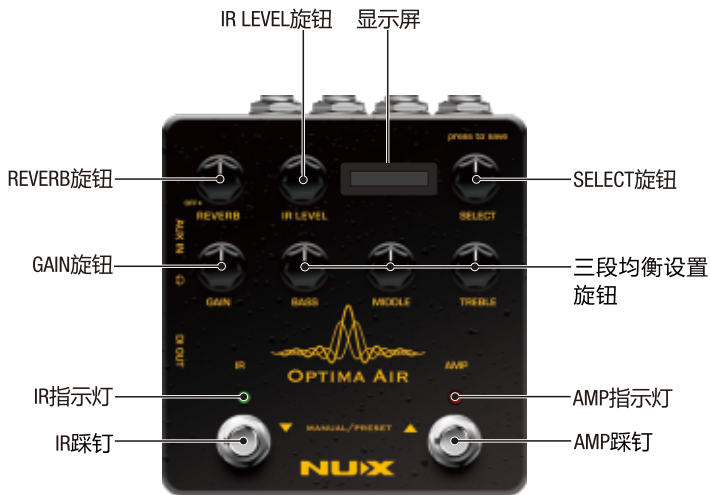
NUX Optima Air是一款带前级放大器的箱琴模拟效果器。无论您使用的是电吉他还是电箱琴吉他，无论您吉他配备的是压电式拾音器还是线圈拾音器，它都能惟妙惟肖地还原其所模拟的电箱琴音色特征。前级放大器部分除了最常用的增益调节外还搭载了三段均衡设置，此外本产品还有一键式混响效果控制器。

Optima Air拥有丰富的输入输出接口。您可以使用SEND/RETURN组合接口将其它效果器或效果器组接入；DI OUT接口直出调音台或PA系统；AUX-IN接口辅助音频输入；耳机接口可用于静音练习或录音。最后也是最重要的，Optima Air还支持多达八款电箱琴DIY音色采样。

产品特点

- 32bit/48kHz高品质采样率。
- 支持自主采样，操作简便快捷。
- 前级放大器与箱琴模拟二合一效果器。
- 24个冲击响应存储位：15个出厂预设，9个用户预设。
- 一键混响效果，双踩钉独立控制，三段均衡调节，配备显示屏。
- 丰富的接口：输入输出接口、SEND/RETURN效果回路、DI直出XLR接口、AUX-IN接口、耳机接口。

控制面板



控制面板

REVERB旋钮



一键混响效果调节旋钮。

IR LEVEL旋钮



调节箱琴模拟信号（湿音）与吉他信号（干音）的输出混合比。

显示屏

显示操作信息。

SELECT旋钮



选择旋钮和保存按钮。预设模式下可快速切换预设；编辑模式下可快速切换采样文件。同时这个旋钮还是保存按钮（详见预设设置）。

GAIN旋钮



增益旋钮，调节输入信号强弱。

三段均衡设置旋钮



BASS旋钮：用于调节低频信号强弱。
MIDDLE旋钮：用于调节中频信号强弱。
TREBLE旋钮：用于调节高频信号强弱。

IR指示灯（绿色）



箱琴模拟效果指示灯。

AMP指示灯（红色）



前级放大指示灯。

控制面板

IR踩钉



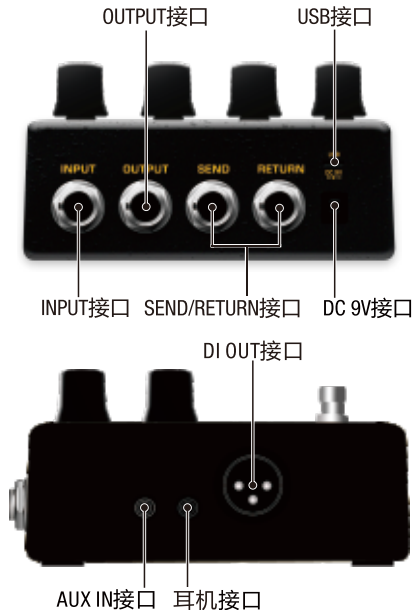
编辑模式下控制箱体模拟功能的开启与关闭。
预设模式下，用于向下切换预设的组别。

AMP踩钉



编辑模式下控制前级放大器的开启与关闭。
预设模式下，用于向上切换预设的组别。此外，这个踩钉还能在保存预设时切换光标位置。

I/O接口



INPUT接口



6.35mm输入接口。

OUTPUT接口



6.35mm输出接口。

SEND/RETURN组合接口



6.35mm效果回路组合接口。

DC 9V接口



9V直流电源接口，内负外正。建议选用NUX ACD-006A电源适配器。

I/O接口

USB接口



Micro-USB接口，请使用质量合格的数据线连接电脑来升级固件以及使用配套的编辑软件。更多详情请访问cn.nuxefx.com。

AUX IN接口



3.5mm音频输入接口，可连接外部音频播放设备输入伴奏。

耳机接口



3.5mm音频输出接口，可连接耳机做静音练习或通过连接外部录制设备录音。

DI OUT接口

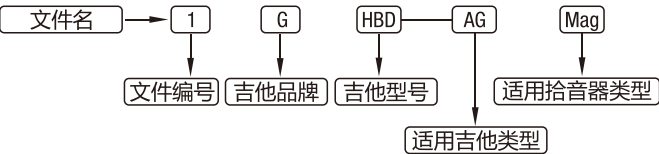


输出平衡信号，可直连调音台或扩音系统。

箱琴模拟功能（编辑模式）介绍

Optima Air 箱琴模拟功能内置了15组出厂采样预设文件以及9组用户采样预设（出厂默认空白），您可以依据您所使用的吉他及其拾音器类型选择所需的预设文件并在此基础上调试出令您满意的音色并保存为预设以备后用。

出厂采样文件命名方式详解



出厂采样文件表

编号	吉他品牌	吉他型号	适用吉他类型	适用拾音器类型
1	Gibson	Humming Bird	电箱琴	线圈拾音器
2	Gibson	Humming Bird	电吉他	线圈拾音器
3	Gibson	Humming Bird	电箱琴和电吉他	压电式拾音器
4	Gibson	J15	电箱琴	线圈拾音器
5	Gibson	J15	电吉他	线圈拾音器
6	Gibson	J15	电箱琴和电吉他	压电式拾音器
7	Martin	D45	电箱琴	线圈拾音器
8	Martin	D45	电吉他	线圈拾音器
9	Martin	D45	电箱琴和电吉他	压电式拾音器
10	Martin	HD28	电箱琴和电吉他	压电式拾音器
11	Taylor	814	电箱琴和电吉他	压电式拾音器
12	Gibson	J200	电吉他	线圈拾音器
13	Gibson	J45	电吉他	线圈拾音器
14	Martin	HD28	电吉他	线圈拾音器
15	Taylor	314	电吉他	线圈拾音器

前级放大功能介绍

Optima Air内置了放大功能，您可以通过调节三段均衡及增益旋钮来调整音色。



编辑模式与预设模式介绍

本产品开机默认为编辑模式，如果要切换至预设模式，请同时踩下IR踩钉和AMP踩钉。



编辑模式下屏幕显示的是出厂采样文件。编辑模式下您可以调整任意参数：使用IR踩钉和AMP踩钉开启或关闭箱琴模拟功能和前级放大器，转动各个旋钮来获取最佳音色。编辑好的音色可以直接保存为预设，本产品提供了9个用户预设存储位置。

创建/编辑预设

在编辑模式和预设模式下，均可以通过按SELECT旋钮来保存更改。

press to save



SELECT

预设模式下如果微调了参数，预设编号数字后会出现“*”标。如需保存更改，连续按两次SELECT旋钮，放弃保存微调请踩IR踩钉一次。

1 My_tone

1* My_tone

更改预设存储位置名称

进入预设保存界面后，预设存储位置数字下会出现一个闪动的横光标，此时，您可以通过转动SELECT旋钮来调整存储位置，确认好存储位置后，您可通过踩AMP踩钉一次来切换光标位置，然后再转动SELECT旋钮选择合适的字符来更改预设名称。（注：预设名称最长为八个字符。）

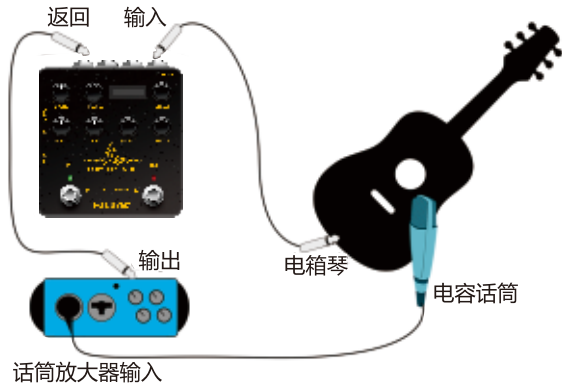
电箱琴采样指南

进入采样模式：

踩住IR踩钉同时接入电源。

进入采样模式后，IR指示灯会持续闪烁，此时屏幕会显示输入（IN）与反馈信号（RE）的强度。请勿在信号强度过低或过高的时候进行采样，我们建议您信号强度在60%~80%之间进行采样以获取最佳采样。

开始采样前请准备好以下设备：电容话筒、话筒放大器、备采电箱琴，并按下图所示的方式将设备连接好。



电箱琴采样指南

准备妥当后请按如下步骤进行采样：

- 1.踩IR踩钉一次，此时屏幕开始三秒读秒，读秒结束后您便可以开始演奏录音（将吉他信号送入本产品）。
- 2.整个录音过程（“±RECORDING”进度条由0%-100%）会持续约10秒左右，我们推荐您使用熟悉指法及和弦来录音。
- 3.录音完毕后踩AMP踩钉一次保存录音，保存过程（“DE-CON...” 进度条由0%-100%）大概会持续10秒。
- 4.屏幕会提示PRESS SELECT旋钮以确认保存，确认需要保存请按一次SELECT旋钮；如需重新采样可直接踩IR踩钉放弃保存并回到第一步。
- 5.确认完毕后，再转动SELECT旋钮选择采样存储位置。
- 6.最后再按一次SELECT旋钮完成采样工作。完成采样工作后本产品会自动返回到第一步，此时如果您不需要再采样其它电箱琴，可断开电源退出采样模式。

技术规格

- 采样率: 48kHz
- 数模转换精度: 32bit
- 信号处理精度: 32bit
- 频率响应范围: 20Hz~20kHz - ±1dB
- 最大输入电平: 3.8Vrms(+13.8dBu)
- 系统延迟: 1ms
- 最大输出电平: 3.8Vrms(+13.8dBu)
- 动态范围: 104dBu
- 总谐波失真加噪声: 0.035% @ 1Vrms,1kHz
0.1% @ 1.5Vrms,1kHz
1% @ 3.8Vrms,1kHz
- 输入阻抗: 5MΩ
- 输出阻抗: 1kΩ
- 回路阻抗: 5MΩ
- 发送阻抗: 100Ω
- 电源规格: 9V直流，内负外正，选配ACD-006A
- 需求电流: < 200mA
- 产品尺寸: 105mm (长) x 115mm (宽) x 58mm (高)
- 产品净重: 420g

随机附件：使用说明书、保修卡。

*技术规格如有变更，恕不另行通知。

质量承诺

亲爱的 **NUXX** 用户：
在您使用 **NUXX** 产品时，请仔细阅读产品说明书，当您有疑问和困难时，请拨打售后服务热线：
400-990-9866

- 一周内出现质量问题可退货退款
- 一年内出现质量问题可免费维修
- 一月内出现质量问题可调换
- 终身享有咨询和维修服务
- [请向销售商索取正规发票并予以保存]

换修政策

- 一、包换政策：
- 1、消费者通过正规授权渠道购买的产品，自购机之日起1个月之内，在正常使用情况下出现非人为的产品性能故障、且产品外观及包装保持完好，可向所购机的经销商换机。
- 2、消费者在换机时应出示由经销商开出的购机凭证，否则经销商可以不予更换。
- 二、保修政策：
- 1、消费者通过正规授权渠道购买的产品(以发票所示销售方为准)，自购买之日起1年内，若出现非人为损坏的性能故障，可享受免费维修服务。
- 2、对于超过1年或人为及不可抗力因素造成损坏的产品， 我司可提供有偿维修服务。

*本售后政策仅适用于中国大陆地区，其它国家及地区以当地售后政策及法律法规为准。

合格证
Certificate

检验员
Inspector

名称
Name 箱琴模拟效果器
及前级放大器

型号
Type **NAI-5**


生产日期
Date

本产品经检验合格
This product is inspected and approved.
执行标准: Q/WKDZ 001-2020
Product is certificated with Q/WKDZ 001-2020

有关产品中所含有害物质的说明

为了控制和减少电器电子产品废弃后对环境造成的污染，本资料就本公司产品中所含的特定有害物质及其安全性予以说明。
本资料适用于2016年7月1号以后本公司所制造的产品。

环保使用期限



此标志适用于在中国国内销售的电子信息产品，表示环保使用期限的年数。所谓环保使用期限是指在制造日起的规定期限内，产品中所含的有害物质不致引起环境污染，不会对人体、财产造成严重的不良影响。环保使用期限仅在遵照产品使用说明，正确使用产品的条件下才有效。不当的使用，将会导致有害物质泄漏的危险。

产品中有害物质的名称及含量

部件名称		有害物质					
		铅(Pb)	汞(Hg)	镉(Cd)	六价铬(Cr(VI))	多溴联苯(PBB)	多溴二苯醚(PBDE)
主体	塑胶件	○	○	○	○	○	○
	五金件	×	○	○	○	○	○
	硅胶件	○	○	○	○	○	○
	内置电路板	×	○	○	○	○	○
附件	*交流电源适配器、线缆	×	○	○	○	○	○

*表示某些产品可能不含有这些项目，上表当中的信息仅在产品含有这些项目时适用。

本表格依据SJ/T 11364的规定编制。
○：表示该有害物质在该部件所有均质材料中的含量均在GB/T 26572规定的限量要求以下。
×：表示该有害物质至少在该部件的某一均质材料中的含量超出GB/T 26572规定的限量要求，因根据现有的技术水平，还没有什么物质能够代替它。

保护环境
如果需要废弃本产品，请遵循本地相关指引，请勿随意丢弃或作为生活垃圾处理，以避免对环境造成污染。

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