

Revelator io24

2-channel audio interface for streamers,
podcasters, and music creators

用于流媒体、播客和音乐创作的 2-channel 音频接口

Owner's Manual 用手手册





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1 Overview 概述

1.1 Introduction 介绍



Thank you for purchasing the Revelator io24 audio interface! Revelator io24 is the perfect audio interface for live streaming or podcasting, and is a powerful recording solution for voice-overs and music production in your home studio. It's designed to deliver polished, professional-sounding results with ease. Once you've registered your Revelator io24 at my.presonus.com, you'll be able to download your drivers, a complimentary copy of Studio One Artist, additional plug-ins, content, and more. It's our gift to you for becoming a PreSonus customer.

We suggest you read this manual to familiarize yourself with the features and applications for your Revelator io24 before trying to connect it to your computer. This will help you to avoid problems during installation and use.

Throughout this manual you will find **Power User Tips**. These tips and tricks will help you to become a Revelator io24 expert—as well as help you to better understand audio terminology, so you can get the most from your purchase and get the best sound quality possible.

Thanks for joining the PreSonus family. We're glad you're here.

感谢您购买Revelator io24音频接口。Revelator io24 是用于现场直播或播客的完美音频接口，也是您在家庭工作室中，用于配音和音乐制作的强大录音解决方案。其优美的设计可轻松提供专业的声音效果。在 my.presonus.com 一旦注册了您的 Revelator io24，您可以下载您的驱动程序、免费的Studio One Artist、额外的插件、内容等。这是我们送给已成为PreSonus客户您的礼物。

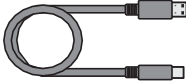
我们建议您：在尝试将Revelator io24连接到您的电脑之前，请先阅读本手册以熟悉它的功能和应用。这将有助于您在安装和使用过程中避免问题。

在这本手册中，您会发现有一些高级用户提示。这些提示和技巧将帮助您成为Revelator io24的专家，并同时也帮助您更好地理解音频术语，从中您获得的会越来越多，并尽可能使音质达到最佳效果。

感谢您加入PreSonus大家庭。我们很高兴您在这里。

1.2 What is in the box 产品清单

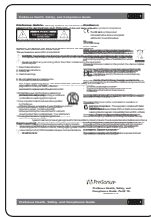
- **Revelator io24** USB audio interface
- Revelator io24 USB 音频接口



- **1M USB-C-to-USB-A Cable.** Use this to connect your Revelator io24 to a USB port on your computer or a powered USB hub.
- 1M USB-C转USB-A电缆。用它来连接您的Revelator io24到您的电脑上的USB端口或供电的USB集线器。



- **Quick Start Guide.** Use this as a handy reference guide to your hardware features while you familiarize yourself with your new interface.
- 快速入门指南。当您熟悉您的新界面时，请用参考这个手册。



- **PreSonus Health, Safety, and Compliance Guide.** Legal language to cure your insomnia.
- PreSonus健康、安全和合规指南。法律语言可以治疗您的失眠症。

- **Warranty/Registration Card**
- 保修卡/注册卡

1.3 What is in your MyPreSonus account MyPreSonus 帐户有什么



There's more to your Revelator io24 than what comes in the box! Let's take a moment to register your Revelator io24 and download the digital products that come with it. These include:

产品清单中不仅仅有Revelator io24! 让我们花点时间来注册您的Revelator io24, 并下载它所附带的数字产品。这些产品包括。

- **Universal Control.** Unlock the StudioLive inside your Revelator io24 with Universal Control. This installation package also includes your audio driver controls that you will need to use advanced Revelator io24 features.
- **Studio One Artist.** Studio One Artist is our award-winning recording and production software. It's also designed to be intuitive and easy to use, so whether you're a seasoned professional or just starting out, Studio One Artist has the tools you need to make a great recording.
- **Studio Magic Bundle.** Over \$1000 USD worth of plug-ins, sounds, and more; Studio Magic supercharges your Studio One Artist experience!
- **Universal Control.** 用Universal Control解锁您 Revelator io24里面的StudioLive。这个安装包还包括您的音频驱动控制, 你将需要使用高级的Revelator io24功能。
- **Studio One Artist.** Studio One Artist是我们屡获殊荣的录音和制作软件。它的设计也很直观, 易于使用, 所以无论你是经验丰富的专业人士还是刚刚开始, Studio One Artist都有你需要的工具来制作一个好的录音。
- **Studio Magic Bundle.** 价值超过1000美元的插件、声音和更多; Studio Magic为你的Studio One Artist体验增色不少!

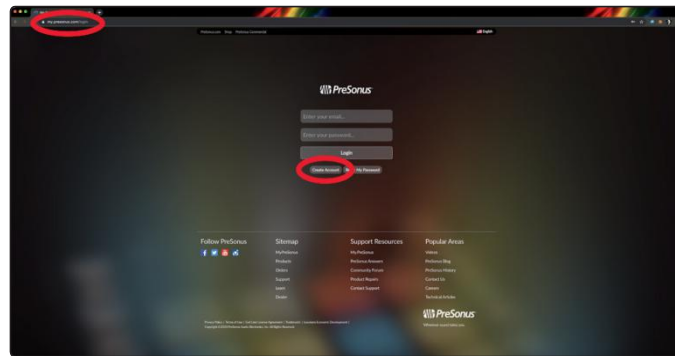
1.3.1 Step 1: Register Revelator io24 第一步: 注册Revelator io24

To download your digital products, you must first create a MyPreSonus account. This account lets you manage all your PreSonus product registrations, provides curated educational content, and is the portal to all tech support and service inquiries. Let's get started!

要下载您的数字产品, 您必须首先创建一个MyPreSonus帐户。这个账户可以让您管理您所有的PreSonus产品注册, 提供精选的教育内容, 并且是所有技术支持和服务咨询的门户。让我们开始吧!

1. In your Internet browser of choice, visit my.presonus.com and click "Create Account"

Power User Tip: If you already have a MyPreSonus account, please log in and skip to step 5.



1. 在您选择的互联网浏览器中，访问 my.presonus.com 并点击 "创建账户"

高级用户提示：如果您已经有一个MyPreSonus帐户，请登录并跳到第5步。

2. Fill in the form with the required information. Make sure to verify that you are, in fact, human and agree to our PreSonus Terms of Use. If you'd like to receive occasional emails about promotions and new video content, check that box now as well.

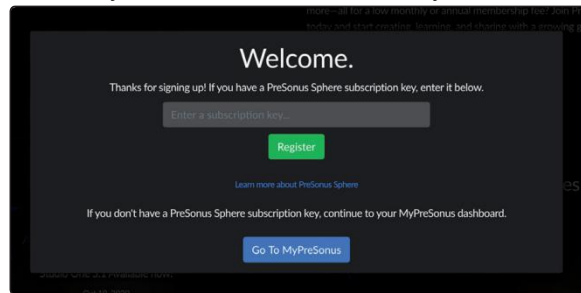
A screenshot of the 'Create Account' form. The form fields include First Name, Last Name, Country/Region (set to United States of America), Email, Password, and Confirm Password. Below the password fields, there is a checkbox for 'I'm not a robot' (Captcha) and two checkboxes for terms and conditions. The 'Save' button is at the bottom right. Red circles and arrows highlight the 'I'm not a robot' checkbox, the terms and conditions checkboxes, and the 'Save' button.

在表格中填写所需信息。请务必确认您本人信息，并同意我们的PreSonus使用条款。如果您想不定期收到有关促销活动和新视频内容的电子邮件，也请现在勾选该选项。

3. Click "Save."
点击 "保存"

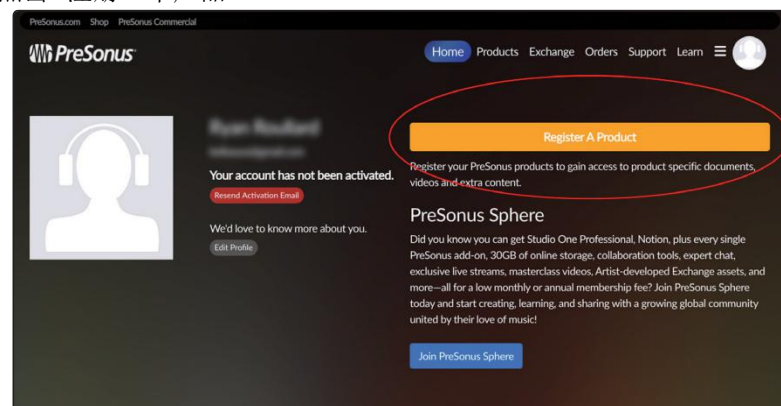
4. Click “Go to MyPreSonus” to log into your shiny new MyPreSonus account.

点击“进入MyPreSonus”，登录您的新MyPreSonus账户。



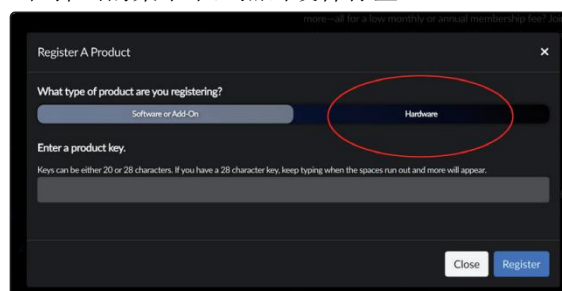
5. Click “Register a Product.”

点击“注册一个产品”。



6. In the pop-up menu, click on the Hardware tab.

在弹出的菜单中，点击硬件标签。



7. Select your purchase date and enter your Revelator io24 Serial Number. You can find your serial number on the bottom of your interface as well as on your Quick Start Guide.

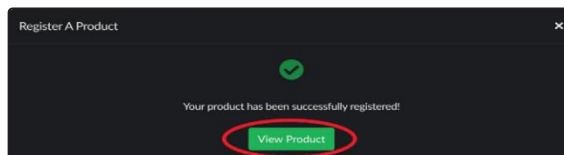
选择您的购买日期并输入您的Revelator io24序列号。

您可以在您的界面底部以及快速入门指南上找到您的序列号。

8. Click Register.

点击注册

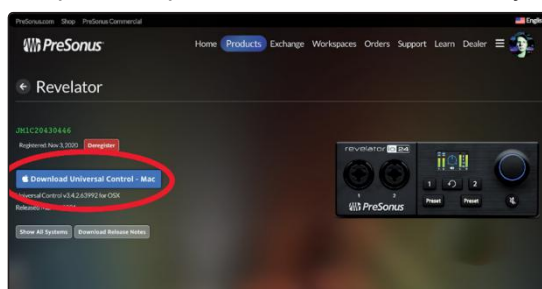
9. Click View Product to download your companion software.



点击查看产品，下载您的配套软件。

1.3.2 Step 2: Download and Install Universal Control 第二部：下载和安装 Universal Control

1. From the Revelator io24 product listing in MyPreSonus, click the "Download Universal Control" button at the top. MyPreSonus will scan your computer and present the correct installer for your operating system.

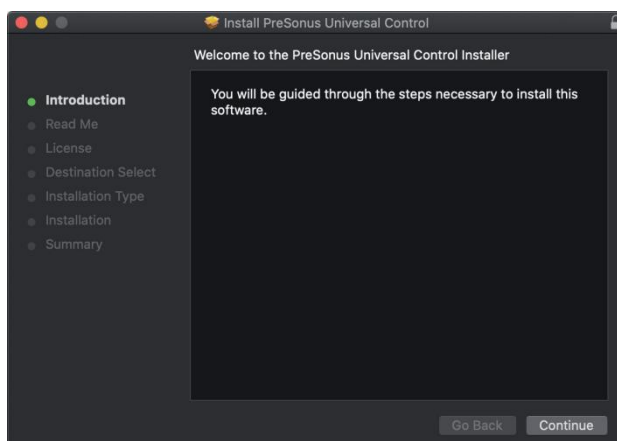


在 MyPreSonus 的 Revelator io24 产品列表中，点击顶部的 "下载通用控制" 按钮。MyPreSonus 将扫描您的电脑并为您的操作系统提供正确的安装程序。

2. Locate the Universal Control installer in your Downloads folder. Double click to open it.

在下载文件夹中找到通用控制的安装程序。双击来打开它。

3. Follow the onscreen instructions to install Universal Control.



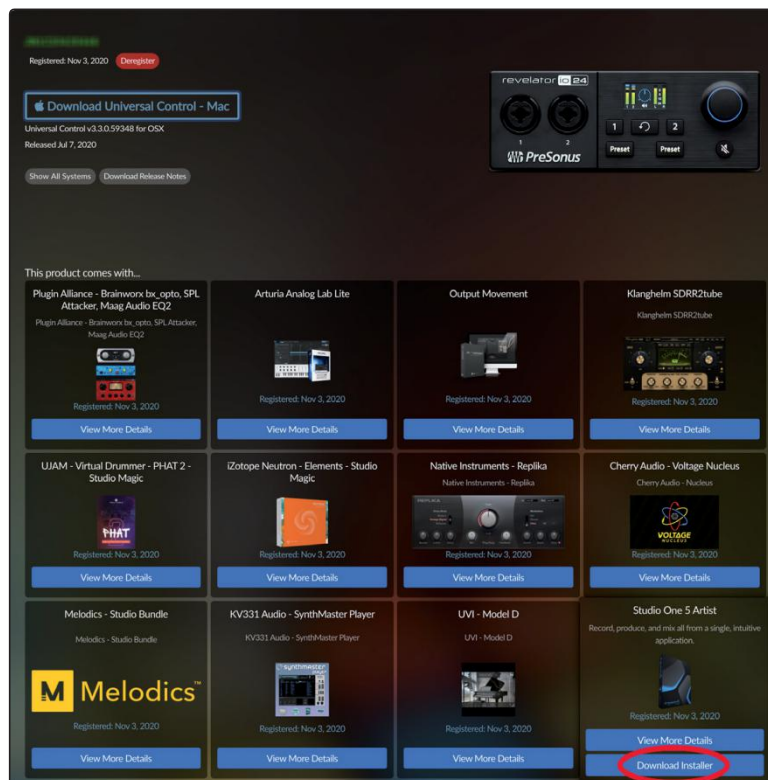
按照屏幕上的指示来安装 Universal Control。

See Section 3 for information and use instructions for all the advanced features available in Universal Control.

有关通用控制中所有高级功能的信息和使用说明，见第3节。

1.3.3 Step 3: Download and Install Studio One Artist (Optional) 第三步：下载和安装 Studio One Artist（可选项）

1. From the Revelator io24 product listing in MyPreSonus, locate Studio One Artist from the product listing. Quick links to every digital product that comes with your Revelator io24 will be listed here. Click the "Download Installer" button at the bottom of the Studio One Artist listing. MyPreSonus will scan your computer and present the correct installer for your operating system.



在 MyPreSonus 的 Revelator io24 产品列表中，从产品列表中找到 Studio One Artist。这里将列出与您 Revelator io24 配套的每个数字产品的快速链接。点击 Studio One Artist 列表底部的 "下载安装程序" 按钮。MyPreSonus 将扫描您的电脑并为您的操作系统提供正确的安装程序。

2. Locate the Studio One installer in your Downloads folder. Double click to open it.
在您的下载文件夹中找到 Studio One 的安装程序。双击来打开它。

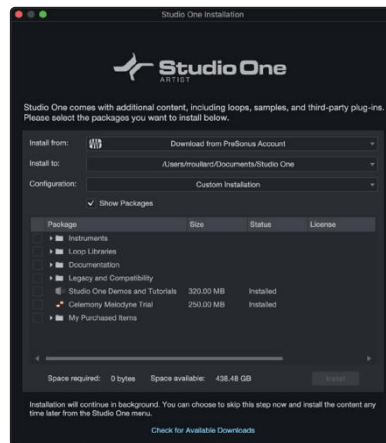
Windows: Launch the Studio One Artist installer and follow the onscreen instructions.

Mac: Drag the Studio One Artist application into the Applications folder on your Mac hard drive.

Windows. 启动 Studio One Artist 安装程序并按照屏幕上的指示操作。

Mac: 启动 Studio One 艺术家安装程序，并按照屏幕上的指示操作。将 Studio One Artist 应用程序拖入您的 Mac 硬盘上的应用程序文件夹。

3. Locate Studio One in your Applications and launch it. When Studio One is launched for the first time on your computer, it will communicate with your My. PreSonus account and verify your registration. To ensure a seamless authorization process, make sure to download your installer to the computer on which you will be using it, and be sure that your computer is connected to the Internet when you launch the application for the first time.



在您的应用程序中找到 **Studio One** 并启动它。当 **Studio One** 第一次在您的电脑上启动时，它将与您的 **My.PreSonus** 账户进行沟通，并验证您的注册。为了确保无缝的授权过程，请确保将安装程序下载到您要使用的电脑上，并确保您的电脑在第一次启动应用程序时连接到互联网。

Power User Tip: You may be prompted to enter your My.PreSonus user account information. Clicking “Remember Credentials” will allow you to have immediate access to any content you purchase from shop.presonus.com.

Studio One Artist comes bundled with an array of demo and tutorial materials, instruments, loops, and samples. The first time you launch Studio One Artist, you will be prompted to install its companion content. Select the content you wish to add and click “Install.” The content will automatically begin to download and install from your My.PreSonus user account.

Power User Tip: To select only a portion of the available content, click on “Show Packages.” From here you can customize your content installation.

See Section 8 for a Getting Started guide to help your start recording and mixing in Studio One Artist.

高级用户提示：您可能会被提示输入您的My.PreSonus用户账户信息。点击“记住证书”将立即允许您访问从 shop.presonus.com 购买的任何内容。

Studio One Artist 捆绑了一系列的演示和教程材料、乐器、循环和样本。当您第一次启动 Studio One Artist 时，您会被提示安装其配套内容。选择您想添加的内容，然后点击“安装”。这些内容将自动开始从您的 My.PreSonus 账户中下载和安装。

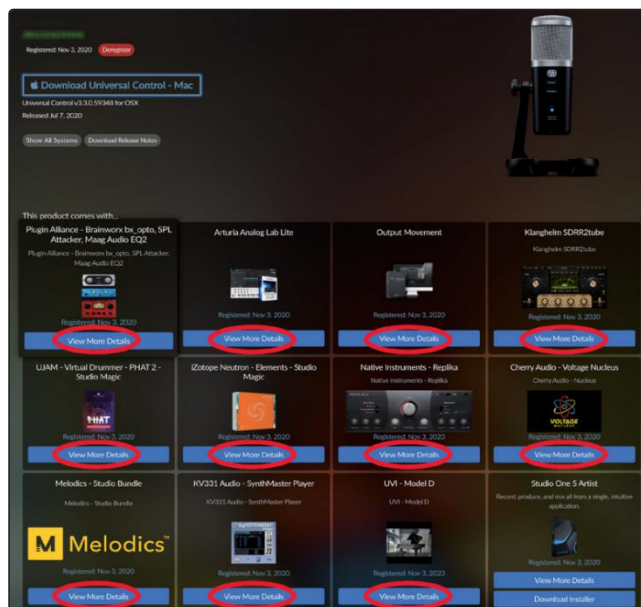
高级用户提示：要想只选择一部分可用的内容，点击“显示包”。从这里您可以定制您的内容安装。

请参阅第8节中的入门指南，以帮助您在 Studio One Artist 中开始录音和混音。

1.3.4 Step 4: Download and Install Studio Magic (Optional) 第四步：下载和安装 Studio Magic (可选项)

From the Revelatorio24 product listing in MyPreSonus, you will also find a complete list with links to all the Studio Magic products that came with your Revelator io24 registration. Click on the “View More Details” button below any product you’d like to install.

Studio Magic software is developed by many different manufacturers, so MyPreSonus will send you to their respective websites for download and installation.



在 MyPreSonus 的 Revelator io24 产品列表中, 您还会发现一个完整的列表, 其中有 Revelator io24 注册时附带的所有 Studio Magic 产品的链接。点击任何您想安装的产品下面的 "查看更多细节" 按钮。

Studio Magic 软件是由许多不同的制造商开发的, 所以 MyPreSonus 会把您送到他们各自的网站进行下载和安装。

2 Connections and Controls 连接和控制

2.1 Front Panel 前端面板



Microphone Inputs. Your Revelator io24 interface is equipped with high-quality microphone preamplifiers for use with all types of microphones. The Revelator io24 features XMAX-L solid-state microphone preamps that are optimized for bus power. Both input channels on your Revelator io24 interface are equipped with combo jacks. This convenient connector accepts either a 1/4-inch or an XLR connector.

Instrument / Line-Level Inputs. The 1/4-inch connectors on Channels 1 and 2 can be used with passive instruments (guitar, bass, etc.) or line-level devices (synthesizers, signal processors, etc.).

Please note: As with any audio input device, plugging in a microphone or an instrument, or turning phantom power on or off, will create a momentary spike in the audio output. Because of this, we highly recommend that you turn down the channel trim before changing connections or turning phantom power on or off. This simple step will add years to life of your audio equipment.

麦克风输入。您的Revelator io24接口配备了高质量的话筒前置放大器, 可以使用所有类型的话筒。Revelator io24 采用了 XMAX-L 固态话筒前置放大器, 对总线电源进行了优化。

Revelator io24 接口的两个输入通道都配备了组合插孔。这种方便的连接器可以接受1/4英寸或XLR连接器。

仪器/线路电平输入。通道1和2的1/4英寸连接器可用于无源乐器（吉他、贝斯等）或线路级设备（合成器）

或线路电平设备（合成器, 信号处理器等）

请注意：与任何音频输入设备一样, 插入麦克风或乐器, 或打开或关闭幻象电源, 将在音频输出中产生一个瞬间的尖峰。正因为如此, 我们强烈建议您在改变连接或打开或关闭幻象电源之前, 调低通道修饰。这个简单的步骤将使您的音频设备的寿命延长几年。



Multipurpose Encoder Knob. This is a lot more than a simple volume knob! It's also a button, and can be used to control many features of your Revelator io24:

- From the Home screen, press it to cycle through Headphone volume, Main volume, and Monitor Blend. Rotate to edit the selected option.
- From the Channel screen, press to cycle through +48v, Gain, and High-pass filter options. Rotate to edit the selected option.

多用途编码器旋钮。这不仅仅是一个简单的音量旋钮! 它也是一个按钮, 可以用来控制您的 **Revelator io24** 的许多功能。

-在主屏幕上, 按它可以在耳机音量、主音量和监听混合之间循环。转动它来编辑所选的选项。

-在 "通道 "屏幕上, 按它可以在+48v、增益和高通滤波器选项之间循环。转动来编辑所选的选项。

2.1.1 The Screen 屏幕

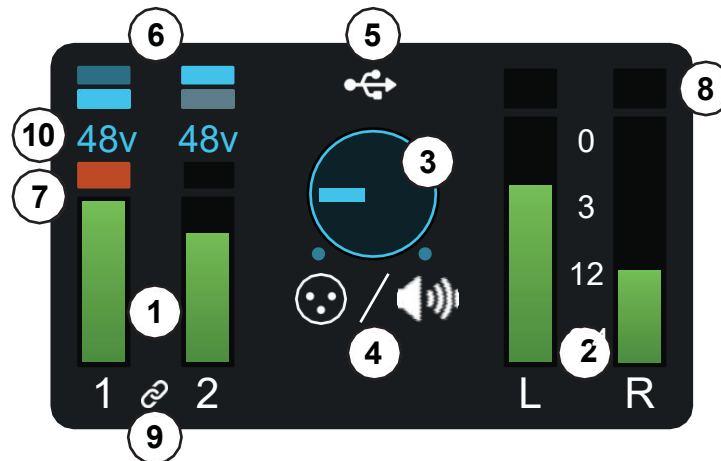
The screen displays metering, preset selection, and other important information.

The following information is displayed on Revelator io24's Home screen.

This is the default screen you'll see when you first use Revelator io24.

该屏幕显示测光、预置选择和其他重要信息。以下信息显示在 Revelator io24 的主屏幕上。

这是您第一次使用Revelator io24时看到的默认屏幕。



1. **Input Meters.** These meters indicate the input level of the analog inputs on your Revelator io24. The red Clip indicator will light when your input signal reaches -0.5 dBFS. At this level, the signal will begin to overload the analog-to-digital converters and exhibit signs of clipping. Use the gain controls to keep the signal below this level.

输入仪表。这些仪表显示您的 Revelator io24 的模拟输入的输入电平。当您的输入信号达到-0.5dBFS时，红色的剪辑指示灯将亮起。在这个电平上，信号将开始超过模数转换器的负荷，出现削波的迹象。使用增益控制来保持信号低于这个电平。

2. **Output Meters.** These meters indicate the signal level received from the first two driver returns (Main Left/Right). These meters display the signal level before the main output level control.

输出仪表。这些仪表显示了从前两个驱动器返回（主左/右）接收的信号电平。这些仪表显示的是主输出电平控制之前的信号电平。

3. **Output Volume/Blend.** This indicates output volume of the currently-selected output (Headphones or Mains) just like a volume knob—as well as Monitor Blend.

输出音量/融合，混合。这表示当前选择的输出（耳机或主控）的输出音量，就像音量旋钮一样，也表示监听混合。

4. **Encoder status.** Lets you know if the Encoder Knob is controlling Headphone output level, Main output level, or monitor Blend (direct vs. hardware.)

编码器状态。让您知道编码器旋钮是否在控制耳机输出电平，主输出电平，或监听混合（直接与硬件。）

5. **USB Status indicator.** Confirms that Revelator io24 is connected via USB and functioning normally.

USB状态指示灯。确认Revelator io24通过 USB 连

接并正常工作。

6. **Preset indicators.** These lights indicate the preset selection of both channels. If presets are bypassed, both will be dark.

预设指示灯。这些灯表示两个通道的预置选择。如果预设被绕过，两个都会变暗。

7. **Input Clip indicator.** Lights red when the incoming signal is too loud for the converter, causing distortion.

输入剪辑指示灯。当输入的信号对转换器来说太大，导致失真时亮红灯。

8. **Output Clip indicator.** Lights red when the outgoing signal is too loud.

输出剪辑指示灯。当输出信号过大时亮红灯。

9. **Stereo link indicator.** This icon informs you that Channels 1 and 2 are configured for use as a single stereo channel for use with stereo instruments like keyboards. This feature can be activated in Universal Control, or by pressing both channel buttons on Revelator io24 simultaneously.

立体声链接指示灯。这个图标告诉您，通道1和2被配置为单一的立体声通道，以便与立体声乐器如键盘一起使用。这个功能可以在通用控制中激活，或者同时按下Revelator io24的两个通道按钮。

10. **+48v indicator.** Informs you if +48v power has been activated—required for most condenser microphones.

+48v指示灯。通知您是否激活了+48v 电源--大多数电容式话筒需要。



WARNING: Phantom power is only required for condenser microphones and can severely damage some dynamic mics, especially ribbon mics. Therefore, switch phantom power off when it is not required. Consult the user documentation that came with your microphone before engaging phantom power.

XLR connector wiring for phantom power:

Pin 1 = GND Pin 2 = +48V Pin 3 = +48V



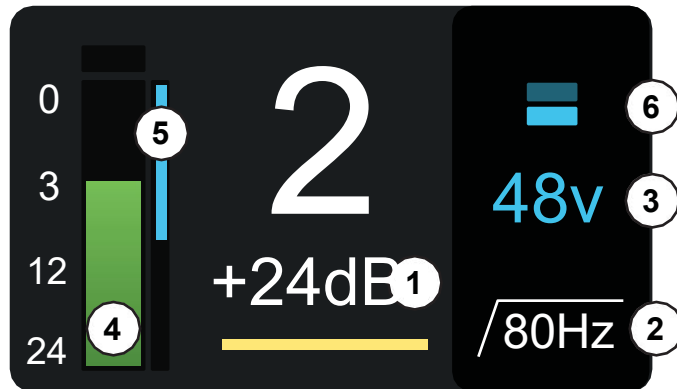
警告：只有电容式话筒才需要幻象电源，而且会严重损坏一些动态话筒，特别是带状话筒。当不需要幻象电源时，请将其关闭。在使用幻象电源之前，请查阅您的话筒附带的用户文件。

幻象电源的XLR连接器的接线：

Pin1=GND Pin2=+48V Pin3=+48V

The following information is displayed on Revelator io24's Channel screens. Press Channel Select Buttons 1 or 2 to bring it up. Press the Back button to return to the Home screen.

以下信息显示在Revelator io24的频道屏幕上。按频道选择按钮1或2来调出它。按 "后退 "按钮返回到主屏幕。



From the Channel screen, the Encoder Knob can be pressed to cycle through the following options:

在通道屏幕上，可以按编码器旋钮来循环浏览以下选项：

1. **Gain.** Rotate the Encoder to turn input Gain up or down. Use this to bring your connected instrument or microphone signals up or down to suitable recording levels. Avoid aforementioned clipping.

增益。转动编码器，将输入增益调高或调低。用它来使你连接的仪器或麦克风信号上升或下降到合适的录音水平。避免前述的削波。

2. **High-pass filter 80Hz.** Rotate the Encoder to turn the High-pass filter on and off. This can be used to cut low-end rumble and other unwanted low frequencies from your recordings.

高通滤波器80Hz。转动编码器来打开或关闭高通滤波器。这可以用来减少录音中的低端隆隆声和其他不需要的低频。

3. **+48v Phantom Power.** Rotate the Encoder to enable/disable +48v power for attached condenser microphones.
+48v幻象电源。旋转编码器来启用/禁用连接电容式话筒的+48v电源。

Other information on the Channel screen includes:

通道屏幕上的其他信息包括：

4. **Input Meter.** This meter indicates the input level of the selected channel on your Revelator io24, just like on the Home screen.

输入表。这个表显示您的 Revelator io24上所选通道的输入电平，就像在主屏幕上一样。

5. **Gain reduction meter.** If you're running any compression or limiting via Revelator io24's DSP (Digital Signal Processing), the amount of gain reduction being applied will be indicated by this blue meter.

增益降低表。如果您正在通过 Revelator io24 的 DSP（数字信号处理）运行任何压缩或限制，正在应用的增益降低量将由这个蓝色的仪表指示。

6. **Preset indicators.** These lights indicate the preset selection of the currently-selected channel, including none.

预设指示灯。 这些灯表示当前选择的通道的预设选择，包括没有。



Channel Select Buttons. Press to display information about Input 1 or input 2 on the screen.

通道选择按钮。 按一下，在屏幕上显示输入1或输入2的信息。

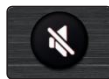


Back Button. Returns display on screen to default Home view.
后退按钮。 将屏幕上的显示返回到默认的主视图。



Preset Selectors. Cycles through presets for inputs 1 and 2, respectively. Press to cycle through Presets; press and hold to bypass Presets.

预设选择器。 分别在输入1和输入2的预置中循环。按一下，在预设中循环；按住不放，绕过预设。



Mute. Enables/Disables the Main Outs. Has no effect on Headphone Out.

静音。 启用/停用主输出。对耳机输出没有影响。

2.2 Back Panel



USB-C Port. Use this port to connect your Revelator io24 to your computer. While the Revelator io24 connects using USB-C, it is fully compatible with USB 2.0 and 3.0 connections. Use the USB-C to A cable that came with your Revelator io24 if your computer has a USB-A connection rather than a USB-C connection.

Please note: The Revelator io24 is backward compatible with USB 2.0 and USB 3.0 speed connections. USB 1.1 is not supported.

USB-C端口。 使用这个端口将您的 Revelator io24 连接到您的电脑。

虽然 Revelator io24 使用 USB-C 连接，但它与 USB 2.0 和 3.0 连接完全兼容。

3.0 连接。如果您的电脑有 USB-A 连接而不是 USB-C 连接，请使用您的 Revelator io24 附带的 USB-C 转 A 线。

请注意： Revelator io24 向后兼容 USB 2.0 和 USB 3.0 速度连接。不支持 USB 1.1。



Kensington Lock. Connect this port to a Kensington lock to prevent theft.

Kensington 锁。 将此端口连接到 Kensington 锁，以防止盗窃。



Headphone Output. Connect your headphones here. Level can be controlled from the Home screen using the Encoder.

耳机输出。 在这里连接您的耳机。可以在主屏幕上用编码器控制电平。



Main Outs. These are the Main outputs for the Revelator io24. The output level of the Main outputs is controlled by the Main level control on the front of the unit. Playback streams 1 and 2 are routed to these outputs.

主输出。 这些是 Revelator io24 的主输出。主输出的输出电平由设备前面的主电平来控制。播放数据流 1 和 2 路由到这些输出。



MIDI I/O. This is the MIDI input and output connections. MIDI stands for “Musical Instrument Digital Interface.” However, MIDI can be used for many things other than instruments and sequencing. The MIDI inputs and outputs allow connection to a variety of MIDI-equipped hardware, such as keyboard controllers, and can be used to send and receive MIDI Machine Control and MIDI Time Code.

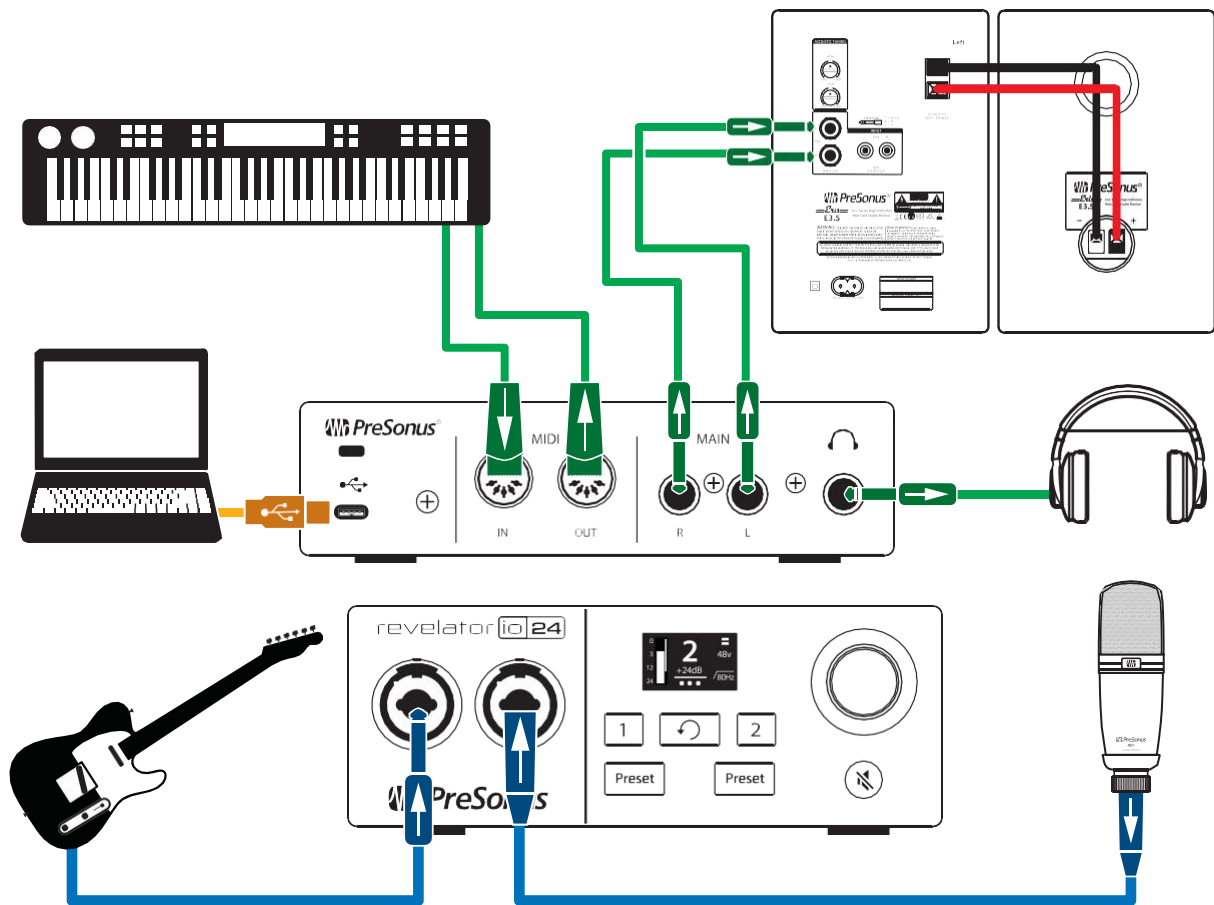
Note: MIDI does not carry audio signals but is frequently used to trigger or control an audio source, such as a virtual instrument or hardware synthesizer. You should ensure that MIDI data is correctly sent and received by the appropriate hardware or software. You may also need to route hardware sound sources' audio to the inputs of

your Studio-series interface. Please consult the User's Manual of your MIDI devices for help with MIDI setup and usage.

MIDI输入/输出。这是MIDI输入和输出的连接。MIDI是 "乐器数字接口 "的意思。然而，MIDI可以用于乐器和序列以外的许多东西。MIDI输入和输出允许连接到各种配备了MIDI的硬件，如键盘控制器，并且可以用来发送和接收MIDI机器控制和MIDI时间代码。

注意：MIDI不携带音频信号，但经常被用来触发或控制一个音频源，如虚拟乐器或硬件合成器。您应该确保MIDI数据被适当的硬件或软件正确发送和接收。您可能还需要把硬件声源的音频路由到Studio系列接口的输入。请查阅您的MIDI设备的用户手册，以获得有关MIDI设置和使用的帮助。

2.3 Connection Diagram 连接图



2.4 Standalone controls 单机控制

While many of the features available for your Revelator io24 can be found in Universal Control, critical controls are available right at your fingertips. Most of these settings can be changed from Universal Control to customize your Revelator io24 to your application and needs.

The most important thing to remember is that the Multipurpose Encoder on your Revelator io24 can be used for nearly everything! From either the Home or Channel screen, pressing the Encoder will cycle through the available options, and rotating it will adjust the parameters.

From the Home screen you can:

- Adjust your Headphone volume
- Adjust your Main Out volume
- Blend your mix between your input signal and the playback from your computer

And from the Channel screen you can:

- Set your mic level
- Toggle +48v phantom power
- Toggle the 80Hz High-pass filter

虽然 Revelator io24 的许多功能都可以在通用控制中找到，但关键的控制由您来控制。这些设置中的大多数可以从通用控制中进行更改，以便根据您的应用和需要定制您的 Revelator io24。

最重要的是要记住，您的 Revelator io24 上的多用途编码器几乎可

以用来做任何事情，在主屏幕或频道屏幕上，按下编码器将循环播放可用的选项。

在主屏幕或频道屏幕上，按编码器将循环浏览可用的选项，旋转编码器将调整参数。

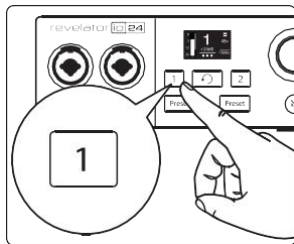
从主屏幕上，您可以：

- 调整您的耳机音量
- 调整您的主输出音量
- 混合您的输入信号和您的电脑播放的混合信号

在 "通道 "屏幕上，您可以：

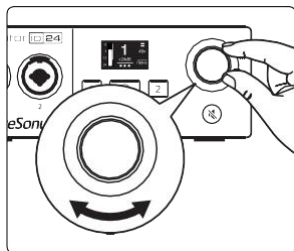
- 设置您的麦克风电平
- 切换+48v幻象电源
- 切换80Hz高通滤波器

2.4.1 Setting the Microphone Level 设置麦克风电平



To set your Revelator io24's input level, press the Channel button for the Channel you would like to use. Next, press the encoder to cycle through the available options. A yellow underline will indicate the currently-selected option. Once you've selected the Gain setting—it's shown below the Channel indicator number and measured in dB (decibels)—turn the Encoder to set the desired gain level.

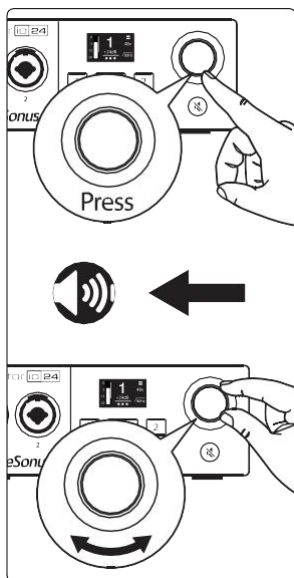
要设置Revelator io24的输入电平，请按您要使用的通道的通道按钮。您想使用的通道。接下来，按编码器循环查看可用的选项。一个黄色的下划线将表示当前选择的选项。一旦您选择了增益设置--它显示在通道指示器数字的下面，以dB（分贝）为单位--转动编码器来设置所需的增益水平。



PowerUser Tip: If your input level is too loud, the clip indicator will display in red above the input level meter. This means that your input signal is clipping, and will begin to sound distorted. If your input signal clips, it will overload the analog-to-digital converters and cause digital distortion. Digital distortion sounds terrible, and cannot be undone if recorded. Because of this, it's important to keep your eye on this indicator while you're setting your levels. Check out Section 9 for other recording tips.

电源用户提示： 如果您的输入电平太高，剪辑指示灯会在输入电平表上方显示为红色。这意味着您的输入信号正在削波，并将开始出现失真。如果您的输入信号被夹断，它将使模数转换器过载，并导致数字失真。数字失真听起来很糟糕，而且如果录制的话，是无法恢复的。正因为如此，在设置电平时，一定要注意这个指示灯。请查看第9节，了解其他录音技巧。

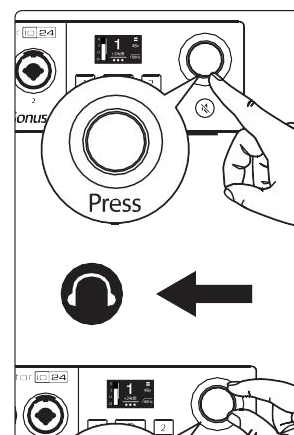
2.4.2 Setting Main Output level 设置主输出电平



By default, the Encoder knob on your Revelator io24 controls the output level of your Main Outputs—the outputs you have your speakers connected to. From the home screen, press the Encoder repeatedly until the speaker icon appears below the Volume indicator. Then rotate the Encoder to set the desired Main output level.

默认情况下，Revelator io24 的编码器旋钮控制主输出的输出电平--您的扬声器连接到的输出。在主屏幕上，反复按编码器，直到扬声器图标出现在音量指示灯下面。然后旋转编码器来设置所需的主输出电平。

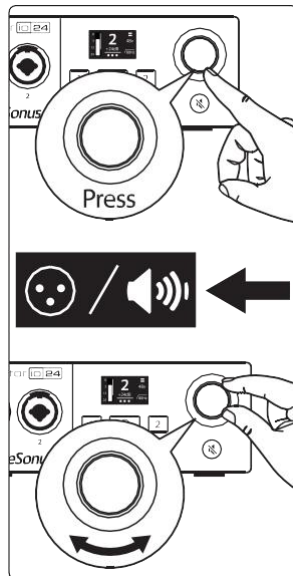
2.4.3 Setting Headphone level 设置耳机电平



From the home screen, press the Encoder repeatedly until the headphone icon appears below the Volume indicator. Then rotate the Encoder to set the desired Headphone output level.

从主屏幕上，反复按编码器，直到耳机图标出现在音量指示器下面。然后旋转编码器来设置所需的耳机输出电平。

2.4.4 Setting Monitor blend 设置监听设备混合



Revelator io24 provides an easy way to create a blend between your input signal and the playback from your computer. This lets you listen to your performance in real-time without any latency (delay).

From the home screen, press the Encoder repeatedly until the XLR/speaker icon appears below the Volume indicator. Then rotate the Encoder to set the desired monitor Blend balance.

Turning the knob to the left will increase the level of the input signal relative to the playback from your computer. Turning it to the right will increase the level of the playback from your computer relative to the input signal.

Power User Tip: Universal Control lets you create a custom mix between your input signals, main computer playback, and both stereo loopback audio channels.

So when you're ready to dial in your headphone mix, go to Section 6 to learn more!

Revelator io24提供了一个简单的方法，在您的输入信号和您的电脑播放之间建立一个混合。这可以实时聆听您的表演，而没有任何延迟（延时）。

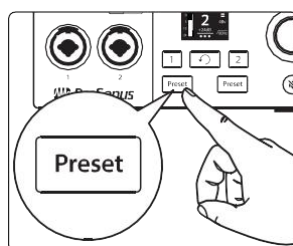
在主屏幕上，反复按编码器，直到 XLR/扬声器图标出现在音量指示灯下面。然后旋转编码器来设置所需的显示器混合平衡。

向左旋转旋钮将增加输入信号相对于电脑播放的电平。向右转将增加相对于输入信号而言的电脑播放电平。

强大的用户提示：通用控制可以让您在输入信号、主电脑播放和两个立体声回环音频通道之间创建一个自定义的混合。

因此，当你准备好拨弄你的耳机混音时，请到第6节去了解更多信息

2.4.5 Selecting Presets 预置选择



EQ and compression are the secret behind the professional broadcast studio sound we all know so well. Your Revelator io24 has you covered with 8 easy-to-use, professionally crafted processing and effects presets. These presets are designed to give you great-sounding results with no audio engineering experience required!

The first two presets can be accessed right from the Preset buttons on your Revelator io24. To cycle through them, press the Channel 1 or Channel 2 Preset buttons repeatedly. The default Presets for Channel 1 are Broadcast and Vocal. Channel 2's default presets are Broadcast and Acoustic Guitar.

When Channels 1 and 2 are linked for stereo operation, available factory presets include several options optimized for stereo recordings, including: Stereo Acoustic, Stereo Piano, Stereo DJ, and more!

EQ和压缩是我们所熟知的专业广播工作室声音背后的秘密。您的 Revelator io24 为您提供了8个易于使用、专业制作的处理和效果预设。这些预设的目的是为您提供良好的声音效果，而不需要任何音频工程经验！

前两个预置可以直接从 Revelator io24 的预置按钮进入。要循环使用它们，请重复按通道1或通道2的预置按钮。频道1的默认预设是广播和人声。频道2的默认预设是广播和原声吉他。

当通道1和2连接起来进行立体声操作时，可用的工厂预置包括几个为立体声录音优化的选项，包括 立体声，立体声钢琴，立体声 DJ，等等。

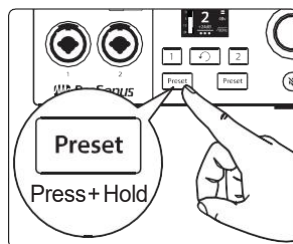
2.4.4 Setting Monitor blend 设置监听设备混合

Power User Tip: But wait! There's more! No really, there are a lot more. Open up Universal Control to access the other presets. You'll also find an additional 12 preset slots (6 per channel) to create your own. You can choose any two of these 12 total presets to be accessible directly from the Preset buttons on your Revelator io24. See Section 4.1 for information on creating and storing presets.

By default, the sound you hear in your headphones will be the sound that is recorded. If you'd like to use presets for monitoring purposes only, you can open up Universal Control and change that setting. See Section 6 to learn how.

强大的用户提示： 这里还有很多！打开 Universal Control 来访问其他预设。您还会发现一个额外的12个预设槽（每个通道 6个）来创建您自己的预设。您可以选择这12个预置中的任何两个，直接从 Revelator io24 的预置按钮上访问。关于创建和存储预置的信息，见第4.1节。

默认情况下，您在耳机中听到的声音将是被记录的声音。如果您想把预设只用于监听，您可以打开 Universal Control 并改变这一设置。参见第6节，了解如何操作。



To bypass the presets, just press and hold the Preset button for the desired Channel. The Preset indicators on Revelator io24's screen will go dark.

Power User Tip: Bypass the presets when you want a clean sound with no effects—great for processing your recording later, or when you want to monitor through plug-ins inside your favorite recording application.

For more on presets, check out Section 4.

要绕过预置，只需按住所需通道的预置按钮。Revelator io24 屏幕上的预置指示灯将变暗。

强大的用户提示： 当您想要一个没有效果的干净的声音时，可以绕过预置，这对以后处理您的录音很有好处，或您想在您喜爱的录音应用程序中通过插件进行监听。

关于预置的更多信息，请查看第4节。

2.4.6 Stream Mix Mode 流媒体混合模式

Stream Mix mode gives you single-click access to an efficient routing configuration optimized for live streaming. In Stream Mix Mode, Revelator io24 sends a complete mix of your analog inputs, loopback channels, reverb, and effects directly to USB Outputs 1 and 2 for use with streaming applications like OBS or Facebook Live.

流媒体混合模式让您一键进入一个为现场流媒体优化的高效路由配置。在流混合模式下，Revelator io24将您的模拟输入、回环通道、混响和效果的完整混合直接发送到USB输出1和2，以便与OBS或Facebook Live等流媒体应用程序一起使用。

When to use Stream Mix mode:

何时使用流混合模式：

- When you would like to live stream using multiple audio sources including: your microphone, guest audio from Skype or Zoom, backing music from a media player app, etc., and you want all of these elements sent to your streaming software in a stereo signal.
- You will be able to monitor the full mix of the above mentioned sources in your headphones.
- 当您想使用多个音源进行直播时，包括：您的麦克风、Skype或Zoom的嘉宾音频、媒体播放器应用程序的伴奏音乐等，并且您想把所有这些元素以立体声信号发送到您的流媒体软件。
- 您将能够在耳机中监听上述音源的全部混合。

When to use Default mode:

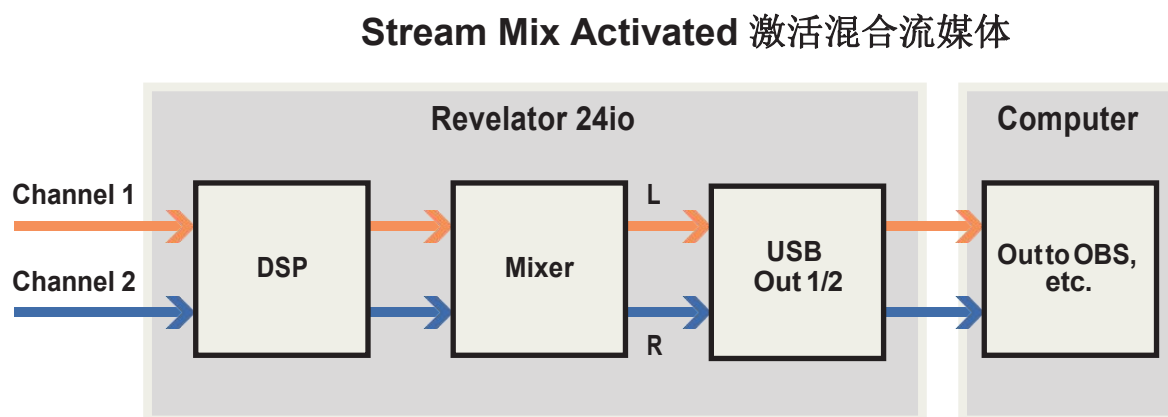
什么时候使用默认模式：

- When you would like to record directly from the Revelator io24's inputs into a DAW, and you don't want to mix in any sources from Skype, Zoom, Spotify, etc.

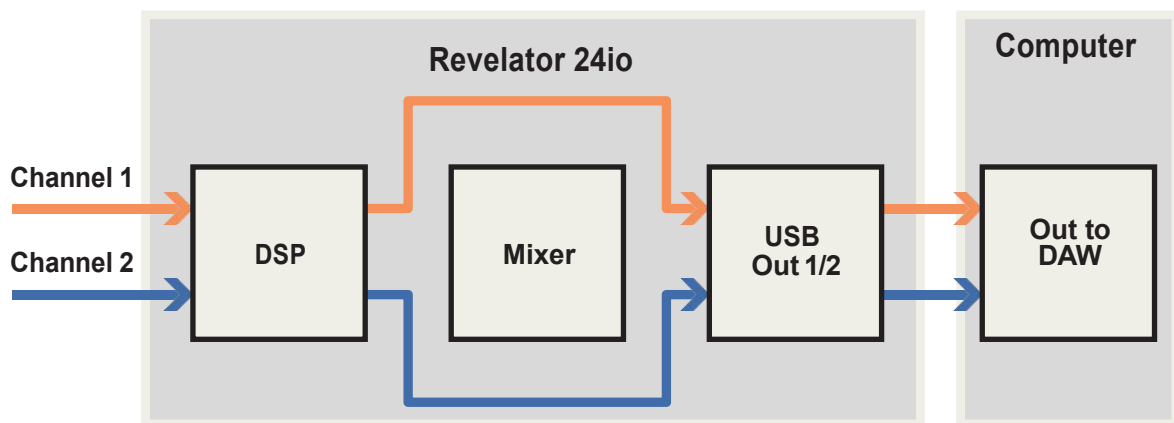
Here's a simple block diagram to illustrate the changes in signal flow when using Revelator io24 in Stream Mix Mode vs. the Default mode.

- 当您想直接从Revelator io24的输入端录制到DAW中，而您不想混入任何来自Skype、Zoom、Spotify等的信号源。

下面是一个简单的方框图，说明在流混合模式下使用 Revelator io24 与默认模式下信号流的变化。



Stream Mix Deactivated (Default Mode) 暂停混合里路媒体（默认模式）



3 Universal Control

The Revelator io24 is so much more than a great-sounding USB interface—and the secret to its advanced features and mixing capability is unlocked with Universal Control.

Revelator io24 不仅仅是一个好听的 USB 音频接口--其高级的功能和混音能力的秘诀被 Universal Control 所解锁。



Before proceeding, ***please make sure you have followed the instructions in Section 1.3.2 and have downloaded and installed Universal Control.***

在继续操作之前，***请确保您已经按照第 1.3.2 节的说明，下载并安装了通用控制。1.3.2 节中的说明，并已下载和安装了Universal Control。***

3.1 The Launch Window



Get ready for lift off! When Universal Control is launched, you will see the Launch window. From this window, you can manage all the driver settings for your Revelator io24.

准备好! 当Universal Control启动时，您会看到启动窗口。从这个窗口，可以管理您的Revelator io24的所有驱动设置。



Sample Rate. Changes the sample rate. You can set the sample rate to 44.1, 48, 88.2, or 96 kHz. (With Multi Mode on macOS, the sample rate is limited to 44.1 and 48 kHz.) A higher sample rate will increase the fidelity of the recording, but will also increase the file size and the amount of system resources necessary to process the audio.

Power User Tip: For most applications, leaving this setting on 48 kHz will yield the best results with the least amount of hassle.

采样率。 改变采样率。您可以将采样率设置为44.1、48、88.2或96kHz。(更高的采样率将提高录音的保真度，但也会增加文件大小和处理音频所需的系统资源数量。

高级用户提示： 对于大多数应用来说，把这个设置放在48kHz上会产生最好的结果，而且麻烦最少。

Block Size (Windows only). Sets the buffer size. From this menu, you can set the buffer size from 64 to 8,192 samples. Lowering the buffer size will lower latency, which is the amount of time it takes for your audio to go from Revelator io24 to the computer and back to your ears; however, this will also increase performance demands on your computer. In general, you will want to set the buffer size as low as your system can safely support. If you begin to hear pops, clicks, or distortion in your audio path, try raising the buffer size. When adjusting the block size, the Safe mode will automatically change to provide the best performance.

块大小（仅限Windows）。设置缓冲区的大小。从这个菜单中，您可以设置64到8192个样本的缓冲区大小。降低缓冲区大小会降低延迟，也就是音频从Revelator io24到电脑再到您的耳朵所需的时间；但是，这也会增加对电脑的性能要求。一般来说，可以把缓冲区的大小设置到您的系统可以安全支持的最低限度。如果您开始听到音频路径中的爆音、咔嗒声或失真，请尝试提高缓冲区大小。当调整块大小时，安全模式将自动改变为提供最佳性能。

Power User Tip: *Your Revelator io24 features built-in zero-latency monitoring so you can leave your Block Size high and the performance demands on your computer low. In general, you can use the default block size, but if you're using an older computer that is having trouble keeping up, go ahead and raise this setting. Experiment to find what works best for you!*

高级用户提示：您的 Revelator io24 具有内置的零延迟监控功能，所以，可以让您的块大小保持在较高的水平，而对您计算机的性能要求较低。一般来说，可以使用默认的区块大小，如果您使用的是一台旧的电脑，很难跟上，可以继续提高这个设置。尝试找到最适合您的方法。

DeviceMode(macOS only). By default, your Revelator io24 presents itself as a single audio interface with 6 inputs and 6 outputs. But when you're ready to use the loopback audio streams to record or route audio to multiple applications at the same time (like the output of a Skype call to the audio input of your Facebook Live stream), that's where Multi Mode comes in. In this mode, your Revelator io24 will show up as 3 different devices on your computer: Revelator IO 24, Revelator IO 24 Loopback 1, and Revelator IO 24 Loopback 2. Each of these devices has 2 inputs and 2 outputs. This is great for applications like Skype that only allow you to use the first two inputs and outputs of any audio interface. PreSonus recommends that you use Multi mode for the best experience. Note that in Multi mode, sample rate options are limited to 44.1 kHz or 48 kHz. For more information on how loopback audio works and how to use it for your podcasts, streams, and more, see [Section 6](#).

设备模式（仅限macOS）。默认情况下，您的Revelator io24表现为一个具有6个输入和6个输出的单一音频接口。但是，当您准备使用回环音频流来录制或将音频同时发送到多个应用程序（如Skype通话的输出到Facebook直播流的音频输入），这就是多模式的作用。在这种模式下，您的Revelator io24将在您的电脑上显示为三个不同的设备。Revelator io24, Revelator io24 Loopback 1, 和 Revelator io 24 Loopback 2。这些设备中的每一个都有2个输入和2个输出。像Skype这样软件只允许您使用任何音频接口的前两个输入和输出的应用是非常好的。PreSonus建议您使用多模式以获得最佳体验。请注意，在多重模式下，采样率选项被限制在44.1kHz或48kHz。关于回环音频如何工作以及如何将其用于播客、流媒体等方面的更多信息，请参见第6节。

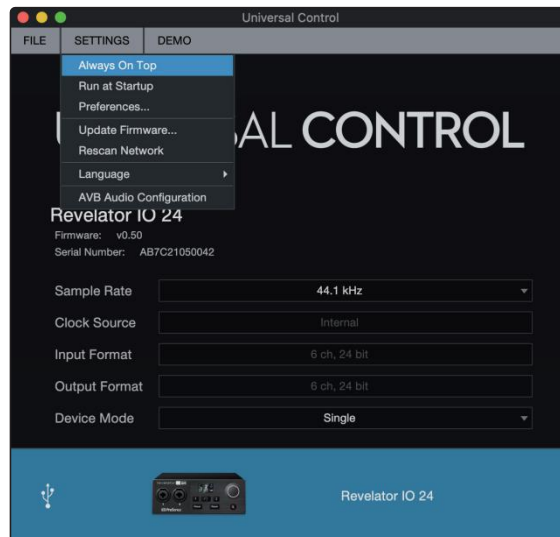
Power User Tip (for Windows Users): On Windows, Revelator io24 is always in Single Mode. If you are using WDM for applications like Skype, your Web Browser, etc., look for the Revelator IO 24 name in respective applications' audio setup menus. If you are using ASIO for applications like Studio One and other DAWs, look for "PreSonus DSP USB" in respective applications' audio setup menus.

高级用户提示（针对Windows用户）：在Windows上，Revelator io24总是处于单模式。如果您在Skype、网络浏览器等应用程序中使用WDM，请在相应的应用程序的音频设置菜单中寻找Revelator io 24的名字。如果您在Studio One和其DAW等应用程序中使用ASIO，请在各自的应用程序的音频设置菜单中寻找"PreSonus DSP USB"。

3.1.1 Launch Window Menu Items 启动窗口菜单项目



- **File Menu.** Manages devices connected to Universal Control.
 - **Show All Devices.** Launches all control windows for all supported devices connected to your computer.
 - **Close All Devices.** Closes all open control windows.
 - **Sign Out.** Signs out of your My.PreSonus user account.
 - **Check for Updates.** Connects to your My.PreSonus user account to check for updates for Universal Control.
 - **Transfers.** Displays recent downloads from your My.PreSonus user account.
 - **About Universal Control.** Displays version and build date information.
 - **Quit.** Quits the Universal Control application and all hardware control windows.
-
- **文件菜单。** 管理连接到 Universal Control 设备上。
 - **显示所有设备。** 为连接到您计算机的所有支持设备启动所有控制窗口。
 - **关闭所有设备。** 关闭所有打开的控制窗口。
 - **登出。** 退出您的 My.PreSonus 用户账户。
 - **检查更新。** 连接到您的 My.PreSonus 用户账户，检查通用控制的更新。
 - **传输。** 显示最近从您的 My.PreSonus 用户帐户的下载。
 - **关于通用控制。** 显示版本和构建日期信息。
 - **退出。** 退出通用控制应用程序和所有硬件控制窗口。



- **Settings Menu.** Provide customization options to personalize your Universal Control experience.
 - **Always on Top.** Keeps the Universal Control Launch window on top whether it is the currently active application or not.
 - **Run at Startup.** Launches Universal Control automatically when your computer boots.
 - **Preferences.** Sets language and appearance options (see below).
 - **Rescan Network.** Scans your computer's connections for all supported PreSonus products.
 - **Language.** Sets the language (English, French, German, Korean, Simplified Chinese, or Spanish).
-
- **设置菜单。** 提供自定义选项，以个性化您的通用控制体验。
 - **始终在顶部。** 保持Universal Control启动窗口在顶部，无论它是否是当前活动的应用程序。
 - **在启动时运行。** 当您的计算机启动时，自动启动通用控制。
 - **首选项。** 设置语言和外观选项（见下文）。
 - **扫描网络。** 为所有支持的PreSonus产品扫描计算机的连接。
 - **语言。** 设置语言（英语、法语、德语、韩语、简体中文或西班牙语）。

Power User Tip: The Launch Window will inform you when a new firmware update is available for your Revelator io24—or other PreSonus hardware!

高级用户提示。当您的Revelator io24或其他PreSonus硬件有新的固件更新时，启动窗口会通知您。

3.2 Using Your Revelator io24 with Popular Applications 在热门的应用程序中使用您的 Revelator io24

If you've never used an audio interface, your computer and every application on it are currently sourcing audio from the built-in microphone and routing audio out to the onboard sound card. To use Revelator io24 with any application that can access audio inputs or outputs or both, you must first set up your computer to use Revelator io24 as an audio interface.

This section will take you through some of the most common use cases. If you are using an application not listed in this section, you'll need to check with the documentation that came with it.

如果您从来没有使用过音频接口，您的电脑和上面的每一个应用程序目前都是从内置的麦克风中获取音频，并将音频路由到板载声卡。将音频输出到板载声卡上。要将 Revelator io24 与任何可以访问音频输入或输出或两者的应用程序一起使用，你必须首先将您的计算机设置为将 Revelator io24 作为一个音频接口。

本节将带您了解一些最常见的使用情况。如果您使用的应用程序没有在本节中列出，您需要查看其附带的文档。

3.2.1 Using Revelator io24 for System Audio 使用 Revelator io24 做系统音频

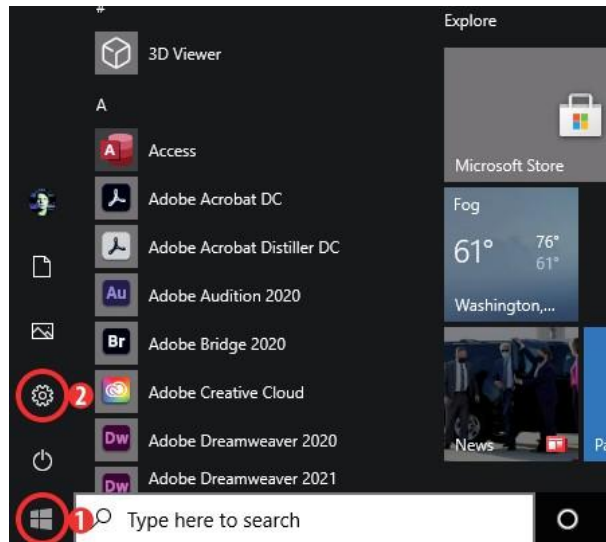
The easiest way to make your Revelator io24 seen by just about any application on your computer is to set it up as the default sound source for your computer. Not only will this prompt most video conferencing and streaming applications to look for Revelator io24, it will also set your default Internet browser to use Revelator io24 as well.

最简单的方法是将 Revelator io24 设置为电脑的默认声源，使电脑上的任何应用程序都能看到它。这不仅会促使大多数视频会议和流媒体应用程序寻找 Revelator io24，它也会将您的默认互联网浏览器设置为使用 Revelator io24。

Power User Tip: Setting your Revelator io24 as the default sound card for your system will also route music streaming applications like Spotify and Apple Music to the headphone output on your new interface. If you do not want to use your interface this way, it is best to configure Revelator io24 as the audio I/O only for the applications for which you want to use it.

高级用户提示：将 Revelator io24 设置为系统的默认声卡，还可以将 Spotify 和 Apple Music 等音乐流媒体应用程序路由到新界面的耳机输出。如果您不想以这种方式使用您的接口，最好只将 Revelator io24 配置为您想使用的应用程序的音频输入/输出。

Windows



1. Click on start icon in lower left corner

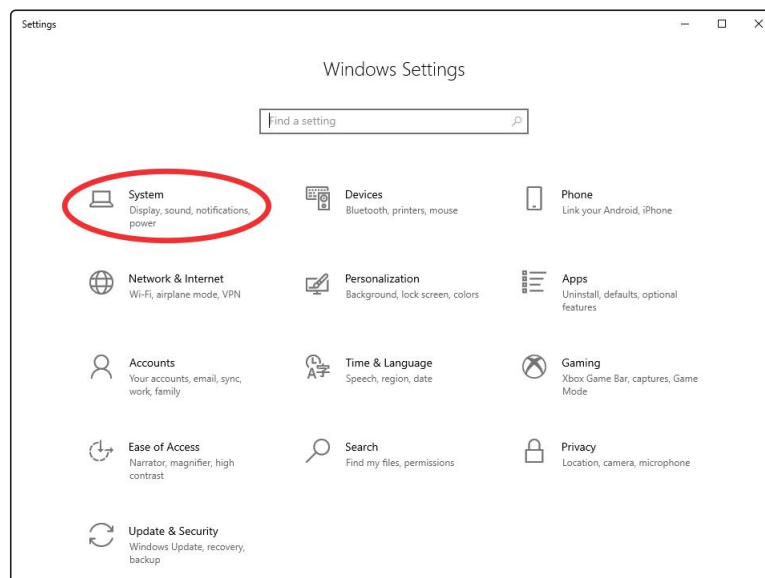
点击左下角的开始图标

2. Click on Settings gear icon

点击设置齿轮图标

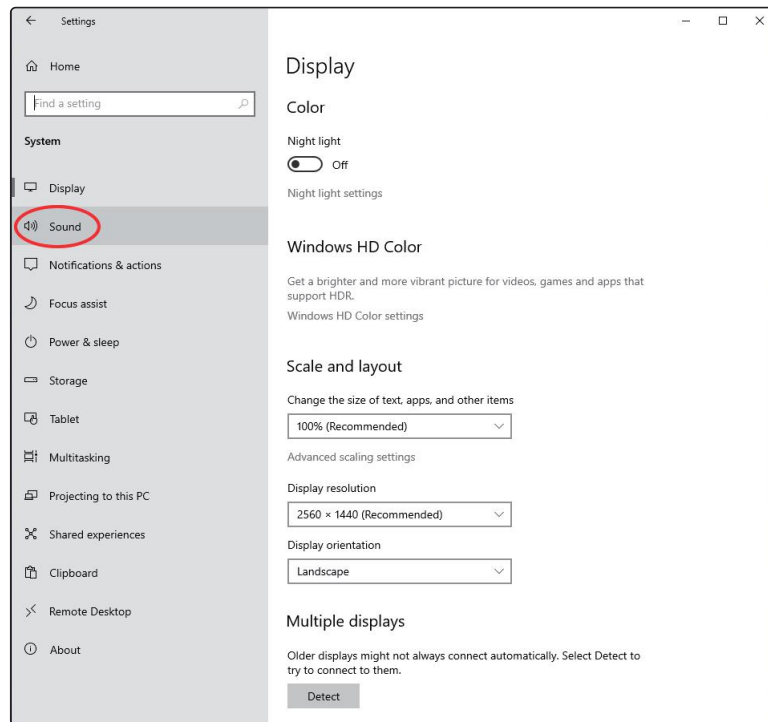
3. Click on System

点击系统



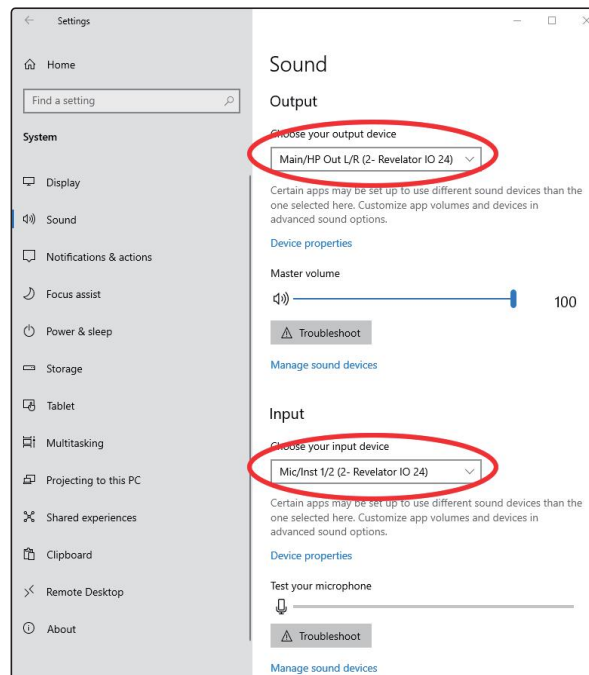
4. Click on Sound

点击声音



5. Click on “Choose your Output Device” and choose HP Out L/R (Revelator IO 24)
点击 “选择您的输出设备”，选择HP输出L/R（Revelator io24）
6. Click on “Choose your input device” and choose Mic/Inst 1/2 (Revelator IO 24)
点击 “选择您的输入设备”，选择麦克风/Inst 1/2 (Revelator IO 24)。

Your Revelator io24 is ready to use! 您的Revelator io24已经可以使用了！



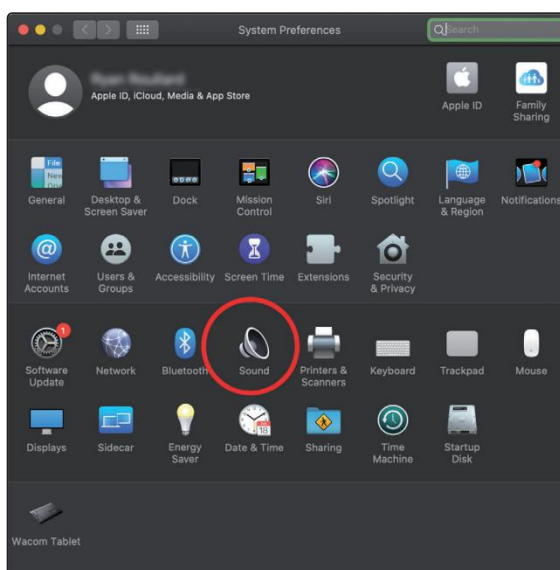
macOS

1. From the Apple Menu, go to System Preferences.



从苹果菜单中，进入您的系统设置

2. Click on Sound.



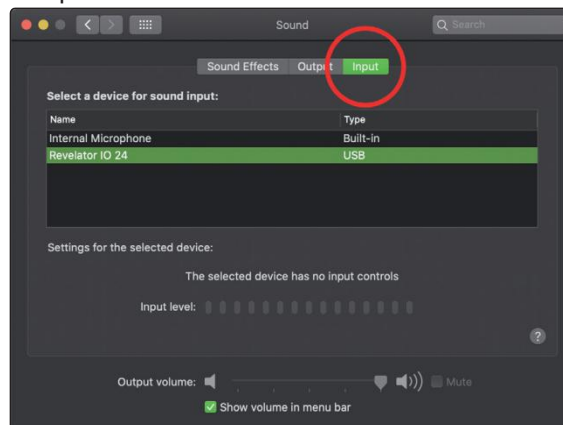
点击声音

3. Click on the Outputs tab and select Revelator IO 24 from the device list. This will route all audio from your computer to the headphone output on your Revelator io24.



点击 "输出" 标签，从设备列表中选择 Revelator IO 24。这将把所有的音频从您的电脑路由到Revelator io24的耳机输出。

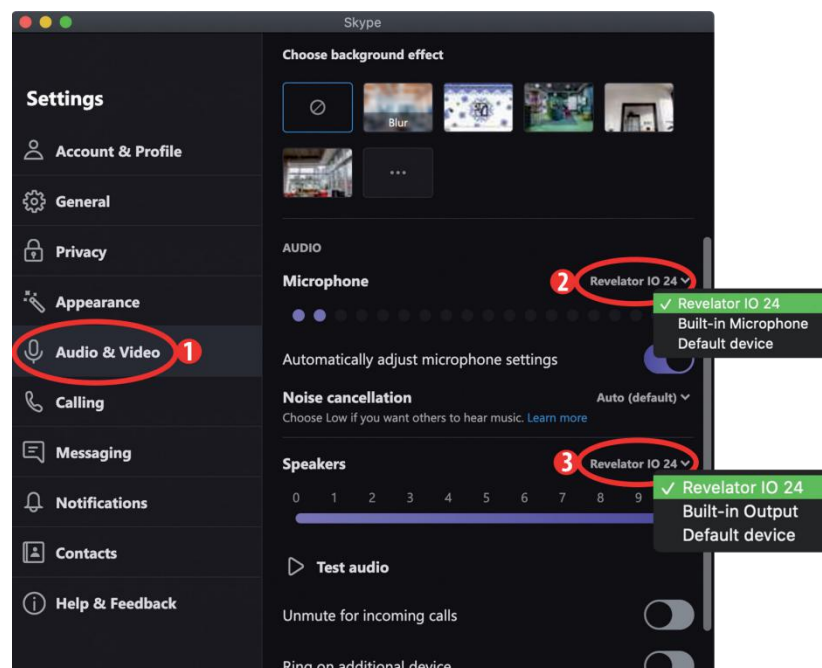
- Click on the Inputs tab and select RevelatorIO 24 from the device list. This will set your Revelator io24 interface as the input source for your computer.



点击 "输入" 标签，从设备列表中选择 Revelator IO 24。这将把您的 Revelator io24 接口设置为电脑的输入源。

Your Revelator io24 is ready to use! 您的Revelator io24已经可以使用了！

3.2.2 Using Revelator io24 for Skype



- From the Skype menu, go to "Audio & Video Settings."

在Skype中使用 Revelator io24

- Under Microphones, select "Revelator IO 24." This will route the audio from your Revelator io24 to your Skype call.

在麦克风下，选择 "Revelator IO 24"，这将把Revelator io24的音频传送到您的Skype通话。

- Under Speakers, select "Revelator IO 24." This will route the audio from your Skype call to the headphone output on your Revelator io24.

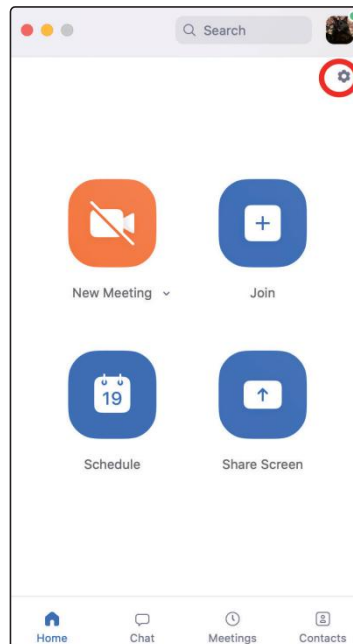
在扬声器下，选择 "Revelator IO 24"，这将把您的Skype通话的音频路由到Revelator io24的耳机输出。

PowerUserTip: *If you would like to record your Skype call, select Revelator IO 24 Loopback 1 or Revelator IO 24 Loopback 2 from the Speaker menu. See Section 6 for more information on using loopback audio.*

高级用户提示: 如果您想录制您的 Skype 通话, 从扬声器菜单中选择 Revelator IO 24 Loopback 1 或 Revelator IO 24 Loopback 2。有关使用回环音频的更多信息, 请参阅第6节。

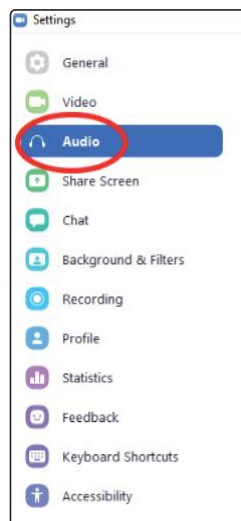
3.2.3 Using Revelator io24 for Zoom 使用 Revelator io24 进行缩放

1. Launch Zoom, and click the cog wheel icon to enter Zoom Preferences.



启动Zoom，并点击齿轮图标，进入Zoom首选项。

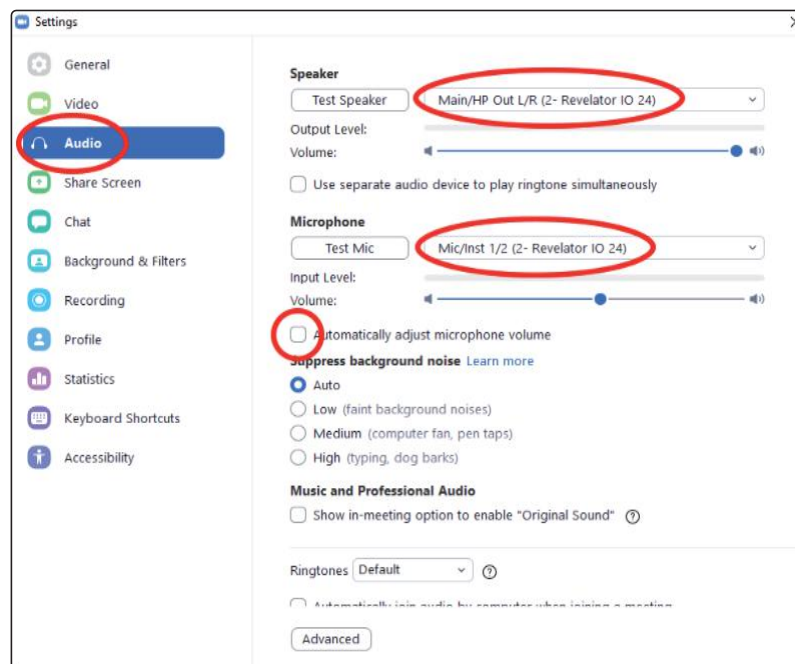
2. Click the "Audio" tab.



点击 "音频" 标签。

Windows:

- Set Speaker to HP Out L/R (Revelator IO 24)
 - Set Microphone to Mic/Inst 1/2 (Revelator IO 24)
 - Uncheck the box marked “Automatically adjust microphone volume”
-
- 将扬声器设置为HP Out L/R (Revelator IO 24)
 - 将麦克风设置为Mic/Inst 1/2 (Revelator IO 24)。
 - 取消勾选标有 "自动调整麦克风音量 "的方框

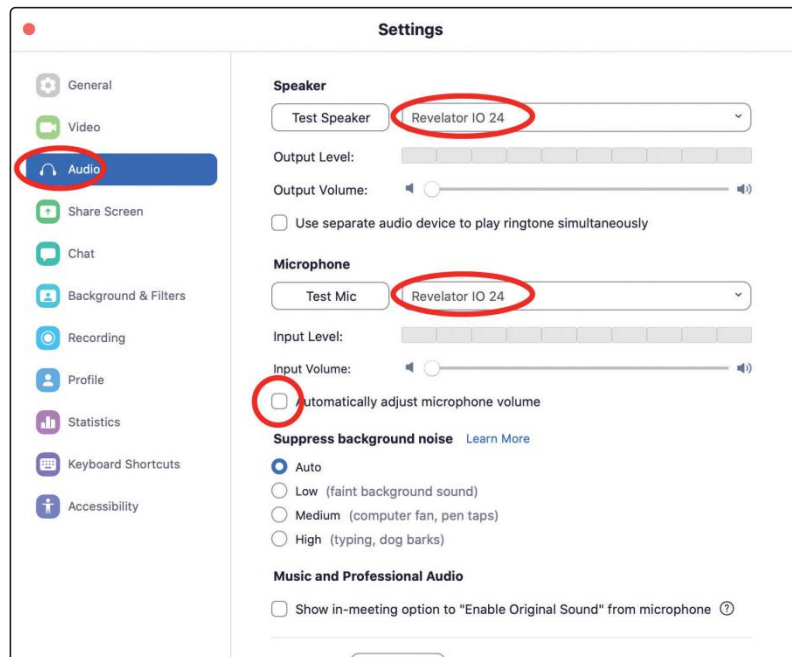


PowerUserTip: When this option is selected, the sliders in Zoom will not have any effect on the Speaker output or Microphone Input gain, as these are controlled by the Revelator io24 itself—either by the on-board controls and/or through the Universal Control software.

高级用户提示: 当选择该选项时，Zoom 中的滑块将不会对扬声器输出或麦克风输入增益产生任何影响，因为这些都是由 Revelator io24 本身控制的--无论是通过板载控制还是通过通用控制软件。

macOS:

- Set Speaker to Revelator IO 24
 - Set Microphone to Revelator IO 24
 - Uncheck the box marked “Automatically adjust microphone volume”
-
- 将扬声器设置为Revelator IO 24
 - 将麦克风设置为Revelator IO 24
 - 取消勾选 "自动调整麦克风音量 "的方框

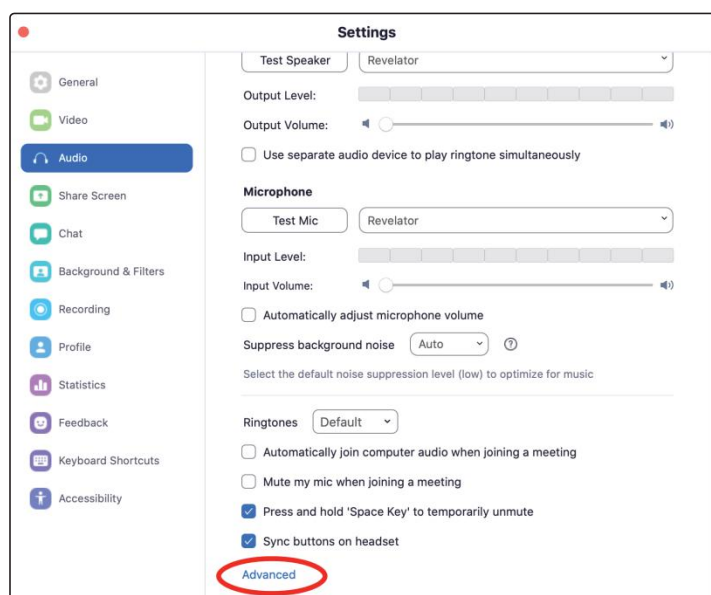


Power User Tip: When this option is selected, the sliders in Zoom will not have any effect on the Speaker output or Microphone Input gain, as these are controlled by the Revelator io24 itself—either by the on-board controls and/or through the Universal Control software. Mac users will see that the sliders do not move and will snap back to the zero position indicating that these controls in Zoom are disabled.

高级用户提示: 当选择该选项时, Zoom 中的滑块将不会对扬声器输出或麦克风输入增益产生任何影响, 因为这些都是由 Revelator io24 本身控制的 -- 无论是通过板载控制还是通过通用控制软件。Mac 用户会看到滑块不动, 并且会弹回到零的位置, 表明 Zoom 中的这些控制被禁用。

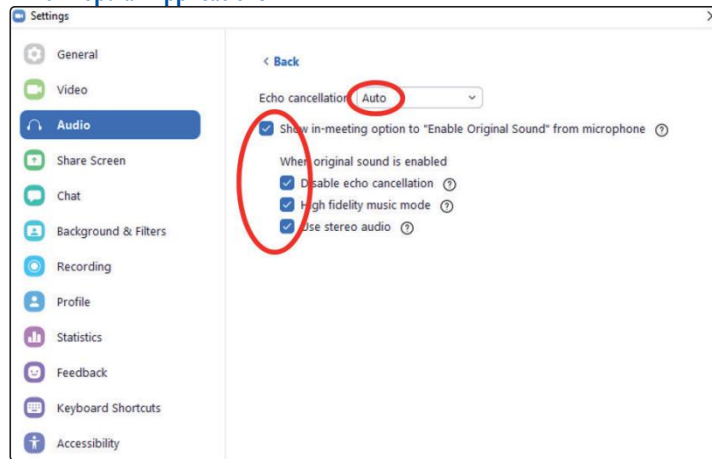
Scroll down and click on Advanced.

向下滚动并点击 "高级"。



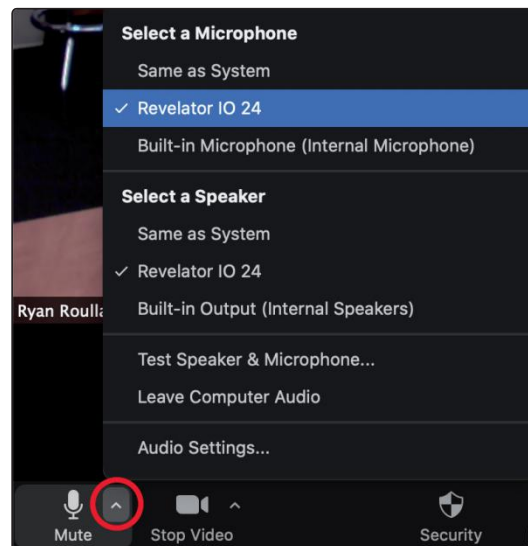
In Zoom's Advanced Audio settings menu, please populate the check boxes and the drop-down menu with the settings shown below.

在 Zoom 的高级音频设置菜单中, 请将复选框和下拉菜单中的设置填入如下所示。



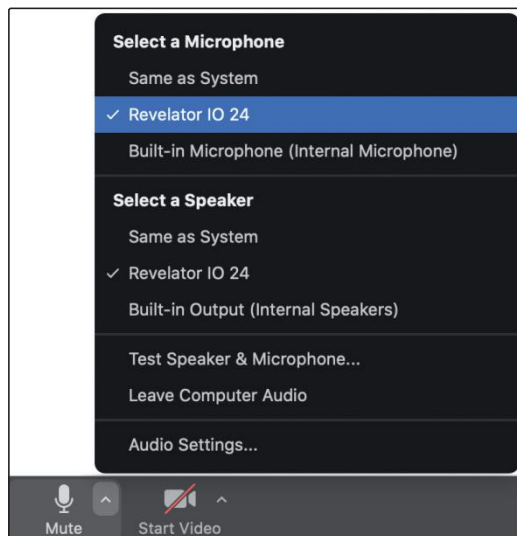
If you need to switch your audio device to Revelator io24 while in a meeting, select the arrow next to the Mute Button to select your audio device list.

如果您在会议中需要将音频设备切换到 Revelator io24，选择静音按钮旁边的箭头，选择您的音频设备列表。



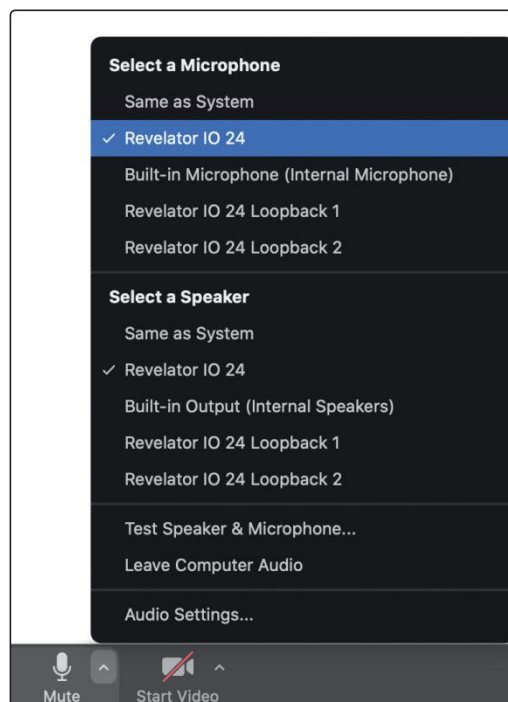
macOS users running Revelator io24 in Single Mode will see Revelator IO 24 appear in Zoom's Microphone and Speaker selections as follows:

在单一模式下运行Revelator io24的macOS用户将看到Revelator IO 24出现在Zoom的麦克风和扬声器选择中，如下所示。



All Windows users and Mac users running Revelator io24 in Multi Mode will see Revelator IO 24 appear in a list similar to this:

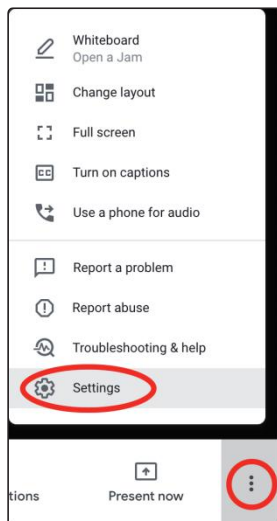
所有Windows用户和在多模式下运行Revelator io24的Mac用户将看到Revelator IO 24出现在类似这样的列表中。



3.2.4 Using Revelator io24 for Google Meet 将 Revelator io24 用于 Google 会议

Open Google Meet, and click on the vertical dots in the lower right corner of the Google Meet window. In the pop-up menu, choose "Settings" by the cog icon.

打开 Google Meet，并点击 Google Meet 窗口右下角的垂直圆点。在弹出的菜单中，选择齿轮图标上的 "设置"。

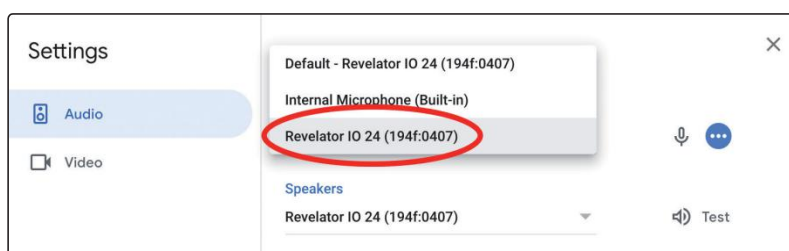


Google Meet's Audio menu will be highlighted by default. If Revelator io24 is not already selected, click the down arrow under Microphone and Speakers and click on "Revelator IO 24."

Mac Users running Revelator io24 in Single Mode will see one instance of Revelator IO 24 shown as follows

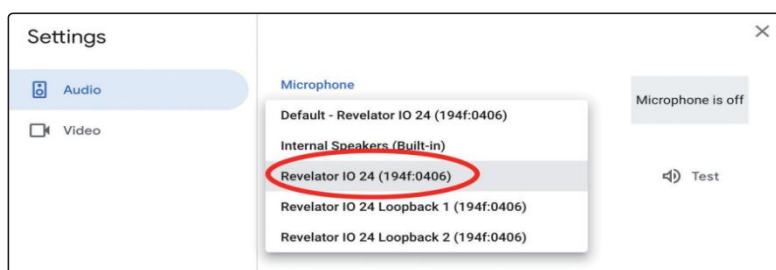
默认情况下，Google Meet 的音频菜单将被突出显示。如果尚未选择 Revelator io24，点击麦克风和扬声器下的向下箭头，然后点击 "Revelator IO 24"。

在单一模式下运行 Revelator io24 的 Mac 用户将看到 Revelator IO 24 的一个实例，显示如下，



Windows Users and Mac Users running Revelator io24 in Multi Mode will see multiple instances of Revelator IO 24. This is normal. Click on "Revelator IO 24."

在多模式下运行 Revelator io24 的 Windows 用户和 Mac 用户会看到 Revelator IO 24 的多个实例。这是很正常的。点击 "Revelator IO 24"。

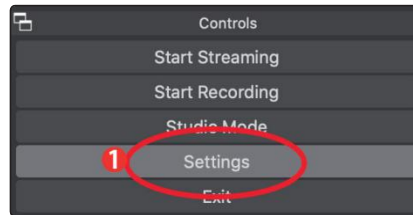


***Power User Tip:** Google Meet will switch audio devices automatically to the last device connected to your system. There is a chance that the next time you open Google Meet that it may default to a different audio device without notifying you. Be sure to check your audio settings to make sure Revelator io24 is selected. PreSonus has no control over how this device selection works.*

高级用户提示: Google Meet 会自动将音频设备切换到最后连接到您的系统的设备上。有可能在您下次打开 Google Meet 时, 它可能会默认为不同的音频设备而不通知您。请务必检查您的音频设置, 以确保 Revelator io24 被选中。PreSonus 无法控制这种设备的选择方式。

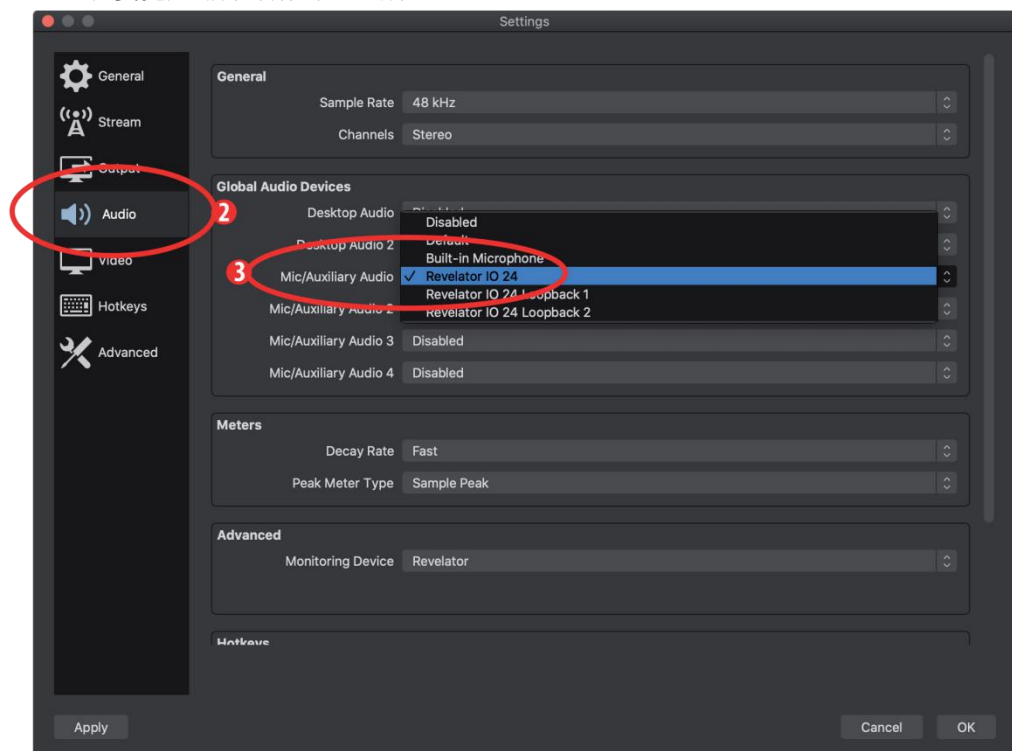
3.2.5 Using Revelator io24 for OBS 为 OBS 使用 Revelator io24

1. Click on Settings under "Controls" 在 "控制" 界面点击设置



2. Click "Audio." 点击 "音频".
3. Under Mic/Auxiliary Audio, select Revelator IO 24.

在麦克风/辅助音频下，选择 Revelator IO 24。



4. If you would like to source the audio for other applications, you can set Mic/Auxiliary Audio 2 and 3 to Revelator IO 24 Loopback 1 and 2 respectively.

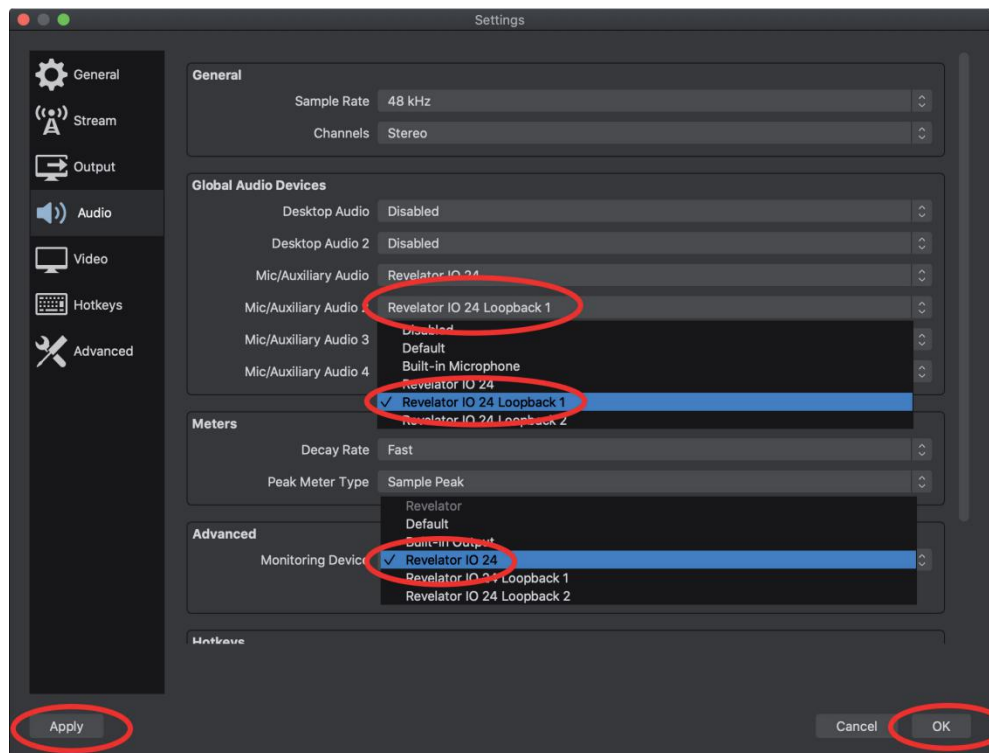
Please note, you must route the output for those applications to the same device. For example, if you would like the audio output from your Skype call to be available on Auxiliary Audio 2, you would set "Revelator IO 24 Loopback 1" as both the Speaker output for Skype and the source for Auxiliary Audio 2. **Please see Section 6 for more information.**

如果您想为其他应用程序提供音频源，您可以将话筒/辅助音频2和3分别设置为 Revelator IO 24 环回1和2。

请注意，您必须将这些应用的输出路由到同一设备。例如，如果您想让 Skype 通话的音频输出在辅助音频2上可用，您可以将 "Revelator IO 24 Loopback 1" 同时设置为 Skype 的扬声器输出和辅助音频2的来源。更多信息请见第6节。

- Under **Advanced**, set the Monitoring Device to Revelator IO 24. This will route the output audio from OBS to the headphone output on Revelator io24.

在 "高级" 下，将监听设备设置为 Revelator IO 24。这将把 OBS 的输出音频路由到 Revelator io24 的耳机输出。



- Click Apply. 点击应用

- Click OK. 点击 “OK”

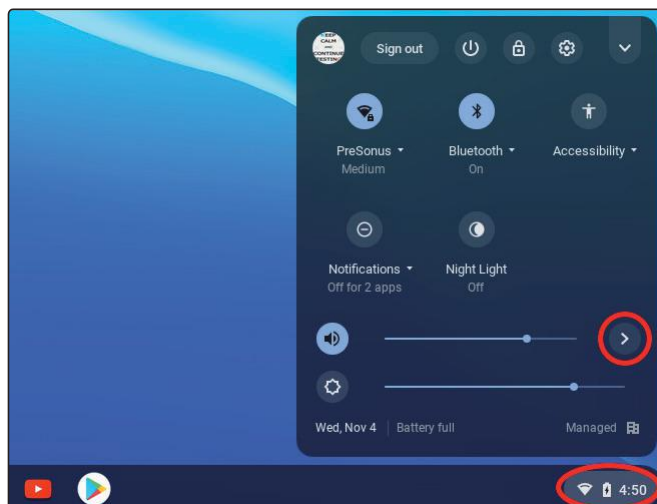
Your Revelator io24 is now set-up for OBS!

您的 Revelator io24 现在已经为 OBS 设置好了！

3.2.6 Using Revelator io24 on Chromebook 在 Chromebook 中使用 Revelator io24

While Chromebooks are compatible with Revelator io24, there is no way to run Universal Control for advanced editing of the settings or effects presets beyond what is directly accessible on the interface itself. That said, Audio setup in Google Chromebooks is very simple.

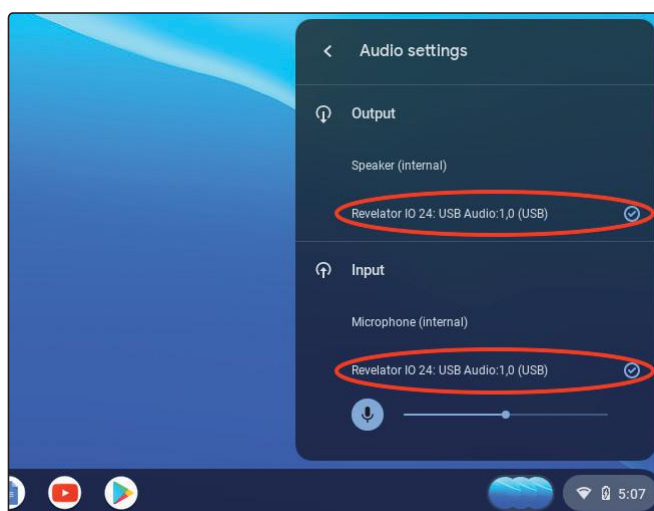
- After connecting the Revelator io24 to your Chromebook, select the taskbar menu in the lower right corner (by the clock) to bring up the system menu.



虽然 Chrome books 与 Revelator io24 兼容，但除了界面上可直接访问的内容外，没有办法运行 Universal Control 来对设置或效果预置进行高级编辑。也就是说，谷歌 Chrome book 的音频设置是非常简单的。

1. 将 Revelator io24 连接到您的 Chrome book 后，选择右下角的任务栏菜单（在时钟旁边），调出系统菜单。
2. Select the greater than symbol (>) to the right of the volume slider to enter Audio Settings and select your audio device. The green circle with the check mark indicates your preferred device. If Revelator io24 is not already selected, select it here for both Output and Input.

选择音量滑块右侧的大于符号（>），进入音频设置，选择您的音频设备。带有复选标记的绿色圆圈表示您的首选设备。如果还没有选择 Revelator io24，请在这里选择它的输出和输入。



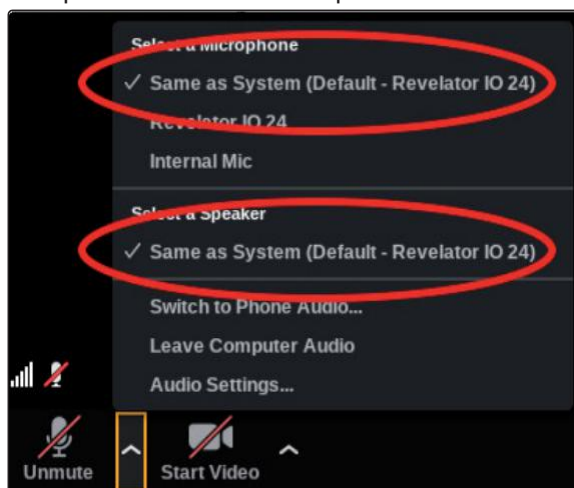
3.2.7 Using Revelator io24 with Zoom on Chromebook 在Chromebook上使用Revelator io24与Zoom

You can use Revelator io24 on a Chromebook to conduct Zoom meetings. Chrome does not install an application for Zoom like it does on macOS or Windows. Instead, on Chromebook, Zoom installs a widget for the Chrome browser, through which you can select your audio device and toggle some advanced audio settings.

您可以在 Chromebook 上使用Revelator io24来进行Zoom 会议。

Chrome并不像在MacOS或Windows上那样为Zoom安装一个应用程序。相反，在Chromebook上，Zoom为Chrome浏览器安装了一个小部件，通过它，可以选择您的音频设备并切换一些高级音频设置。

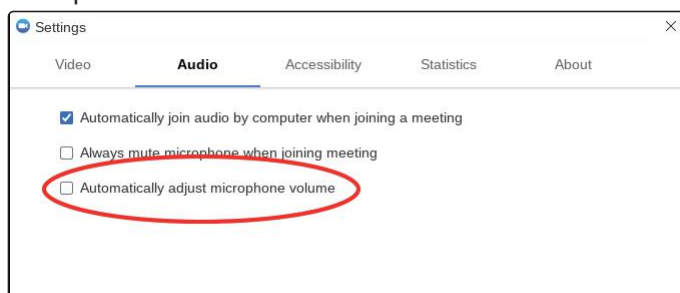
1. Launch Zoom and start a Zoom meeting.
2. Once you are in a Zoom meeting, you can change your audio device by selecting the up arrow next to the microphone icon in the lower left corner of the screen.



启动 Zoom，开始一个Zoom会议

一旦您进入Zoom会议，您可以通过选择屏幕左下角的麦克风图标旁边的向上箭头来改变您的音频设备

3. Select Revelator io24 as your Microphone and Speaker.
4. Click on Audio Settings to access the Advanced options menu.
5. Ensure that the box labeled "Automatically adjust microphone volume" is not checked.



选择Revelator io24作为您的麦克风和扬声器

点击音频设置，进入高级选项菜单

确保标注 "自动调整麦克风音量 " 的方框没有被选中

6. You can adjust both Input gain and speaker playback volume on the Revelator io24 manually.

There are no other advanced menu options as found in the Mac / Windows versions of Zoom.

您可以手动调整 Revelator io24 的输入增益和扬声器播放音量。

在Mac/Windows版本的Zoom中，没有其他高级菜单选项。

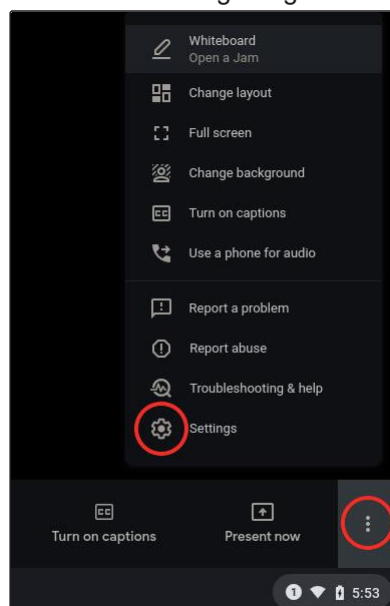
3.2.8 Using Revelator io24 with Google Meet on Chromebook 在Chromebook上将 Revelator io24 与 Google Meet 一起使用

Revelator io24 will work with Google Chromebook for Google Meet.

1. Open Google Meet and start a meeting.

Once you're in a Google Meeting, select the vertical dots in the lower right corner of your Google Meet window to open the Options menu.

2. Click on the Settings Cog icon.



Revelator io24 将与谷歌 Chromebook 一起用于 Google Meet。

1. 打开Google Meet并开始会议。

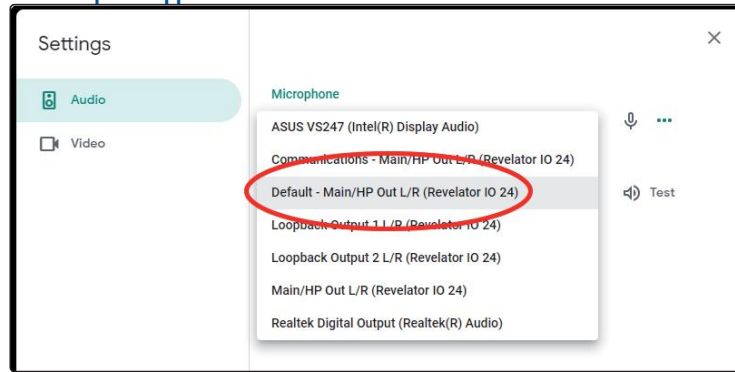
一旦您进入谷歌会议，选择谷歌会议窗口右下角的垂直圆点，打开选项菜单。

2. 点击设置Cog 图标。

Google Meet's Audio menu will be highlighted by default. If Revelator io24 is not already selected, click the down arrow under Microphone and Speakers and click on "Revelator io24."

Google Meet 的音频菜单将被默认突出显示。如果还没有选择 Revelator io24，请点击麦克风和扬声器下的向下箭头，然后点击 "Revelator io24"。





Power User Tip: Google Meet will automatically switch to the last audio device connected to your system. There is a chance that the next time you open Google Meet that it may choose a different audio device without notifying you. Be sure to check your audio settings to make sure Revelator io24 is selected. PreSonus has no control over how this device selection works.

高级用户提示：Google Meet 会自动切换到最后一个连接到您系统的音频设备。有可能在您下次打开 Google Meet 时，它可能会选择一个不同的音频设备而不通知您。请务必检查您的音频设置，以确保 Revelator io24 被选中。PreSonus 无法控制这种设备的选择方式。

3.2.9 Using Revelator io24 with iOS/iPadOS devices 在iOS/iPadOS设备上使用 Revelator io24

Revelator io24 works when connected directly to iOS/iPadOS devices like iPads, though you should be aware of the following:

When connected to iPad Pro tablets with USB-C ports, Revelator io24 will function as intended without additional power or direct connect. However, there's no way to charge the iPad while Revelator io24 is connected.

All other iOS devices with Lightning connectors will require the use of the Apple Lightning to USB 3 Camera Adapter which features a pass-through for a power cable.

Revelator io24 will not work when connected directly to an iPhone, as it requires additional power.

Note: You must use the Apple Lightning to USB 3 Camera Adapter, not the Lightning to USB cable.

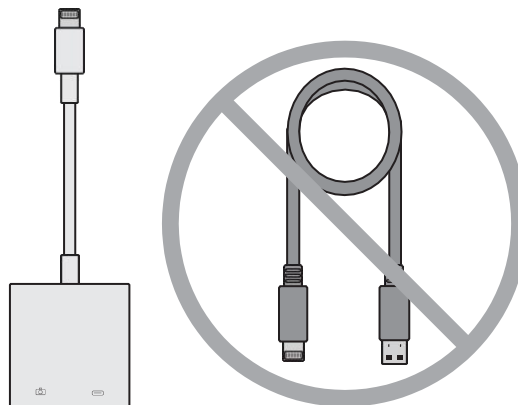
Revelator io24 在直接连接到iPad等iOS/iPadOS设备时可以工作，不过您应该注意以下几点。

当连接到带有 USB-C 端口的iPad Pro平板电脑时，Revelator io24将按原定计划运行，无需额外的电源或直接连接。然而，在Revelator io24连接时，没有办法为iPad充电。

所有其他带有Lightning接口的iOS设备都需要使用苹果Lightning至USB 3相机适配器，该适配器具有电源线的直通功能。

Revelator io24直接与iPhone连接时将无法工作，因为它需要额外的电源。

注意：您必须使用苹果Lightning转USB 3相机适配器，而不是Lightning 转USB线。



3.2.10 Using Revelator io24 with Android devices 在安卓设备上使用Revelator io24

Revelator io24 works great when connected directly to Android devices. If you find your Android device doesn't provide enough power, an externally-powered USB hub can be connected to your Android device to provide additional power to your Revelator io24.

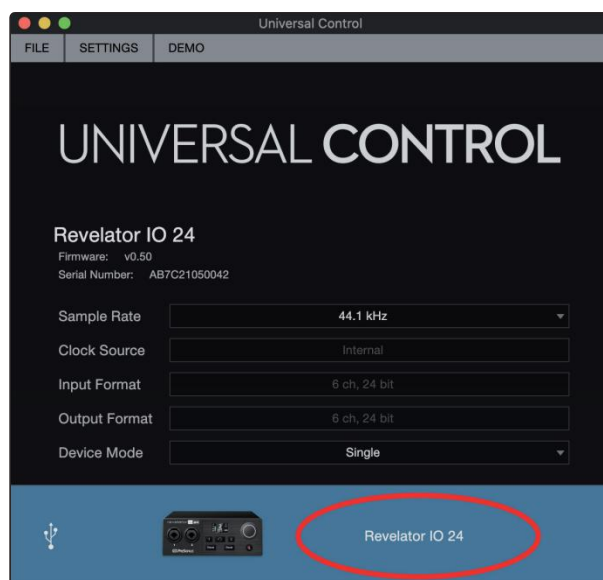
Revelator io24 直接与安卓设备连接时效果很好。如果您发现您的安卓设备不能提供足够的电力，可以将一个外部供电的USB集线器连接到您的安卓设备，为您的Revelator io24提供额外的电力。

4 Presets and Scenes 预置和场景

4.1 Preset Management 预设管理

Your Revelator io24 can access 2 presets using the Preset button... but there are 6 more presets created by PreSonus for you to enjoy—plus another 6 preset slots for you to create custom presets. These presets are all available from Universal Control.

To view the advanced features, click on Revelator io24 from the Device List in the Universal Control launch window.



您的 Revelator io24 可以通过预置按钮访问2个预设.....但还有6个由PreSonus创建的预设供您享用，另外还有6个预置供您创建自定义预置。这些预置都可以从 Universal Control 获得。

要查看高级功能，请在通用控制启动窗口的设备列表中点击 Revelator io24。

In the upper left corner, you will see the Preset Manager. Let's take a quick tour:

在左上角，您会看到预置管理器。让我们快速浏览一下。



1. **HotKey.** This preset slot lets you store a setting to use on the fly. It overrides the current presets and must be toggled off before you can use the other presets again. This is great when you want to throw a quick effect on your voice.

Note that the HotKey works only with whichever channel/VoiceFX are assigned to—default is Channel 1.

热键。这个预设槽可以让你存储一个设置，以便在飞行中使用。它覆盖了当前的预设，并且必须在你再次使用其他预设之前切换关闭。当你想在你的声音上添加一个快速的效果时，这很好。

请注意，热键只对指定的Voice FX通道起作用，默认是通道1。

2. **Preset Slots 1-2.** This corresponds to the two Preset slots on your Revelator io24. These are the presets that are available from the front panel Preset buttons. You can choose to keep the factory presets, or change them as you see fit.

3. **预置槽1-2。**这与你的Revelator io24上的两个预置槽相对应。这些是可以从前面板的预置按钮中获得的预置。您可以选择保留出厂时的预设，或按适合您的方式改变它们。

4. **Save Preset.** Click on this button to save a preset to one of the 6 user slots. Rename it, if you like.

保存预置。点击这个按钮可以把一个预置保存到6个用户插槽中的一个。如果您喜欢的话，可以给它重命名。

5. **Preset List.** Click on the Preset name to view the Preset dropdown menu. This will let you view every Preset available and quickly select the one you want.

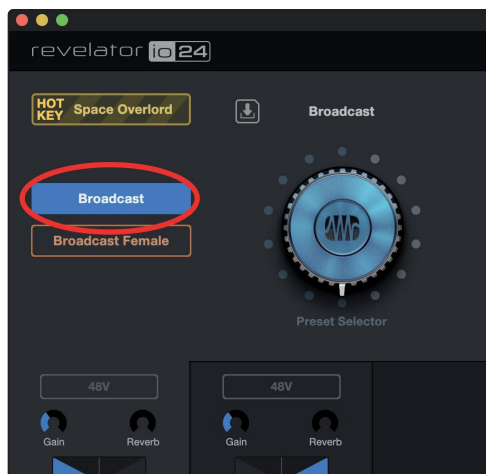
预置列表。点击预置名称，查看预置下拉菜单。您可以查看每一个可用的预设，并迅速选择您想要的预设。

6. **Preset Selection Knob.** Use your mouse's scroll wheel to turn this knob and audition presets in real-time.

预设选择旋钮。使用你的鼠标滚轮来转动这个旋钮，实时试听预置。

4.1.1 Changing Preset Button Slots 更改预置按钮槽位

To change one of the presets available from Revelator io24:



从Revelator io24中可以改变其中一个预置：

1. Click to select the slot you would like to change.
2. Select the desired preset using either the Preset selection knob or selecting it from the dropdown menu.

Let's try it!

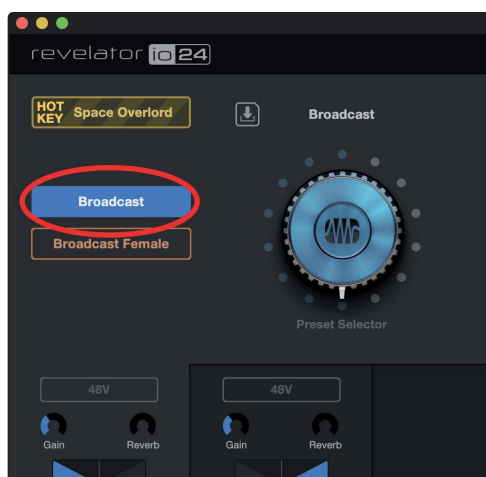
In our example, we're going to change the "blue" preset from "Broadcast" to "VintageChannel."

1. 单击以选择要更改的插槽。
2. 使用预设选择旋钮或从下拉菜单中选择所需的预设。

让我们试一试!

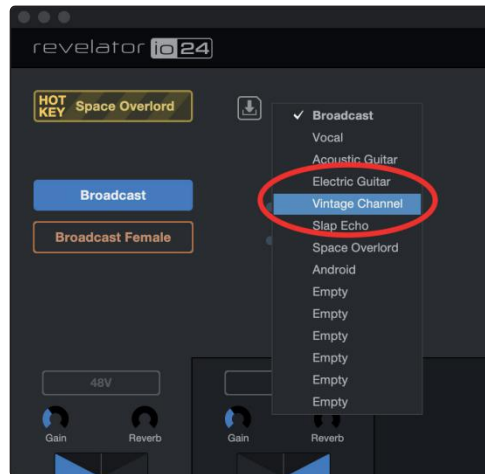
在我们的例子中，我们将把“蓝色”预设从“Broadcast”更改为“Vintage Channel”。

1. From the Preset Slot list, select "Broadcast"

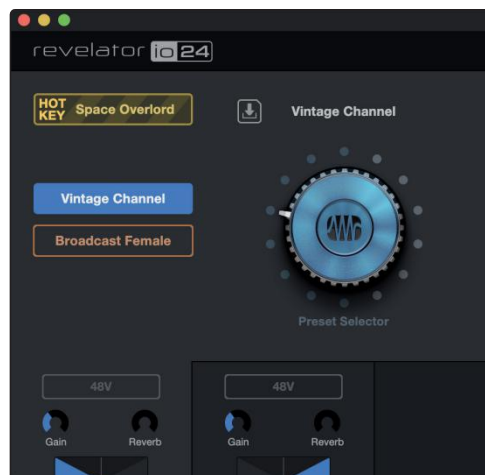


1. 从预设插槽列表中，选择“广播”

2. Click on the dropdown menu and select “Vintage Channel” from the list.



2. 点击下拉菜单，从列表中选择 “Vintage Channel”。
3. “Vintage Channel” is now the preset stored in this slot.



That's it!

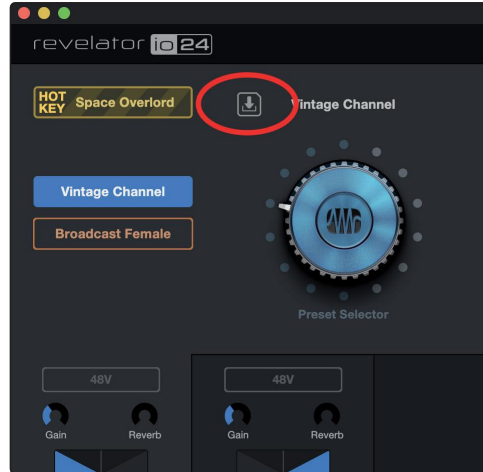
3. “Vintage Channel” 现在是预置存储在这个插槽。
就是这样!

4.1.2 Storing New Presets 存储新的预设

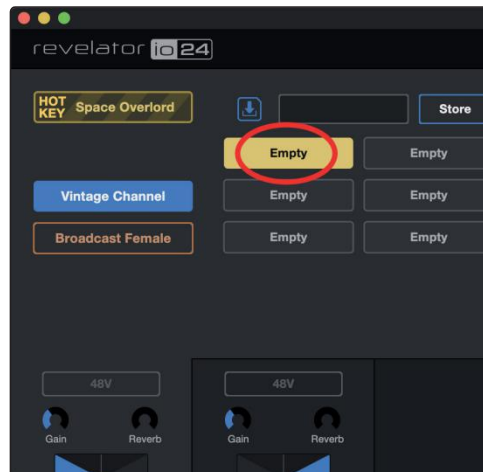
We're going to get into all the Fat Channel settings later ([Section 5](#)), but while we're here, let's talk about storing new Presets.

To store a new preset to one of the 6 User Slots:

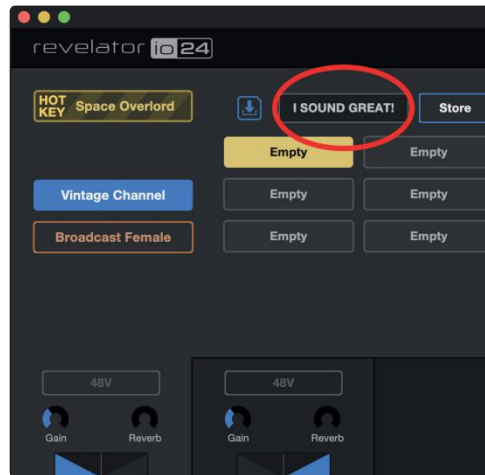
1. Click on the Save Preset button.



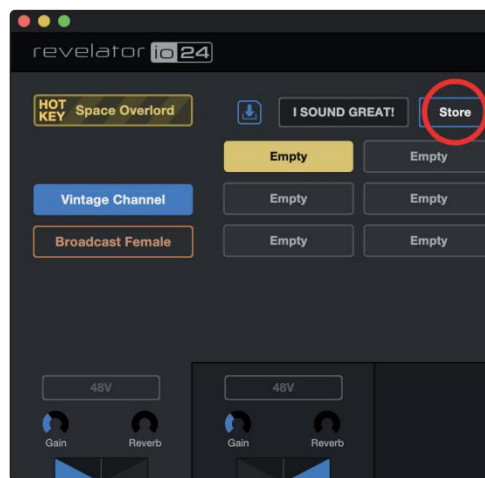
2. Select the user slot to which you want to store it.



3. Enter the name you'd like to use.



4. Click Store.



Done!

稍后我们将进入所有的Fat Channel设置(第5节)，但在这里，让我们谈谈存储新的预设。

要将一个新的预设存储到6个用户槽中的一个：

- 1.单击Save Preset按钮。
- 2.选择要将其存储到的用户插槽。
- 3.输入您想要使用的名称。
- 4.点击商店。

完成!

4.1.3 Exporting/Importing Presets 导出/导入 预置

Revelator io24 can save two presets per channel on the hardware unit itself. This is useful for times when you want to use Revelator io24 with a device that doesn't run Universal Control—for example, a Chromebook, iPad, or a camera with an audio input.

You can Import and Export Presets from Universal Control to Revelator io24 and vice-versa. This way, you can build a wide inventory of presets to use for many different applications—and always make sure you have them ready for whatever task comes your way.

To Export a new preset to one of the 6 User Slots:

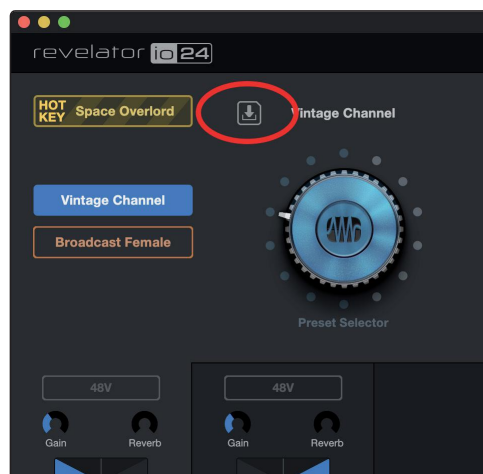
Revelator io24可以在硬件单元上为每个通道保存两个预设值。当您需要使用它们时，这是非常有用的。

Revelator io24，设备不运行通用控制，例如，Chromebook，iPad，或带有音频输入的相机。

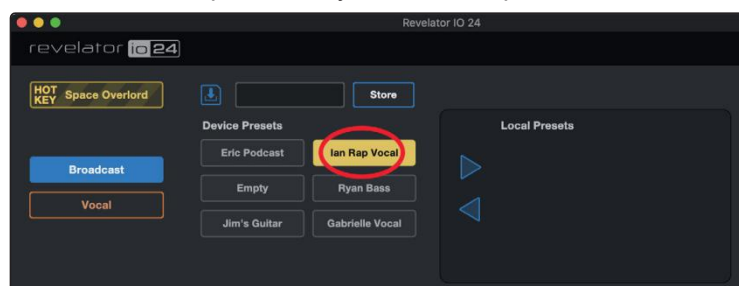
您可以从Universal Control 导入和导出预置Revelator io24，反之亦然。这样，您就可以为许多不同的应用程序建立一个广泛的预置目录，并且总是确保您已经为任何任务做好了准备。

要导出一个新的预设到6个用户插槽之一：

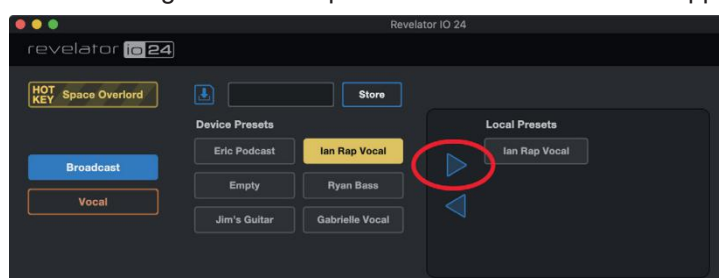
1. Click on the Save Preset button.



2. Select the device preset that you want to Export.

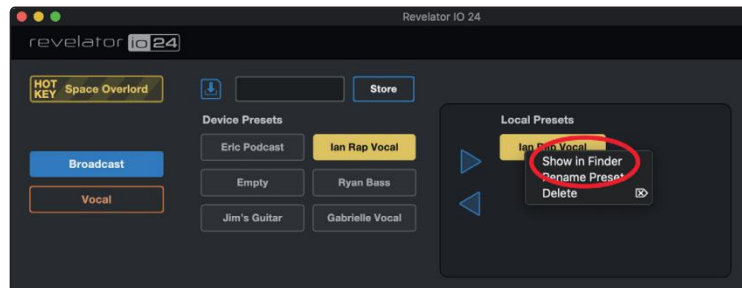


3. Click on the right arrow to Export the Preset. The Preset will appear in the list.



- 1.单击Save Preset按钮。
- 2.选择需要导出的设备预置。
- 3.单击右箭头导出预设。预设将出现在列表中。

To find where the exported Preset has been stored on your computer, right-click on it and choose Show in Finder (Mac) or Show in Explorer (Windows). Have fun sharing this file with other Revelator io24 users!

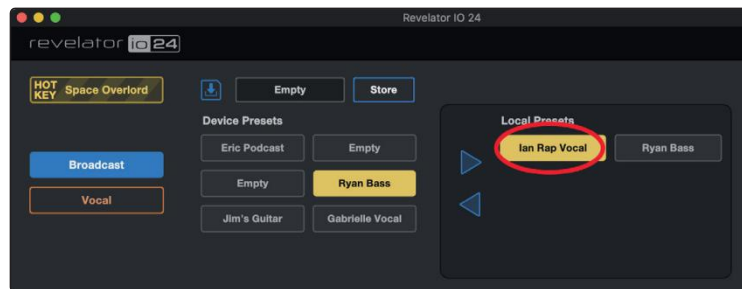


To Import a new preset to one of the 6 User Slots:

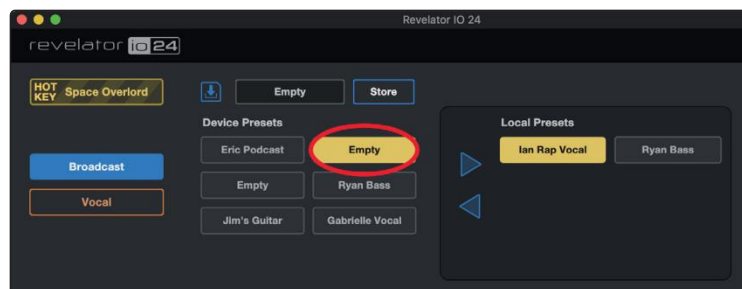
要找到导出的预设已存储在您的计算机上，右键单击它，并选择显示在Finder (Mac)或显示在Explorer (Windows)。与其他 Revelator io24用户共享这个文件有乐趣!

导入一个新的预设到6个用户槽位之一:

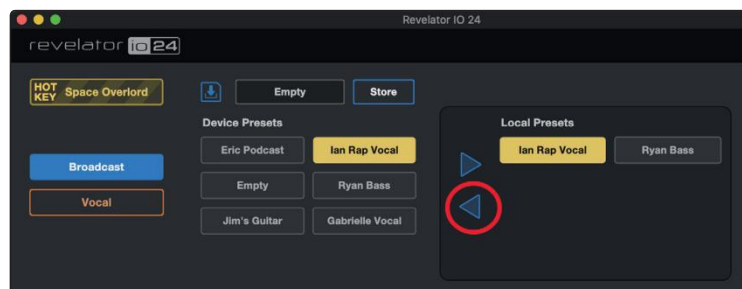
1. Click on the desired Preset in the Local Presets list.



2. Click on the desired Slot in the Device Presets list.



3. Click on the left arrow to load the Preset into the selected Device Preset slot



Now, if you'd like that new Preset stored in one of the positions available from the Preset buttons on your Revelator io24, follow the instructions in Section 4.1.1 and customize away!

- 1.单击“本地预设”列表中所需的预设。
- 2.在“设备预设”列表中单击所需的槽位。
- 3.单击左侧箭头将预设加载到选中的设备预设槽位

现在，如果你想要将新的预设存储在**Revelator io24**上的预设按钮可用的位置之一，请按照**4.1.1**节中的说明进行自定义!

4.1.4 Scenes - Save and Recall 场景-保存和回忆

Scenes allow you to store all of the Revelatorio24's settings for recall at a later time. This is useful for if you have various projects that require specific settings—you won't have to set up every little detail of your Revelator io24 every time you change projects! For example, you might have a podcasting setup with a preset for your frequent guest, and also have a setup you like for recording acoustic guitar.

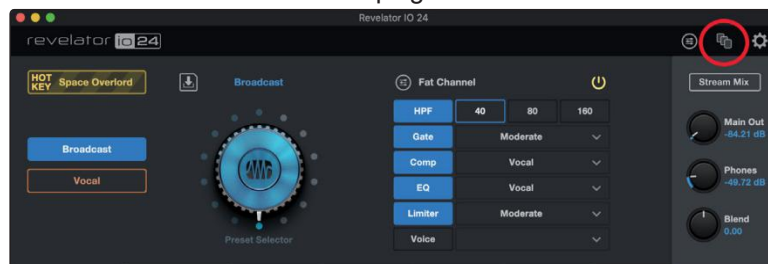
Use Scenes to quickly jump from one configuration to another without having to adjust multiple settings!

场景允许您存储所有Revelator io24的设置，以便在以后的时间中回忆。如果您有各种需要特定设置的项目，这是非常有用的——您不必在每次更改项目时都要设置 Revelator io24的每个小细节！例如，您可能有一个为经常访问的客人预先设置的podcast设置，还有一个您喜欢的录制原声吉他的设置。

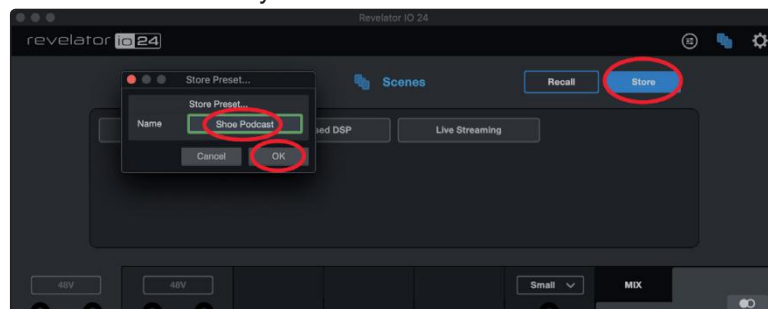
使用场景快速从一个配置跳转到另一个，而不需要调整多个设置！

To store a Scene:

1. Set up your Revelatorio24 just the way you like it for a particular application before storing the Scene.
2. Click the Scenes menu on the top right of Universal Control.



3. Click Store and name your Scene. Click OK.



To Recall (load) a Scene, simply click the Scene you want from the Scene List and then click Recall.

To delete a Scene, right-click it in the Scene List and choose Delete.

存储场景：

- 1.在存储场景之前，为特定的应用程序设置您的Revelator io24。
- 2.点击 Universal Control 的右上角的 Scenes 菜单。
- 3.点击存储并命名你的场景。单击OK。

要回忆 (加载) 一个场景，只需从场景列表中点击你想要的场景，然后点击回忆。

要删除场景，右键单击场景列表，选择删除。

4.1.5 Sharing Scenes and Presets 共享场景和预置

Exporting a Scene or Preset creates a Scene or Preset file.

To share Presets and Scenes with your friends, all you need to do is send the desired Scene or Preset file to your friend, either via e-mail or a PreSonus Sphere Workspace.

If someone is kind enough to share a Preset or Scene with you, it can be imported to Universal Control simply by placing the file in the correct folder.

Folder locations for sharing and import are listed below. Note that these folders won't be found on your system if you have not Exported Scenes or Presets of your own.

导出场景或预置创建场景或预置文件。

要与你的朋友分享预设和场景，你所需要做的就是通过电子邮件或PreSonus Sphere Workspace发送你想要的场景或预设文件给你的朋友。

如果有人很友好地与你共享预设或场景，它可以导入到通用控制简单地把文件放在正确的文件夹。

下面列出了共享和导入的文件夹位置。请注意，如果你没有导出场景或预置，这些文件夹将无法在你的系统中找到。

Windows:

Scenes are stored in: C:\Users\YOUR_USER_NAME\
Documents\PreSonus\Revelator IO\Scene

Presets are stored in: C:\Users\YOUR_USER_NAME\
Documents\PreSonus\Revelator IO\Fat

macOS:

Scenes are stored in: /Users/YOUR_USER_NAME/
Documents/PreSonus/Revelator IO/Scene

Presets are stored in: /Users/YOUR_USER_NAME/
Documents/PreSonus/Revelator IO/Fat

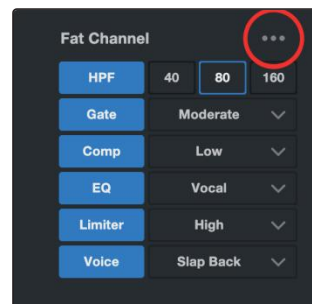
5 Fat Channel and Voice Effects Fat Channel and 声效

5.1 Fat Channel and Voice FX



The FatChannel provides essential signal processing tools to sculpt your sound, as well as VoiceFX section to warp, distort, and bounce it around. These are the effects that are stored with a preset. A dedicated Reverb processor is also available, but it is important to note that Reverb is not stored with a Preset. **More on Reverb in Section 5.1.7.**

If you're new to audio processing, the FatChannel section provides easy-to-use presets for each processor block. This section will go through the controls available as well as provide some useful information on how these processors affect your sound.



If you are an advanced user, more granular control is available for each processor. To view every parameter available, click on the Advanced (...) button. **For more information, please refer to Section 7.2.**

Fat Channel 提供了必要的信号处理工具来塑造您的声音，以及声音 FX 部分，以扭曲，扭曲，并反弹它周围。这些是预先设置好的效果。一个专门的混响处理器也可用，但重要的是要注意，混响不是与预设存储。更多关于混响的内容见 5.1.7 节。

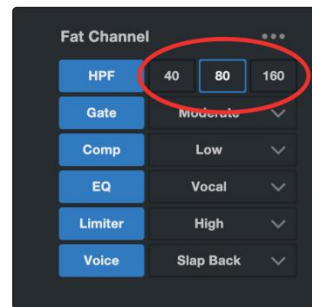
如果您是音频处理新手，Fat Channel 部分为每个处理器块提供了易于使用的预设。本节将介绍可用的控件，并提供一些关于这些处理器如何影响声音的有用信息。

如果您是高级用户，则可以为每个处理器提供更细粒度的控制。要查看每个可用的参数，请单击 Advanced (...) 按钮。更多信息请参见 7.2 节。

5.1.1 High Pass Filter(HPF) 高通滤波器

Also known as a low-end roll-off filter, the High Pass Filter (HPF) lets you cut all frequencies below a specified point, letting the frequencies above that point pass through unchanged. This filter can be handy when you want to reduce the “boominess” or “muddiness” of a vocal and improve the overall clarity. Note that this is a digital high-pass filter that is independent of the hardware high-pass filter discussed in section 2.1.1

Choose between 40 Hz, 80 Hz, and 160 Hz.



Power User Tip: When looking at frequency ranges in audio, it's important to know that the smaller the number, the lower the frequency is. The 40 Hz and 80 Hz settings can be especially useful in reducing the “rumble” from a nearby road or any background electrical noise or hum.

If you would like more granular control, **please see Section 7.2.1 on advanced High Pass Filter settings.**

高通滤波器 (High Pass filter, HPF) 也被称为低端滚动滤波器，它允许你切断某一特定点以下的所有频率，让该点以上的频率不变地通过。这个过滤器很方便

当你想减少声音的“隆隆声”或“浑浊声”，提高整体清晰度时。请注意，这是一个独立于2.1.1节中讨论的硬件高通滤波器的数字高通滤波器

在40hz、80hz和160hz之间选择。

高级用户提示: 在查看音频的频率范围时，重要的是要知道数字越小，频率越低。40hz和80hz的设置在减少附近道路的“隆隆声”或任何背景电噪音或嗡嗡声时特别有用。

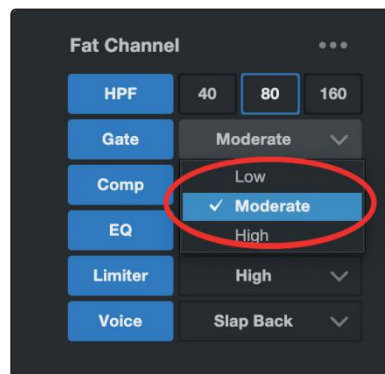
如果您想要更细粒度的控制，请参阅部分

7.2.1高级高通滤波器设置

5.1.2 Gate 噪音门

Noise gating is the process of removing unwanted sounds from your audio by cutting (or attenuating) all signals below a set threshold. The gate will remain “open” as long as the signal is louder than the set threshold. Noise gates were originally designed to help eliminate extraneous noise and unwanted artifacts from a recording, such as hiss, rumble, or transients from other instruments in the room. Since hiss and noise are not as loud as the intended audio source (You!), a properly set gate will only allow the intended sound to pass through; the volume of everything else is lowered. Not only will this strip away unwanted artifacts, it will also add definition and clarity to the desired sound.

Choose between Low, Moderate, and High. Low will provide the least amount of gating, High will provide the most.



Ready to build your own gate? See [Section 7.2.2](#) for advanced Noise Gate controls.

噪音门控是通过切断(或衰减)所有低于设定阈值的信号来移除音频中不需要的声音的过程。只要信号大于设定的阈值，门就会保持“打开”。噪音门最初的设计是为了帮助消除录音中多余的噪音和不需要的工件，例如房间中其他仪器发出的嘶嘶声、隆隆声或瞬态声。因为嘶嘶声和噪音并不像预期的声源(You!)那么响亮，所以正确设置的门只会让预期的声音通过;其他物质的体积降低了。这不仅可以去除不需要的伪影，还可以为你想要的声音增加清晰度和清晰度。

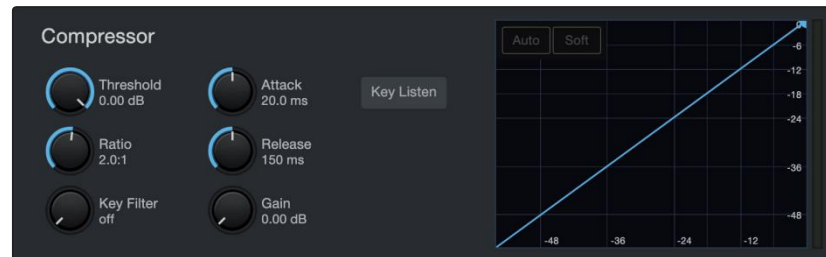
在低、中、高之间进行选择。低将提供最少的门控量，高将提供最多的。

5.1.3 Compressor (Comp) 压缩机

Audio signals have very wide peak-to-average signal-level ratios (sometimes referred to as dynamic range) which is the difference between the loudest level and the softest level. This can create problems when you're setting input levels because when enough gain (or volume) is applied to capture the softest level at its best, one cough, laugh, or excited moment can overload the input, resulting in distortion... and not the cool kind.

A compressor works by limiting the dynamic range of an audio source to make it sound more consistent and even. By setting the maximum level, the compressor makes sure that any audio signal that exceeds that volume is reduced to match it.

Choose between Low, Moderate, High, and De-Ess. Low will provide the least amount of compression, High will provide the most. Compression presets optimized for electric guitar, bass guitar, vocals, and acoustic guitar are also available.



音频信号有非常宽的峰值与平均信号水平比率(有时称为动态范围),这是最大的水平和最软的水平之间的差异。当你在设置输入电平时,这可能会产生问题,因为当使用足够的增益(或音量)来捕捉最柔和的电平时,一个咳嗽、笑或兴奋的时刻就会使输入过载,导致失真.....而不是那种很酷的失真。

压缩机的工作原理是限制声源的动态范围,使声音听起来更一致、更均匀。通过设置最大水平,压缩机确保任何音频信号超过该音量被减少匹配。

在低、中、高和消齿音之间进行选择。低将提供最少的压缩量,高将提供最多的。压缩预设优化电吉他,低音吉他,声乐,和原声吉他也可用。

Use the De-Ess setting if you notice a lot of "sibilance" in your speech. Sibilance is the pronounced presence of the "s" or "sh" sound. Depending on your accent and speech pattern, it can be more or less pronounced.

Power User Tip: While it may be charming in casual speech, sibilance can quickly become distracting because it resonates at a higher frequency that can become grating when heard repeatedly. The goal of a de-esser is not to remove the "s" sound entirely, rather, it's intended purpose is to level it out so that it's even with the rest of the consonants. In other words, you'll still sound like you.

For more advanced compression controls and to learn about the different compressor models onboard your Revelator io24, see Section 7.2.3.

如果你注意到你的演讲中有很多“嘶嘶声”,就使用“消ess”设置。Siilance是“s”或“sh”音的发音。根据你的口音和说话模式,它可以或多或少地发音。

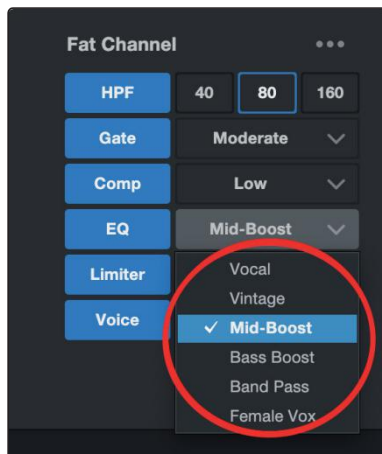
高级用户提示:虽然这种声音在随意的讲话中很有魅力,但它很快就会让人分心,因为它的共振频率更高,重复听到时就会变成刺耳的声音。减音的目的不是要把“s”音完全去掉,相反,减音的目的是为了让它与其他辅音平齐。换句话说,你听起来还是你。

要了解更多先进的压缩控制和有关Revelator io24上的不同压缩机型号,请参见7.2.3节。

5.1.4 Equalizer (EQ)

An equalizer, or EQ, is a filter that allows you to adjust the volume level of a frequency or range of frequencies within an audio signal. In its simplest form, an EQ will let you turn the treble and bass up or down, allowing you to adjust the coloration of your car stereo or your television. In professional audio circles, equalization is a highly sophisticated art that can be used to sculpt the tone of instruments in a mix, counteract anomalies in a room, or just pump up the bass.

Regardless of its application, good equalization is critical to a good sound. When used correctly, an equalizer can provide the impression of nearness or distance, “fatten” or “thin” a sound, and help blend or provide separation between similar sounds in a mix, allowing both to be heard as intended.



均衡器，或EQ，是一种滤波器，允许您调整音频信号的频率或频率范围的音量水平。在最简单的形式中，EQ可以让你调高或调低高音和低音，让你调整汽车音响或电视的颜色。在专业的音频领域，均衡是一种高度复杂的艺术，可以用来塑造混合乐器的音调，抵消房间里的异常，或者只是放大低音。

不管它的应用，好的均衡是一个好的声音的关键。当正确使用时，均衡器可以提供接近或距离的印象，“胖”或“瘦”的声音，并帮助混合或提供类似的声音之间的分离，使两者都能被听到。

Choose between the following preset EQ settings:

- Vocal
- Vintage
- Bass-Boost
- Mid-Boost
- Band Pass
- Female Vox
- Broadcast
- Keys
- Electric Guitar
- Acoustic Guitar
- Electric Bass

在以下EQ预设设置之间进行选择:

- 声乐
- 经典
- 低音增强
- 中音增强
- 带通滤波器
- 女声
- 广播
- 键
- 电吉他
- 木吉他
- 电子贝斯

Power User Tip: *The best way to pick the best EQ setting for your voice is to experiment. Everybody's voice is unique and because EQs are entirely dependent on the frequency of the source, your ears are your best tool in finding the right sound for your voice.*

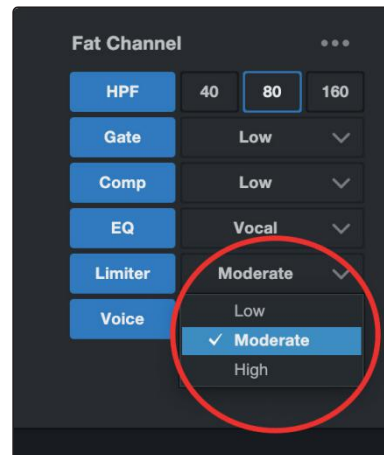
Like the Compressor, Revelator io24 offers advanced controls and several EQ models to choose from when you're ready to dive deeper. See Section 7.2.5 for Advanced EQ Controls.

高级用户提示: 为你的声音选择最佳情商设置的最好方法就是去试验。每个人的声音都是独特的，因为eq完全依赖于源的频率，你的耳朵是你找到适合自己声音的最佳工具。

像压缩机，Revelator io24提供先进的控制和几个EQ模型选择，当你准备潜水更深。高级EQ控制器请参见7.2.5节。

5.1.5 Limiter

True to its name, a Limiter sets the upper dynamic range of your signal and prevents the source from exceeding it by “limiting” it to that threshold. If you’re thinking that sounds a lot like what we just told you a compressor does, you’re catching on! A limiter is different from a compressor in a very critical way: Unlike a compressor, which works gradually to reduce the signal, the limiter prevents virtually any increase in gain at the upper end of the dynamic range. In other words, you can try to get as loud as you want, but the limiter is going to stop that volume spike like a brick wall.



正如它的名字，一个限位器设置你的信号的上动态范围，并防止源通过“限制”它在那个阈值超过它。如果你认为这听起来很像我们刚刚告诉你的压缩机的功能，那你就明白了！限幅器与压缩机的区别是非常关键的：与逐渐降低信号的压缩机不同，限幅器实际上阻止了动态范围上端增益的任何增加。换句话说，你可以试着把音量提高到你想要的程度，但是这个限制器会像一堵砖墙一样阻止音量飙升。

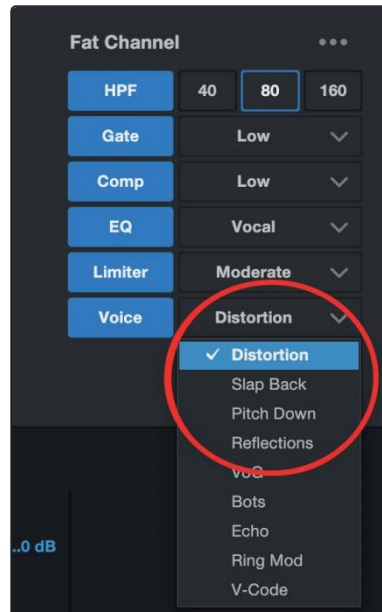
Choose between Low, Moderate, and High. Low will provide the least amount of limiting, High will provide the most.

Ready to dial in a customized Limiter setting? See **Section 7.2.6 for advanced Limiter controls.**

在低、中、高之间进行选择。低将提供最少的限制，高将提供最多的。

准备好拨号在一个定制的限制设置？**高级限幅器控制**请参见 7.2.6 节

5.1.6 Voice FX



Need an effect for your Sci-Fi podcast? Want to add a little spookiness to your Halloween stream? Voice FX are here to give you fun, fantastical effects for your audio. Expect crazy echoes, distortions, warbles, robot voices, and more.

Don't forget—just because they're called Voice FX, doesn't mean they can only be used on voices... Experiment with different sound sources!

Note: Revelator io24's Voice FX can only be used on one of the two Inputs at a time. You can select Channel 1 or 2 for use with Voice FX from the Settings menu.

Like the rest of the Fat Channel, each Voice Effect has advanced controls. **See Section 7.2.7 to find out more.**

你的科幻播客需要效果吗？

想在你的万圣节直播中增加一点毛骨悚然的感觉吗？Voice FX 在这里给你乐趣，幻想的效果为你的音频。期待疯狂的回声、扭曲的声音、颤音、机器人的声音等等。

不要忘记——仅仅因为它们被称为声音特效，并不意味着它们只能用于声音……尝试不同的声源！

注意：Revelator io24 的声音特效一次只能在两个输入之一上使用。您可以选择频道1或频道2使用语音FX从设置菜单。

像Fat Channel 的其余部分一样，每个声音效果都有高级控制。请参阅7.2.7节了解更多信息。

5.1.7 Reverb

Reverberation—or reverb, as it is more commonly known—is perhaps the most widely-used effect in recording. Natural reverb is created by sound waves reflecting off of a surface or many surfaces. For example, when you walk across the wooden stage in a large hall, thousands of reflections are generated almost instantaneously as the sound waves bounce off the floor, walls, and ceilings. These are known as early reflections, and their pattern provides psycho-acoustic indications as to the nature of the space that you are in, even if you can't see it. As each reflection is then reflected off of more surfaces, the complexity of the sound increases, while the reverb slowly decays.

混响——或者更通俗的说法是混响——可能是录音中使用最广泛的效果。自然混响是由声波从一个或多个表面反射而产生的。例如，当你走过一个大厅的木质舞台时，当声波从地板、墙壁和天花板上反射回来时，几乎在瞬间就产生了成千上万的反射。这些被称为早期反射，它们的模式提供了关于你所处空间性质的心理声学暗示，即使你看不到它。随着每一次反射被更多的表面反射，声音的复杂性增加，而混响慢慢衰减。

The reason for the widespread use of reverb in audio recording is fairly self-evident: Human beings don't live in a vacuum. Because our brains receive cues about the nature of the space around us based partially on audio reflections, a sense of space can make an audio recording sound more natural and, therefore, more pleasing.

The Reverb in Revelator io24 is independent of your presets, so you can use the same Reverb setting on any preset you like.



混响在录音中广泛使用的原因是不言而喻的：人类并不是生活在真空中。因为我们的大脑接收到关于我们周围空间性质的线索，部分是基于音频反射，空间感可以使音频录音听起来更自然，因此，更令人愉快。

在Revelator io24的混响是独立于你的预设，所以你可以使用相同的混响设置在任何你喜欢的预设。

To adjust the amount of Reverb you hear in your mix, raise or lower the Reverb Fader in the mixer. *See Section 6.2.2 for more information on your Revelator io24 mixer.*



要调整混音中听到的混响的数量，请提高或降低混音器中的混响Fader。请参阅第6.2.2节了解更多关于Revelator io24混合器的信息。

1. **Preset.** Choose between Small, Medium, and Large. These presets emulate room size. In general, the bigger the room size, the more reverberant it will be.
2. **Size.** This setting adjusts the length of each reflected sound as well as how often you hear them.

1. **预设。** 在小、中、大之间进行选择。这些预设模拟房间大小。一般来说，房间越大，它的回响就越大。
2. **尺寸。** 这个设置可以调整每个反射声音的长度以及你听到它们的频率。

3. **HPF (High Pass Filter).** Like the High Pass Filter in FatChannel, this setting will cut frequencies in the reverb's output below the threshold you set here.

Power User Tip: This is especially helpful for bass-rich sound sources (baritone voice, acoustic guitar) as adding too much reverb in low frequencies can muddy your sound.

4. **Pre-Delay.** Pre-Delay is the time (in milliseconds) between the end of the initial sound and the moment when the first reflections become audible.

Power User Tip: Imagine you're on a stage in a large music hall. You stand on the very edge of the stage and shout "Hello world!" toward the center of the hall. There will be a brief pause before you hear the first noticeable reflections of your voice, because the sound waves can travel much further before encountering a surface and bouncing back. Adjusting the pre-delay parameter on a reverb allows you to change the apparent size of the room without having to change the overall Size. This will give your mix a little more transparency by leaving some space between the original sound and its reverb.

5. **Reverb (Amount).** To change the amount of Reverb affecting Channels 1 and 2, use the Reverb control at the top of either Channel to dial in the amount to taste.

3. **HPF (高通滤波器)。**就像Fat Channel 通道中的高通滤波器一样，这个设置将把混响输出的频率降低到你在这里设置的阈值以下。

高级用户提示：这对低音丰富的声源(男中音，原声吉他)特别有帮助，因为在低频中添加过多的混响会使你的声音浑浊。

4. **pre-delay。**预延迟是初始声音结束到第一次反射声音被听到之间的时间 (以毫秒为单位)。

高级用户提示：想象你在一个大型音乐厅的舞台上。你站在舞台的边缘大喊：“你好，世界！朝大厅中央走去。在你听到声音的第一个明显反射之前会有一个短暂的停顿，因为声波在遇到一个表面并反射回来之前可以传播得更远。在混响上调整预延迟参数允许你改变房间的表面大小，而不必改变整体大小。这将使你的混音更透明一点，在原始声音和混响之间留下一些空间。

5. **混响 (数量)。**要改变影响频道1和2的混响量，使用任一频道顶部的混响控制来拨入要品尝的量。

6 Mixing and Loopback Audio 混合和环回音频

Revelatorio24 is equipped with a powerful yet easy-to-use mixer that lets you blend your input signals with three stereo audio streams. These can include playback from a recording application like Studio One, the audio from a Skype call, the sounds from your favorite video game, or all three at the same time.

If you're just starting out and only plan on recording your voice, you won't ever need to use the mixer. However, when you're ready to start adding call-in audio to your podcast or creating more elaborate streams, this mixer will solve a myriad of routing problems and headaches.

macOS users, please note: *All the mixer descriptions in this section assume that you have enabled Multi Mode. This will provide you with the best user experience. If you haven't enabled Multi Mode, please take a step back to Section 3.1 and do so now.*

Revelator io24 配备了一个强大的但易于使用的混音器，让您混合您的输入信号与三个立体声音频流。这些功能包括Studio One等录音应用的回放、Skype通话的声音、你最喜欢的视频游戏的声音，或者同时播放这三种功能。

如果你刚刚开始，只打算录制你的声音，你永远不需要使用混音器。然而，当你准备开始添加呼叫音频到你的播客或创建更复杂的流，这个混合器将解决无数的路由问题和头痛。

macOS用户，请注意：本节中的所有混合器描述都假设您已经启用了多模式。这将为提供最佳的用户体验。**如果您还没有启用Multi Mode，请回到3.1节并现在启用。**

6.1 What is Loopback Audio? 什么是环回音频?

Loopback audio is the industry term for routing audio from one application to another. Applications that use audio interfaces, like your Revelator io24, are designed to receive audio from one audio device and send audio to one audio device. This means that most applications can only send to and receive from an audio interface... not from other applications.

This can present a challenge in certain situations. Still wondering why loopback audio is so cool? Here are some great uses:

环回音频是一个行业术语，用于将音频从一个应用程序路由到另一个应用程序。使用音频接口的应用程序，如

Revelator io24，被设计用于从一个音频设备接收音频并将音频发送到一个音频设备。这意味着大多数应用程序只能发送和接收音频接口，而不能从其他应用程序。

在某些情况下，这可能会带来挑战。还想知道为什么环回音频这么酷吗？这里有一些很棒的用途：

- **Make your Podcast guests feel like they're right there in the studio with you.** Not only can you easily record the audio from your Zoom guest, you can combine your mic signal with audio from Studio One—and send the entire mix to Zoom by selecting one of your Revelator io24's loopback devices as the source for Zoom. Your guests hear both your voice and your audio add-ons while you record just their voice!
- **Create super professional screencasts.** Most screen-capture applications let you include your mic OR your system audio. With Revelator io24's mixer and loopback streams, you can create a mix of both your mic and your system sound then use a Revelator io24 loopback device as the source for your screen-capture application.
- **Make a gameplay video.** Just like with making a screencast, loopback audio makes recording gameplay audio and your mic at the same time quick and easy.

Best of all, the Revelator io24's mixer makes it easy to monitor any mix you create, so you can record and stream with confidence, knowing that what you're hearing is exactly what your audience will be listening to as well.

• 让你的播客听众觉得他们就在你的演播室里。您不仅可以轻松地录制您的Zoom客人音频，您可以将您的麦克风信号与音频从Studio One -和发送整个混音通过选择您的Revelator io24的环回设备之一作为Zoom的源。您的客人听到您的声音和您的音频插件，而您只是记录他们的声音！

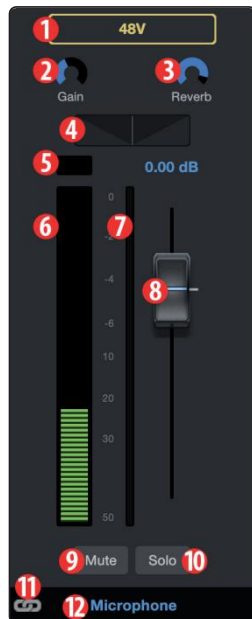
• 创建超级专业的视频。大多数屏幕捕捉应用程序允许您包含您的麦克风或您的系统音频。使用Revelator io24的混音器和环回流，您可以创建您的麦克风和系统声音的混合，然后使用Revelator io24环回设备作为您的屏幕捕捉应用程序的源。

• 制作游戏玩法视频。就像制作截屏一样，环回音频可以同时录制游戏玩法音频和你的麦克风，既快捷又简单。

最重要的是，Revelator io24的混音器可以很容易地监控您创建的任何混音，所以您可以录制和流媒体充满信心，知道您所听到的正是您的听众将会听到的以及。

6.2 Mixer Controls 混合器控制

6.2.1 Microphone Channel Controls 麦克风输送控制



1. **+48v.** Engages/disengages +48v power for use with condenser microphones like the PreSonus PX-1 or M7.
2. **Gain.** Use this control to set the gain for your connected microphone or instrument. Gain can also be set using the Encoder knob on your Revelator io24.
3. **Reverb.** Use this control to set the amount of Reverb applied to the signal. Reverb settings can be set up to taste using the Reverb section. **See section 5.1.7 for more on Reverb.**
4. **Pan.** This sets the pan position for your signal in every stereo mix. Pan sets the position of the microphone relative to the left and right side of the mix. When the Pan is set to the center position, your microphone will sound equally in both the left and right side of the mix. As you turn it to the right, it will be louder in the right side. As you turn it to the left, it will be louder in the left side.
5. **Clip Light.** This light will illuminate red when the input signal is too loud and clipping. If your input signal clips, it will overload the Revelator io24's analog-to-digital converters, causing digital distortion. This sounds terrible. If you record a signal with digital distortion, there is no undoing it or fixing it. And because of this, it's important to keep your eye on this indicator while you're setting your levels.
6. **Channel Meter.** This meter displays the current level of your microphone before the fader level.
7. **Gain Reduction Meter.** This meter displays the amount of gain reduction being applied to your microphone signal by the gate, compressor and/or limiter.
8. **Microphone Channel Fader.** Controls the Overall Level of the Microphone Channel in the currently selected mix.
9. **Mute.** Mutes the signal in every stereo mix.
10. **Solo.** Solos the signal in every stereo mix.
11. **Channel Link.** Clicking this links Channels 1 and 2 to act as a single stereo Channel, suitable for stereo instruments like keyboards.
12. **Channel Name.** Double-clicking on the word "Microphone" will let you customize the name of the microphone channel.

1. + 48 v. 使用/断开+48v电源，用于电容麦克风，如 PreSonus PX-1或M7。

2. 获得。使用此控件可为连接的麦克风或仪器设置增益。增益也可以使用你的启示器io24上的编码器旋钮进行设置。

3. 混响。使用此控件设置应用到信号的混响量。混响设置可以设置为味觉使用混响部分。更多关于混响的内容请参见 5.1.7节。

4. **Pan.** 这设置了你的信号在每个立体声混音中的平移位置。平移器设置麦克风相对于混合器左右两侧的位置。当 Pan被设置到中心位置时，你的麦克风将在混合的左右两边发出同样的声音。你向右转，右边的声音就大一些。当你把它转到左边时，左边的声音会大一些。

5.夹光。当输入信号太大或太短时，该灯将亮红灯。如果你的输入信号剪辑，它会使启示者io24的模数转换器过载，造成数字失真。这听起来很糟糕。如果你用数字失真来记录信号

没有什么补救的办法。正因为如此，当你设定水平时，一定要注意这个指示器。

6.通道计。此仪表显示您的麦克风当前水平之前的音量渐变水平。

7.获得减计。这个仪表显示增益减少的数量，应用到麦克风信号的门，压缩机和/或限幅器。

8.麦克风通道音量控制器。在当前选择的组合中控制麦克风通道的总体级别。

9.静音。在每个立体声混音系统中都能屏蔽信号。

10.独奏。在每一个立体声混音中独唱信号。

11.频道链接。点击这个链接通道1和通道2作为一个单一的立体声通道，适合像键盘这样的立体声乐器。

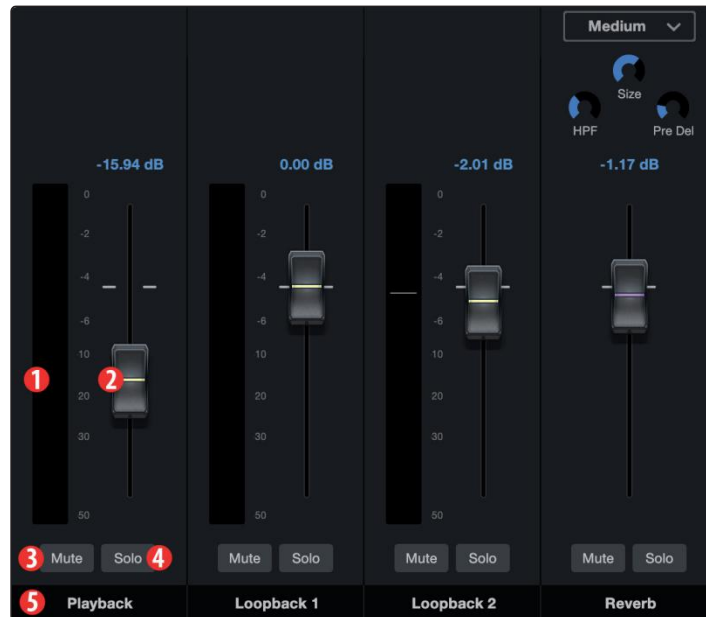
12.频道名称。双击单词“麦克风”将允许您自定义麦克风通道的名称。

6.2.2 Mixer Channel Controls 混音通道控制

Your Revelator io24 mixer has four Channels:

1. **Playback.** This is the output channel for the Revelator io24 Playback Device in each stereo mix.
2. **Loopback 1.** This is the output channel for the Revelator io24 Loopback 1 Device in each stereo mix.
3. **Loopback 2.** This is the output channel for the Revelator io24 Loopback 2 Device in each stereo mix.
4. **Reverb.** This is the output channel for the Reverb in each stereo mix. The higher you set the fader, the more Reverb you will hear.

Each channel has the same controls:



你的Revelator io24混频器有四个频道：

- 1.回放。这是每个立体声混音中Revelator io24播放设备的输出通道。
- 2.回送1。这是在每个立体声混音中Revelator io24环回1设备的输出通道。
- 3.环回2。这是Revelator io24环回2设备在每个立体声混音中的输出通道。
- 4.混响。这是每个立体声混音的混响输出通道。你设置的音量越高，你会听到越多的混响。

1. **Channel Meter.** This meter displays the current level of the channel before the fader (#2) level.
2. **Channel Fader.** Controls the Overall Level of the Channel in the currently selected mix.
3. **Mute.** Mutes the Channel in your currently-selected mix. Note that the microphone channel Mute is global and mutes the channel across all mixes.
4. **Solo.** Solos the Channel in your currently-selected mix. Note that the Input channel Solos are global and solos the channel across the Main Mix mix.
5. **Channel Name.** Double-clicking on the default name will let you customize the name of the Channel.

1. 通道计。这个仪表显示当前水平的通道前的渐变(#2)水平。
2. 通道音量控制器。控制当前选定组合中通道的总体级别。
3. 静音。将当前选择的混音中的频道静音。请注意，麦克风通道Mute是全局的，在所有混音中对通道进行静音。
4. 独奏。独奏频道在您当前选择的混合。请注意，输入通道独奏是全局的，独奏是横跨主混合混合的通道。
5. 频道名称。双击默认名称将允许您自定义Channel的名称。

6.2.3 Main Output Controls and Mix Selection 主要输出控制和混合选择

Revelator io24 gives you very fine, detailed control over the details of the different mixes that you can send to your Loopback streams and outputs.

The Main Output Controls affect the physical outputs of your Revelator io24, including Main Outputs, Headphones, etc. Anything you can plug a cable into.

Revelator io24为您提供非常精细、详细的控制，可以将不同的混合信息发送到Loopback流和输出。

主要输出控制影响Revelator io24的物理输出，包括主要输出，耳机等。任何能插电缆的东西。



1. **Stream Mix.** Click this button to activate/de-activate Stream Mix mode. **See section 2.4.6 for more on Stream Mix.**
2. **Main Out.** Master volume control for your Main outputs (your speakers)
3. **Phones.** Master volume control for your Headphone Output.
4. **Blend.** Control your direct monitoring signal in relation to your software monitoring signal. Left = more direct, right = more from software.

Revelator io24's Mix Selection Controls let you create four unique mixes to send to four different outputs. This is useful if, for example, you have backing music running during your podcast, but don't want to send the backing music to a guest on your show calling over Skype. You can create custom mixes for Monitor, Main, Loopback 1, or Loopback 2.

1. 流混合。点击此按钮激活/取消激活流混合模式。有关Stream Mix的更多信息，请参见2.4.6节。
2. 主输出。主音量控制的主要输出(您的扬声器)
3. 手机。主音量控制您的耳机输出。
4. 混合。将您的直接监控信号与您的软件监控信号相关联。左=更直接，右=更多来自软件。

Revelator io24的混合选择控件让您创建四个独特的混合发送到四个不同的输出。这是很有用的，例如，如果你在播客中播放背景音乐，但不想把背景音乐发送给通过Skype打电话的嘉宾。您可以为Monitor、Main、Loopback 1或Loopback 2创建自定义混合。

5. **Main.** Click on this tab to bring up the mix for the Revelator io24 Device.

6. **Record.** Click on this tab to bring up the mix for the Main USB Output stream. Stream Mix must be engaged.
7. **Loopback 1.** Click on this tab to bring up the mix for the Revelator io24 Loopback 1 Device.
8. **Loopback 2.** Click on this tab to bring up the mix for the Revelator io24 Loopback 2 Device.
9. **Phones Listen.** You can listen to any of the four mixes by clicking on the headphone icon. This will route the selected mix to your headphones instead of the Monitor mix, so you can audition your other mixes.
10. **Link.** You can quickly copy your Phones mix settings to any other Mix by clicking this Link button.
11. **Mono/Stereo.** Each mix can be toggled between mono and stereo. Use the mono control when routing loopback audio to an application that only accepts one input, or when you wish to monitor in mono.
12. **Output Fader.** Sets the overall output level of the currently selected mix.
13. **Mix Clip.** When this light illuminates, your mix is too loud and is “clipping”. You can fix this by lowering the overall output level or by lowering each channel in the mix.
14. **Mix Meter.** Displays the overall level of the current mix.
15. **Mute.** Mutes the currently selected mix.
16. **Mix Name.** Each Mix name can be customized by clicking on the default name below the Main output fader.

5. Main。点击这个选项卡调出Revelator io24设备的混合。

6. 录音。单击此选项卡调出主USB输出流的混合。**Stream Mix**必须参与。

7. 回送1。单击此选项卡调出启示器io24环回1设备的混合。

8. 环回2。单击此选项卡调出启示器io24环回2设备的混合。

9. 手机听。你可以通过点击耳机图标来听这四种混音。这将路由选择的混音到你的耳机，而不是**Monitor**混音，所以你可以听你的其他混音。

10. 链接。您可以快速复制您的手机混合设置到任何其他混合点击这个链接按钮。

11. 单声道/立体声。每种混音都可以在单声道和立体声之间切换。当将环回音频路由到只接受一个输入的应用程序时，或当您希望使用单声道监控时，请使用单声道控制。

12. 输出音量控制器。设置当前选定组合的总体输出级别。

13. 混合剪辑。当这盏灯亮起时，你的混音太吵了，太“剪裁”了。你可以通过降低整体输出水平或降低混合中的每个通道来解决这个问题。

14. 组合仪表。显示当前组合的总体级别。

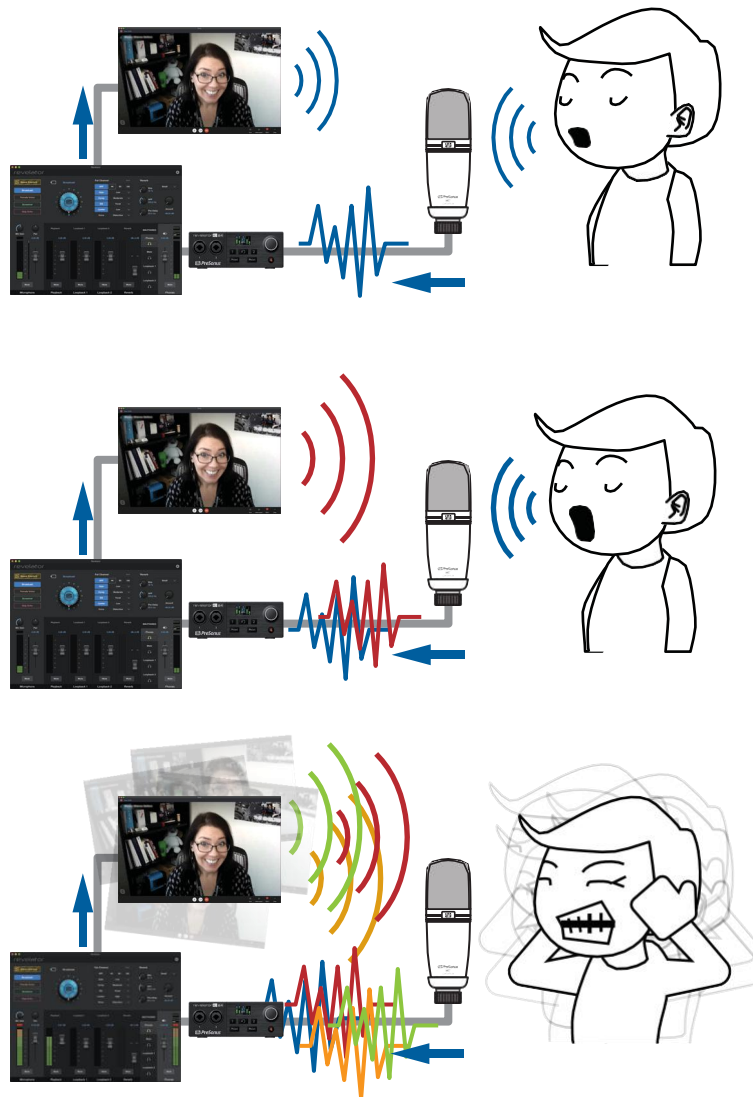
15. 静音。使当前选择的组合静音。

16. 组合的名字。每个**Mix**名称可以通过点击主输出渐变器下面的默认名称来定制。

6.3 Feedback Loops are Bad

While loopback audio and the Revelator io24 mixer makes it really easy to mix and record the sound of one piece of software into another, there is also the potential to send the output of a software application back into itself and create what is known as a “feedback loop.”

虽然loopback音频和Revelator io24混音器可以很容易地将软件的一个部分混音和录制到另一个部分，但也有可能将软件应用程序的输出发送回自身，并创建所谓的“feedback loop”。



Whenever you're recording using the Revelator io24 mixer with an application that offers monitoring, like Studio One or OBS, you must either disable monitoring or mute the return channel in your Revelator io24 mixer to avoid creating a feedback loop.

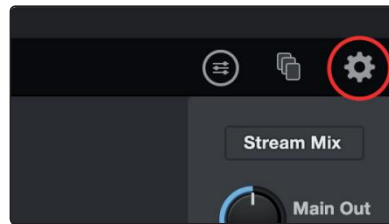
当你使用Revelator io24混频器与一个提供监控的应用程序时，如 Studio One 或 OBS，你必须在Revelator io24混频器中禁用监控或静音返回通道，以避免创建反馈循环。

Applications like Skype and Zoom have a “mix minus” feature that removes the input signal from the output signal, so you don’t have to worry about this if you’re just recording a video chat. This feature is on by default, all the time.

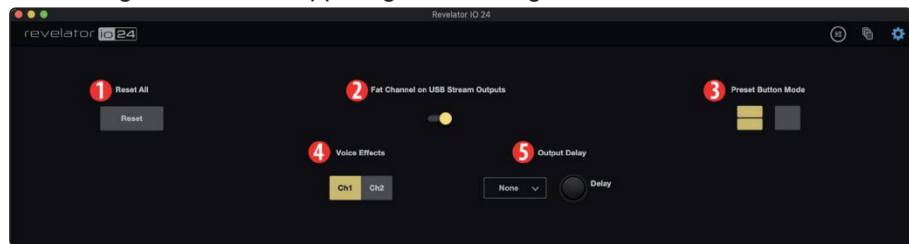
像Skype和Zoom这样的应用程序有一个“mix - minus”功能，可以将输入信号从输出信号中去除，所以如果你只是录制视频聊天，就不必担心这个问题。默认情况下，该功能一直处于开启状态。

7 Advanced Features and Customization Tools 高级功能和定制工具

7.1 Settings Menu 设置菜单

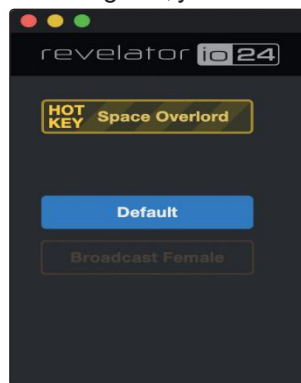


Your Revelator io24 features several customizable features. Press the Settings button in the upper right corner to get started.



你的Revelator io24有几个可定制的特性。按右上角的设置按钮开始

1. **Reset All.** Click this button to reset your Revelator io24 to its factory default state.
2. **Fat Channel on USB Stream Outputs.** By default, your Revelator io24 will record audio just as you hear it in your headphones, complete with the Fat Channel preset. If you would like to record only the raw unprocessed audio, but still listen to the presets while you record, disable “Fat Channel on USB Stream Outputs.”
3. **Preset Button Mode.** By default, your Revelator io24 offers two presets via the Preset buttons on the interface itself. If you find yourself only using one, you can simplify this accordingly by clicking here.



- 1.重置所有。单击此按钮将您的启示器io24重置为出厂默认状态。
- 2.Fat Channel USB流输出。默认情况下，您的Revelator io24将录制音频，就像您在耳机中听到的那样，完成脂肪通道预设。如果您想只记录未经处理的音频，但仍然听预设，而您的记录，禁用“脂肪通道的USB流输出。”
- 3.预设按钮模式。默认情况下，您的启示器io24通过界面上的预设按钮提供了两个预设。如果你发现自己只使用一个，你可以通过点击这里来进行相应的简化。

When One or Two Preset Button Mode is engaged, you will only see the respective number of presets in the Revelator io24 mixer as well; the unused presets will be greyed out. Note that in single Preset slot mode, the Preset button on Revelator io24 will toggle between the loaded preset and bypass. In two-Preset slot mode, bypass is still achieved by pressing and holding the Preset button on Revelator io24.

当一个或两个预设按钮模式被使用时，你只会看到相应数量的预设。在Revelator io24混频器以及未使用的预设将变为灰色。注意，在单预设槽模式下，Revelator io24上的预设按钮将在加载预设和旁路之间切换。在双预设槽模式下，仍然可以通过按住Revelator io24上的预设按钮来实现旁路。

4. **Voice Effects.** By default, your Revelator io24's Voice FX are only available on Channel 1. Use this control to make them available on Channel two. Only one channel can use Voice FX.
5. **Output Delay.** Use an output delay to help sync audio to video if you're experiencing sync issues between your audio and video. Use the drop-down menu to choose the desired Outputs, and the Delay knob to set the amount of delay in milliseconds. (Similar features are sometimes called "lip sync" on some TVs)

4. 声音效果。默认情况下，你的启示者io24的声音特效只能在Channel 1上使用。使用此控件可使它们在Channel 2上可用。只有一个频道可以使用语音FX。

5. 输出延迟。如果您遇到音频和视频之间的同步问题，请使用输出延迟来帮助同步音频到视频。

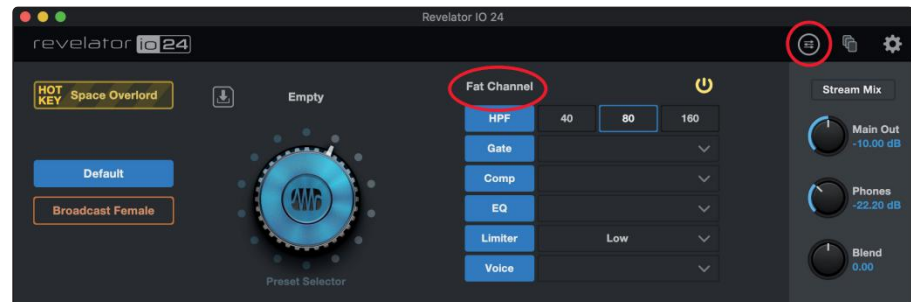
USB 1/2 = Main

USB 3/4 = Loopback 1

USB 5/6 = Loopback 2

7.2 Advanced Fat Channel and Voice Effects Controls 高级混合处理插件 Fat Channel 和声效控制

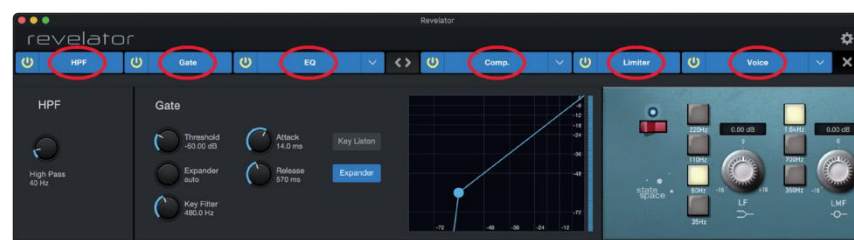
To open the advanced Fat Channel and Voice Effects Controls, click on the Fat Channel menu at the top right of Universal Control, or click "Fat Channel."



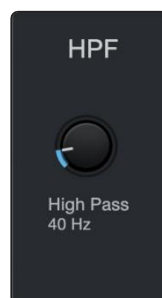
要打开高级Fat Channel 和声音效果控件，请单击通用控件右上角的Fat Channel 菜单，或单击“Fat Channel”。

To edit any of the effects, click on the name of the desired processor from the tabs at the top of the screen. This will bring its controls into focus.

要编辑任何效果，请从屏幕顶部的选项卡中单击所需处理器的名称。这将使其控制成为焦点。



7.2.1 High Pass Filter 高通滤波器



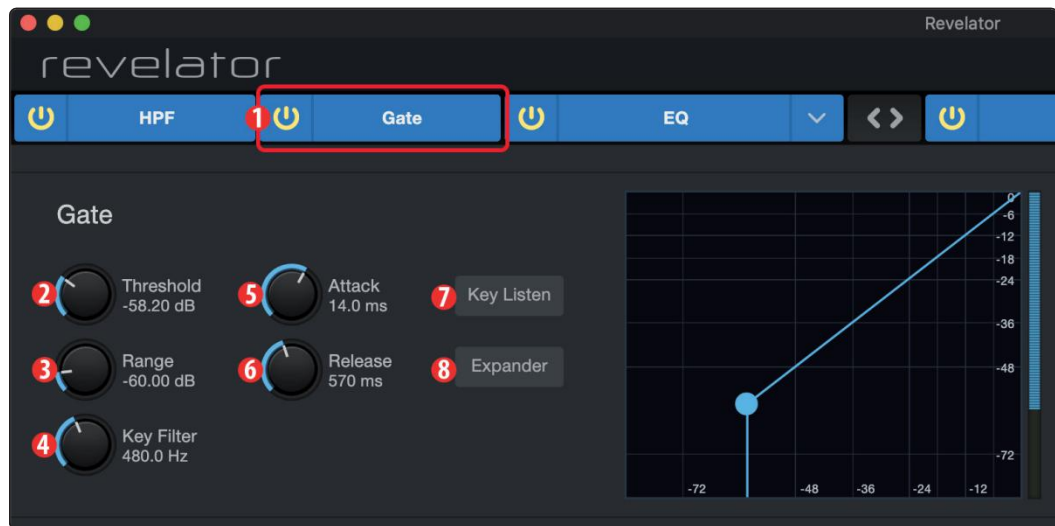
Use this control to set the High-Pass Filter frequency threshold for the selected Channel or Output Bus. The filter's threshold can be set from 24 Hz to 1 kHz. When the threshold is set to its lowest point, the filter is off. The high-pass filter's slope is -12 dB/8va.

Power User Tip: A high-pass filter attenuates all frequencies below the set threshold. Use the Fat Channel high-pass filter to remove unwanted low frequencies from your source signal, rather than trying to EQ them out.

使用此控件可设置所选通道或输出总线的高通滤波器频率阈值。滤波器的阈值可以从24赫兹到1 kHz设置。当阈值设置为最低点时，过滤器关闭。高通滤波器的斜率为-12 dB/8va。

高级用户提示：高通滤波器衰减所有低于设定阈值的频率。使用Fat Channel高通滤波器来去除源信号中不需要的低频，而不是试图将它们EQ出去。

7.2.2 Noise Gate 噪声门



1. **On/Off.** Turns the Noise Gate on or off in the signal chain.
2. **Threshold.** Sets the signal level that bisects the signals you wish to keep from the signals you want to attenuate. Signals below this level are attenuated according to the setting of the Range parameter. Signals above this level pass through unaffected.

1.开/关。打开或关闭信号链中的噪声门。

2. 起点。设置将希望保持的信号与希望衰减的信号平分的信号电平。低于此电平的信号将根据**Range**参数的设置衰减。高于这个水平的信号不受影响地通过。

3. **Range.** Sets the amount of attenuation applied to a signal when its level falls below the Threshold. Lower settings pull signal level down further, all the way to $-\infty$, if desired. Higher settings pull the signal down to a lesser extent, de-emphasizing noise and other nuisance signals more subtly (without a “hard” cut-off). **Note:** *Range is disabled when the Expander is engaged.*
4. **Key Filter.** This sets the frequency at which the gate will open. Setting a specific frequency, in addition to a specific decibel level, provides more sonic shaping.
Power User Tip: *A properly set key filter on a gate can greatly improve the overall sound quality of a mix. For example, if you are recording outside, the road noise may be loud enough to open the gate. This is where a key filter can come in handy. By setting the key filter to remove some of those low frequencies, the gate won't be as apt to open for the next passing car.*
5. **Attack.** Sets the time it takes for the gate to “open” when a signal passes the threshold.
Power User Tip: *A fast attack rate is crucial for percussive instruments. Slow-rising signals such as vocals and bass guitar require a slower attack; with these signals, a faster attack can cause an audible click. All gates have the ability to click when opening but a properly set gate will never click.*
6. **Release.** Sets the time it takes for the gate to “close” when a signal falls beneath the threshold.
Power User Tip: *Gate release times should typically be set so that the natural decay of the instrument or vocal being gated is not affected. Shorter release times help to clean up the noise in a signal but may cause “chattering” with percussive instruments. Longer release times usually eliminate chattering and should be set by listening carefully for the most natural release of the signal.*
7. **Key Listen.** Press the button to engage or disengage the Key Listen function. It will illuminate to indicate that the Key Listen is active. When Key Listen is enabled, you will be listening to the frequency that Key Listen is set to.
8. **Expander Mode.** Press the button or turn the encoder to switch between Gate and Expander functions for this processor.

4.范围。设置当信号的电平低于阈值时应用于信号的衰减量。较低的设置将信号电平进一步降低，如果需要，可以一直拉到 $-\infty$ 。较高的设置会将信号降低到较小的程度，更巧妙地降低噪音和其他恼人信号的重要性(而不会有“硬”切断)。备注:当扩展器被占用时，Range被禁用。

5.关键的过滤器。这设置了栅极打开的频率。设置一个特定的频率，除了一个特定的分贝水平，提供更多的声音塑造。

高级用户提示: 适当设置门上的键过滤器可以极大地改善混音的整体音质。例如，如果你在室外录音，道路噪音可能大到足以打开大门。这就是关键过滤器可以派上用场的地方。通过设置关键滤波器来去除一些低频，门就不会为下一辆经过的汽车打开。

6.袭击。设置信号通过阈值时门“打开”所需的时间。

高级用户提示: 快速的攻击速度对打击乐器是至关重要的。缓慢上升的信号，如人声和低音吉他需要一个较慢的攻击;有了这些信号，更快的攻击可以引起声音的滴答声。所有的门在打开时都有点击的能力，但是一个正确设置的门永远不会点击。

7.版本。设置当信号低于阈值时门“关闭”所需的时间。

高级用户提示: 通常应该设置门的释放时间, 以使乐器的自然衰减或声音被门控不受影响。较短的释放时间有助于清除信号中的噪音, 但可能会导致敲击乐器的“抖动”。较长的释放时间通常可以消除抖振, 应该通过仔细倾听信号最自然的释放来设置。

8.主要听。按此键可开启或退出按键监听功能。它将说明关键倾听是积极的。当键侦听启用时, 您将侦听键侦听设置为的频率。

9.扩张器模式。按下按钮或转动编码器来切换此处理器的Gate和Expander功能。

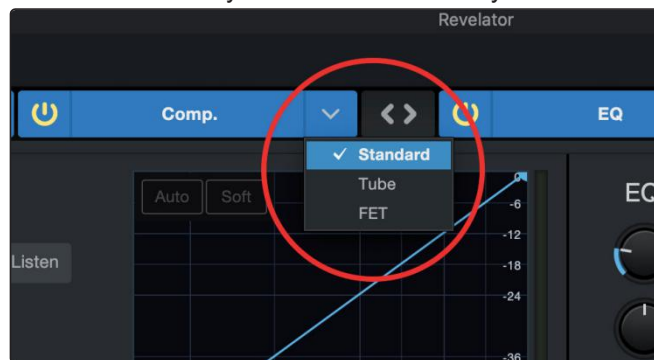
7.2.3 Compressor 压缩机

As previously mentioned, a compressor is a dynamics processor that reduces the dynamic range of a signal by attenuating it by a set ratio when it exceeds a defined threshold. Your Revelator io24 is equipped with three compressor models from which to choose: Standard, Tube, and FET.

These distinct compressor plug-in models have their own set of controls and behavior:

- **Standard Compressor.** A clean and full-featured compressor that offers transparent dynamic range reduction.
- **Tube Leveling Amplifier.** A model of a tube-based optoelectronic compressor, with simple, quick controls and a classic tonal character.
- **Class-A FET Leveling Amplifier.** A model of a Class-A FET-based compressor, with an aggressive, punchy tonal character.

To change the compressor model, click on the dropdown menu. Note: The compressor will turn off whenever a new model is loaded and must be re-enabled for you to hear its effect on your voice.



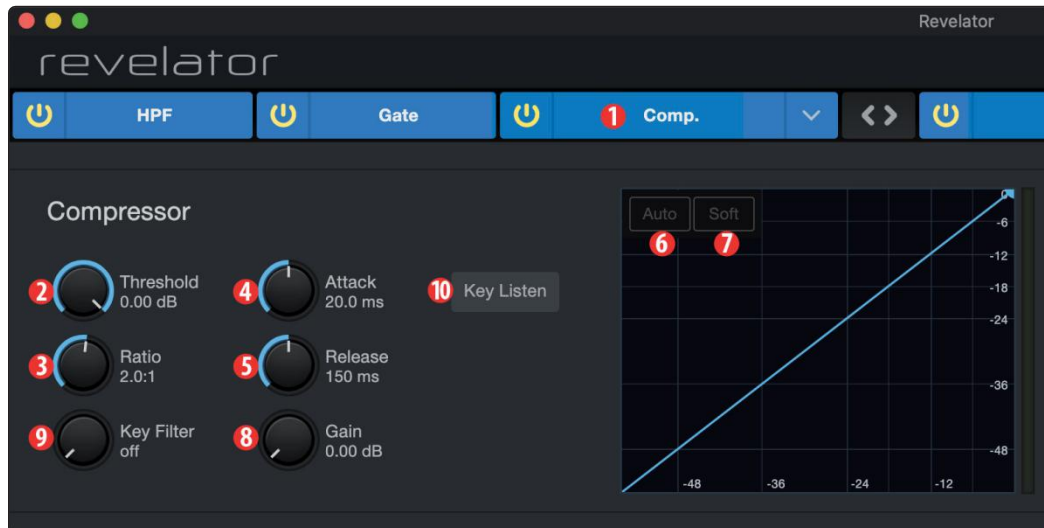
如前所述, 压缩机是一种动态处理器, 当信号超过一个定义的起点时, 它通过一个设定的比率衰减信号, 从而减小信号的动态范围。您的 Revelator io24 配备了三种压缩机型号, 从其中选择: 标准, Tube, 和场效应管。

这些不同的压缩机插件模型有自己的一套控制和行为:

- 标准压缩机。一个清洁和全功能的压缩机, 提供透明的动态范围缩小。
- 管水准测量放大器。一种基于管的光电压缩机模型, 具有简单、快速的控制和经典的色调特征。
- a类场效应晶体管调平放大器。A类场效应晶体管压缩机的模型, 具有积极的, 有力的音调特征。

如果需要更换压缩机的型号, 请单击下拉菜单。注意: 压缩机将关闭, 每当一个新型号加载, 必须重新启用, 以便您听到它对您的声音的影响

Standard Compressor 标准压缩机



1. **On/Off.** Turns the Compressor on or off in the signal chain.
2. **Threshold.** Sets the level above which the compressor begins to attenuate the signal.
3. **Ratio.** Sets the relationship between the amount a signal goes above the threshold, and the amount it is attenuated. At a 1-to-1 ratio (often written as 1:1), no compression occurs. At a 4:1 ratio, a signal that passes the threshold by 8 dB is attenuated to within 2 dB of the threshold (dividing by four). The higher the ratio you choose, the more pronounced the compressor effect becomes.
4. **Attack.** Sets the time it takes for the compressor to begin attenuating a signal, once it passes the threshold.
5. **Release.** Sets the time it takes for the compressor to stop attenuating a signal once it falls below the threshold.
6. **Auto. Press to toggle Auto mode on or off.** When Auto mode is active, the Attack and Release controls become inoperative, and a preprogrammed attack and release curve is used. In this mode, the attack is set to 10 ms, and the release is set to 150 ms. All other compressor parameters can still be adjusted manually.
7. **Soft.** Press to toggle Soft knee on or off. When set to "on," compression will be applied more gradually over time when the Threshold is reached by the input signal.

***Power User Tip:** Very short compressor release times can produce a choppy or "jittery" sound, especially when compressing instruments that have a lot of low-frequency components, such as a rich acoustic guitar. Very long release times can result in an over-compressed, or "squashed," sound. All ranges of release can be useful, however, and you should experiment to become familiar with different sonic possibilities.*

1. 开/关。开启或关闭信号链中的压缩机。
2. 起点。设置高于压缩机开始衰减信号的电平。
3. 比例。设置信号超过阈值的量与信号衰减的量之间的关系。在1比1的比例下 (通常写成1:1)，不会发生压缩。在4:1的比例下，通过阈值8 dB的信号衰减到阈值2 dB以内 (除以4)。选择的比例越高，压缩机的效果就越明显。
4. 袭击。设置压缩机开始衰减信号所需的时间，一旦信号超过阈值。
5. 版本。设置信号一旦低于阈值，压缩机停止衰减所需的时间。

6. 自动模式。按切换自动模式的开启或关闭。当自动模式被激活时，攻击和释放控制将失效，并使用预先编程的攻击和释放曲线。在这种模式下，攻击时间设置为10ms，释放时间设置为150ms。其他压缩机参数仍可手动调整。

7. **Soft**。当设置为“开”时，当输入信号达到起点时，压缩将随着时间的推移而更加缓慢地应用。

高级用户提示：非常短的压缩机释放时间可能会产生一种波动或“抖动”的声音，特别是当压缩有很多低频成分的乐器时，如丰富的原声吉他。非常长的释放时间会导致

过度压缩或“压扁”的声音。所有的释放范围都是有用的，但是，你应该尝试熟悉不同的声音可能性。

8. **Gain**. Sets the amount of “makeup gain” to apply to a signal. Once a signal is compressed, its overall level is often reduced. This gain control lets you bring it back up to the proper level after compression occurs.

9. **Key Filter**. This sets the frequency at which the compressor will engage. The compressor will still process the entire frequency range, but it is only engaged when the specified frequency is present.

10. **Key Listen**. Press to listen the signal being used to trigger the compressor, as set with the Key Filter control (including the effects of the high-pass filter). Press again to switch back to the normal channel signal.

8. 获得。设置应用于信号的“化妆增益”的数量。一旦一个信号被压缩，它的整体水平通常会降低。这种增益控制可以让您在压缩发生后将其恢复到适当的水平。

9. 关键的过滤器。这设置了压缩机启动的频率。压缩机仍将处理整个频率范围，但只有在指定的频率出现时才会使用。

10. 关键听信号。按下听信号被用来触发压缩机，作为设置与关键滤波器控制(包括高通滤波器的影响)。再按一次，切换回正常的通道信号。

Tube Leveling Amplifier Tube 水准测量放大器



1. **On/Off.** Turns the Compressor on or off in the signal chain.
2. **Gain.** Sets input gain to the compressor. Because this type of compressor operates in a different way than a standard compressor, much of the way that it affects signals is based on the input level. Try different settings to see what suits your needs.
3. **Peak Reduction.** Sets the amount of peak reduction to apply to the signal. Higher settings result in more gain reduction and more pronounced compression effect.
4. **Compressor/Limiter Toggle.** The button below toggles the Tube Leveling Amplifier between its compressor and limiter modes. When in compressor mode, it acts with a variable ratio of 1:1-10:1. When in limiter mode, it acts with a variable ratio of 10:1-20:1, more aggressively limiting peaks.
5. **Key Filter.** This sets the frequency at which the Tube Leveling Amplifier will engage. It will still process the entire frequency range, but it is only engaged when the specified frequency is present.
6. **Key Listen.** Press to listen to the signal being used to trigger the compressor, as set with the Key Filter control (including the effects of the high-pass filter). Press again to switch back to the normal channel signal.

1.开/关。开启或关闭信号链中的压缩机。

2.获得。设置压缩机的输入增益。由于这类压缩机的工作方式与标准压缩机不同，它对信号的影响在很大程度上是基于输入的

的水平。尝试不同的设置，看看什么适合你的需要。

3.峰值减少。设置应用于信号的峰值减少量。设置越高，增益减少越多，压缩效果越明显。

4.压缩/限幅器切换。下面的按钮在压缩机和限制模式之间切换管调平放大器。在压缩机模式下，以1:1 ~ 10:1的变比作用。在限幅模式下，它的作用比为10:1-20:1，具有更强的限幅峰值。

5.关键的过滤器。这设置了管调平放大器将接合的频率。它仍然会处理整个频率范围，但只有当指定的频率出现时才会使用。

6.关键听。按下听信号被用来触发压缩机，作为设置与关键滤波器控制 (包括高通滤波器的影响)。再按一次，切换回正常的通道信号。



Class-A FET Compressor 场效应管压缩机

1. **On/Off.** Turns the Compressor on or off in the signal chain.
2. **Input Gain.** Sets input gain to the compressor. This setting affects the action of the compressor, so feel free to try various settings to find the optimal effect for your needs.
3. **Output Gain.** Sets the amount of “make up gain” to apply to a signal. Once a signal is compressed, its overall level is often reduced. This gain control lets you bring it back up to the proper level after compression occurs.
4. **Attack.** Sets the time it takes for the compressor to begin attenuating a signal once it passes the threshold.
5. **Release.** Sets the time it takes for the compressor to stop attenuating a signal once it falls below the threshold.

1.开/关。开启或关闭信号链中的压缩机。

2.输入增益。设置压缩机的输入增益。这个设置会影响到压缩机的动作，所以请随意尝试各种设置，以找到适合您需要的最佳效果。

3.输出增益。设置应用于信号的“构成增益”的数量。一旦一个信号被压缩，它的整体水平通常会降低。这种增益控制可以让您在压缩发生后将其恢复到适当的水平。

4.袭击。设置信号一旦超过阈值，压缩机开始衰减所需的时间。

5.版本。设置信号一旦低于阈值，压缩机停止衰减所需的时间。

6. **Ratio.** Sets the Ratio for the compressor. The following Ratios are available: 4:1, 8:1, 12:1, 20:1, or All.
7. **Key Filter.** This sets the frequency at which the compressor will engage. The compressor will still process the entire frequency range, but it is only engaged when the specified frequency is present.
8. **Key Listen.** Press to listen to the signal being used to trigger the compressor, as set with the Key Filter control (including the effects of the high-pass filter). Press again to switch back to the normal channel signal.

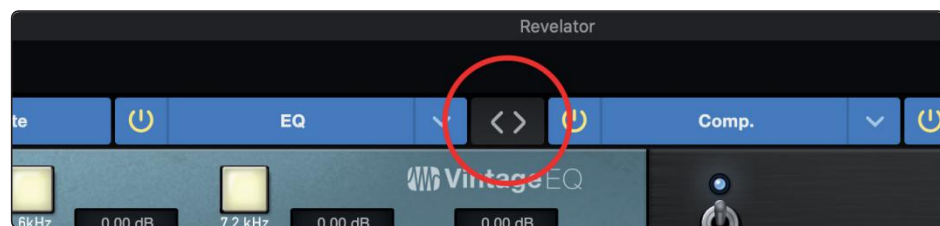
6. 比例。设置压缩机的“配比”。下面的比率是可用的: 4:1, 8:1, 12:1, 20:1, 或全部。

7. 关键的过滤器。这设置了压缩机启动的频率。压缩机仍将处理整个频率范围, 但只有在指定的频率出现时才会使用。

8. 关键听信号。按下听信号被用来触发压缩机, 作为设置与关键滤波器控制(包括高通滤波器的影响)。再按一次, 切换回正常的通道信号。

7.2.4 Changing the Signal Chain 改变信号链

The Compressor and EQ can be reordered in the signal path. By default, the signal passes through the compressor before passing through the EQ. When reordered, the EQ is placed before the compressor in the signal path.



压缩机和EQ可以在信号通路中重新排序。默认情况下, 信号先经过压缩机, 再经过EQ, 重新排序时, EQ被放置在信号路径的压缩机前面。

Power User Tip: *Placing the compressor before the EQ allows you to make dramatic changes to the EQ settings without needing to alter the compressor setting. However, if you place the EQ before the compressor, you can better control different frequencies, achieving a more natural response.*

高功率用户提示: 将压缩机放置在EQ之前, 您可以在不改变压缩机设置的情况下对EQ设置做出显著的改变。然而, 如果你把EQ放在压缩机前, 你可以更好地控制不同的频率, 实现更自然的响应。

7.2.5 Equalizer 均衡器

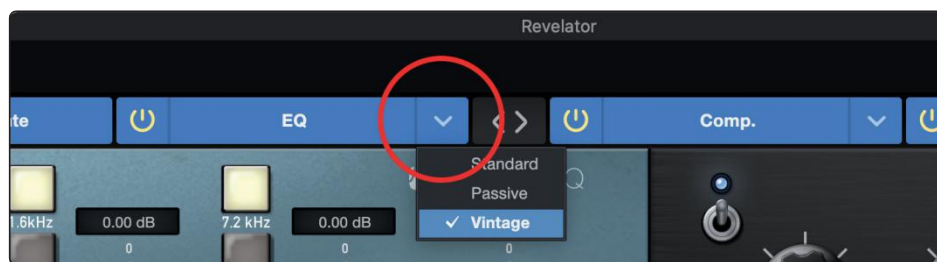
As previously mentioned, an EQ (or equalizer) is a tone control that lets you make changes in the tonal balance of a signal. You can boost or cut the level of ranges of frequencies, to make corrective or creative changes to the signal. Like the compressor, your Revelator io24 is equipped with three EQ models from which to choose: Standard, Passive, and Vintage.

如前所述, 均衡器 (或均衡器) 是一种音调控制, 可以让你改变信号的音调平衡。你可以提高或削减频率范围的水平, 以纠正或创造性地改变信号。像压缩机一样, 你的Revelator io24配备了三种EQ型号可供选择: 标准、被动和老式。

These distinct EQ models have their own set of controls and behavior:

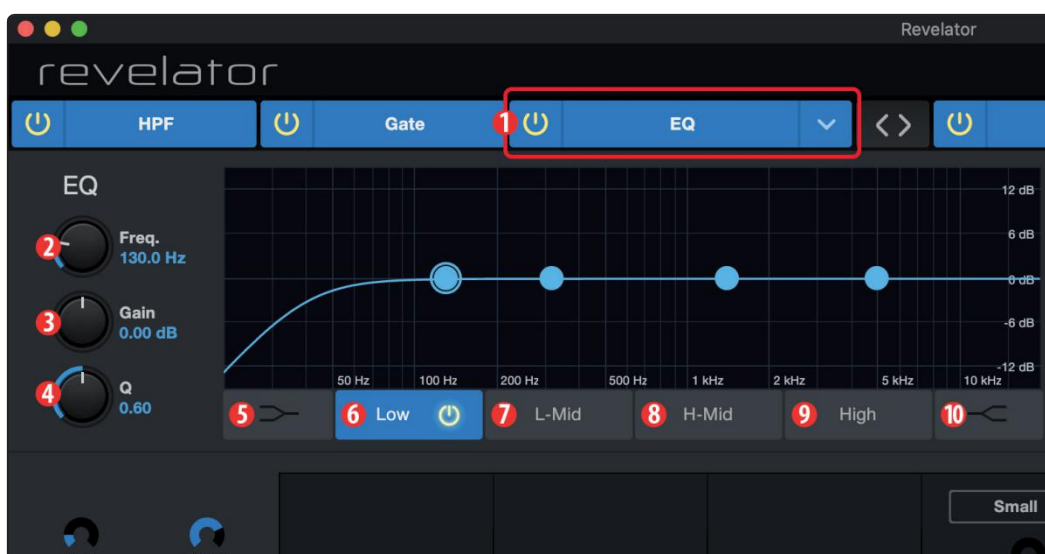
- **Standard EQ.** A clean and full-featured EQ that offers transparent tone shaping.
- **Passive Program EQ.** A model of a tube-based EQ with simple, quick and a classic tonal character.
- **Vintage 1970s EQ.** A model of a classic solid-state EQ, with simple, musical frequency settings and a lot of character.

To change the EQ model, click on the dropdown menu. Note: The EQ will turn off whenever a new model is loaded and must be re-enabled for you to hear its effect on your voice.



要改变EQ模型，请点击下拉菜单。注意：每当加载一个新的模型，EQ就会关闭，必须重新启用才能听到它对你的声音的影响。

Standard EQ



1. **On/Off.** Turns the EQ on or off in the signal chain.
2. **Frequency.** This control sets the center frequency at which signals are boosted or cut for the currently selected band.
3. **Gain.** Sets the amount by which the selected frequency will be boosted or cut.
4. **Q.** Sets the Q (or width) of the current EQ band. Larger Q values affect a narrower range of frequencies. Lower Q values affect a wider range.

1. 开/关。在信号链中打开或关闭均衡器。
2. 频率。这个控制设置了当前所选频段的信号被提升或削减的中心频率。
3. 增益。设定所选频率被提升或削减的量。
4. Q. 设置当前均衡带的Q值（或宽度）。较大的Q值影响较窄的频率范围。较低的Q值则影响较宽的范围。

5. **Low Shelf On/Off.** Enables/disables the low shelf EQ. When the Shelf button is not engaged, the Low band is parametric. Enabling the Shelf button turns the Low band into a low-shelving EQ that alters, by a fixed amount, a band of low frequencies at and below a user-selected shelving frequency.
Power User Tip: A low shelving EQ is like a bass-control knob on a stereo. In this mode, the Center Frequency control selects the shelving frequency.
6. **Low Band Select.** Enables/Disables the Low Band and enables the Frequency, Gain, and Q for this band.
7. **L-Mid Band Select.** Enables/Disables the Low-mid Band and enables the Frequency, Gain, and Q for this band.
8. **H-Mid Band Select.** Enables/Disables the High-mid Band and enables the Frequency, Gain, and Q for this band.
9. **High Band Select.** Enables/Disables the High Band and enables the Frequency, Gain, and Q for this band.
10. **High Shelf On/Off.** Enables/disables the high shelf EQ. When the Shelf button is not engaged, the High band is a parametric EQ. Enabling the Shelf button turns the High band into a high shelving EQ that alters, by a fixed amount, a band of high frequencies at and above a user-selected shelving frequency.
Power User Tip: A high shelving EQ is like a treble-control knob on a stereo. In this mode, the Center Frequency control selects the shelving frequency.

5.低搁板开/关。启用/禁用低频段EQ。当Shelf按钮没有使用时，低频段是参数性的。启用Shelf按钮后，低频段就变成了一个低搁置EQ，在用户选择的搁置频率上下，以一个固定的量来改变低频段。

电源用户提示。低搁架EQ就像立体声中的低音控制旋钮。在这种模式下，中心频率控制可以选择搁置频率。

6.低频段选择。启用/禁用低频段，并启用该频段的频率、增益和 Q 值。

7.L-Mid Band Select（中低频段选择）。启用/禁用中低频段，并启用该频段的频率、增益和Q值。

8.H-中频段选择。启用/禁用中高频段，并启用该频段的频率、增益和Q值。

9.高频段选择。启用/禁用高频段，并启用该频段的频率、增益和Q值。

10.High Shelf On/Off. 启用/停用高架EQ。当Shelf按钮没有使用时，高频段是一个参数性的EQ。启用 "搁架 "按钮后，高频段就变成了高搁架EQ，在用户选择的搁架频率上下，以一个固定的量改变高频的频带。

电源用户提示。高搁架EQ就像立体声中的高音控制旋钮。在这种模式下，中心频率控制可以选择搁置频率。

Passive Program EQ



1. **On/Off.** Turns the EQ on or off in the signal chain.
2. **Low Boost.** Sets the level of boost applied around the chosen low frequency. This control interacts nicely with the Low Attenuation control, allowing for boosts in apparent bass energy while keeping overall bass energy within optimal limits.
3. **Low Attenuation.** Sets the level of attenuation applied around the chosen low frequency. This control interacts nicely with the Low Boost control, allowing for boosts in apparent bass energy while keeping overall bass energy within optimal limits.
4. **Low Frequency Select.** Sets the center frequency of the band covered by the Low Boost and Low Attenuation controls.
5. **High Bandwidth.** Sets the Q (or width) of the effect of the high EQ band.
6. **High Boost.** Sets the level of boost applied around the chosen high frequency.
7. **High Attenuation.** Sets the amount of attenuation applied in a shelving fashion to frequencies at and above the chosen high frequency.
8. **High Frequency.** Sets the center frequency of the high EQ band.
9. **Attenuation Select.** Sets the frequency at and above which the High Attenuation control attenuates treble content.

- 1.开/关。在信号链中打开或关闭均衡器。
- 2.低频提升。设定所选择的低频周围的提升水平。这个控制与低衰减控制有很好的相互作用，允许提高明显的低音能量，同时将整个低音能量保持在最佳限度内。
- 3.Low Attenuation. 这个控制与低速提升控制有很好的相互作用，可以提升明显的低音能量，同时将整体的低音能量保持在最佳限度内。
- 4.低频选择。设置低速提升和低速衰减控制所覆盖的频带的中心频率。
- 5.高带宽。设定高 EQ 频段效果的 Q 值（或宽度）。
- 6.High Boost（高提升）。设定所选择的高频周围的提升水平。
- 7.High Attenuation（高衰减）。设定在选定的高频及以上的频率上以搁置方式应用的 衰减量。
- 8.高频。设置高频均衡带的中心频率。
- 9.Attenuation Select（选择减弱）。设定高频衰减控制对高音内容进行衰减的频率及以上的频率。

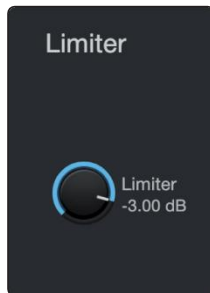
Vintage 1970s EQ



1. **EQ On/Off.** Enables/disables the EQ globally. Touch to toggle on or off.
2. **Low Frequency.** Sets the shelving frequency for the Low Band.
3. **Low Gain.** Sets the Gain for the Low Band.
4. **Low-Mid Frequency.** Sets the center frequency for the Low-Mid Band.
5. **Low-Mid Gain.** Sets the Gain for the Low-Mid Band.
6. **High-Mid Frequency.** Sets the center frequency for the High-Mid Band.
7. **High-Mid Gain.** Sets the Gain for the High-Mid Band.
8. **High Gain.** Sets the Gain for the High Band.

- 1.EQ开/关。全局启用/禁用均衡器。触摸来切换开启或关闭。
- 2.低频。设置低频段的搁置频率。
- 3.低增益。设置低频段的增益。
- 4.Low-Mid Frequency（中低频）。设置中低频段的中心频率。
- 5.低-中增益。设置中低频段的增益。
- 6.High-Mid频率。设置中高频段的中心频率。
- 7.High-Mid Gain（中高增益）。设置中高频段的增益。
- 8.High Gain（高增益）。设置高波段的增益。

7.2.6 Limiter

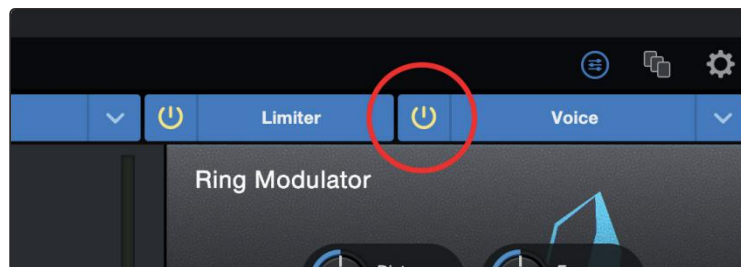


This encoder sets the threshold of the limiter for the selected channel or output bus. When the signal's amplitude (level) exceeds the threshold setting, the limiter is engaged. Turning the knob counterclockwise lowers the threshold, so limiting begins at a lower amplitude. The Limiter ratio is $\infty:1$. 这个编码器为选定的通道或输出总线设置限制器的阈值。当信号的振幅（电平）超过门限的设置时，限制器就会启动。逆时针旋转旋钮可以降低门限值，因此限制在较低的幅度上开始。限制器的比例是 $\infty:1$ 。

7.2.7 Voice FX

Your Revelator io24 is equipped with six Voice FX processors that can make your voice sound ethereal, otherworldly, or just plain weird... your choice! This section will go through each effect in detail. Note that while you can use any of these effects with the FatChannel and Reverb, you can only use one effect at a time.

To enable/disable the Voice FX of your choice, use the power button in the Voice tab.



你的Revelator io24配备了6个语音特效处理器，可以使你的声音听起来空灵、超凡脱俗，或者只是普通的怪异.....由你选择！本节将详细介绍每个特效。本节将详细介绍每种效果。请注意，虽然你可以用胖通道和混响来使用这些效果中的任何一种，但你一次只能使用一种效果。

要启用/禁用你选择的语音特效，请使用声音标签中的电源按钮。

Doubler

The Doubler will enhance your voice with a natural doubling effect that will add richness and depth with just a hint of reverb.



1. **Lows.** Use this control to boost the low-frequency content.
2. **Width.** This control adjusts the stereo image.
3. **Wet/Dry.** Blends the affected sound with the dry sound of your voice. Set to 100% to only hear the processed sound. Set to 0% to only hear the dry sound.

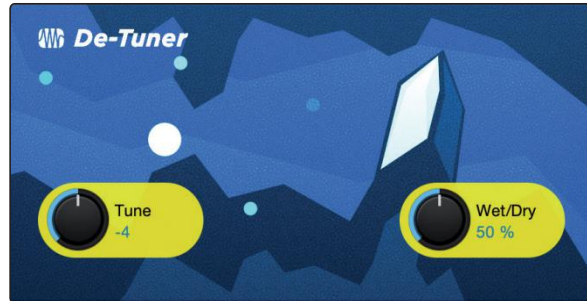
Doubler将以自然的加倍效果增强你的声音，只需一丝混响，就能增加丰富度和深度。

1. 低频。使用这个控制来提高低频的内容。
2. 宽度。这个控制可以调整立体声图像。

3.湿/干。将受影响的声音与你的声音的干声混合。设置为100%，只听到处理后的声音。设为0%，则只听到干的声音。

Detuner 解调器

True to its name, the Detuner will artificially lower your voice.



1. **Tune.** Sets the amount your voice will be lowered.
2. **Wet/Dry.** Blends the affected sound with the dry sound of your voice. Set to 100% to only hear the processed sound. Set to 0% to only hear the dry sound.

正如它的名字一样，Detuner将人为地降低你的声音。

调音。设置你的声音将被降低的量。

湿/干。将受影响的声音与你的声音的干音混合。设置为100%，只听到处理过的声音。设为0%则只听到干的声音。

Vocoder 声码器

Think of a vocoder as a “talking synthesizer.” Your voice is sent through a filter and essentially removed so that only the synthesized sound after it was modulated by the filter remains. This results in a synthesized sound that pulses to the tempo of your voice with the same tonal characteristics.

可以把声码器看作是一个“会说话的合成器”。你的声音被送过一个滤波器，并基本上被移除，这样就只剩下被滤波器调制后的合成声音了。这就产生了一个合成的声音，它以相同的音调特征随着你的声音的节奏跳动。



1. **Freq.** Sets the frequency of the filter.
2. **Type.** Choose between three filter types: Noise, Sawtooth, Rectangle
3. **Wet/Dry.** Blends the affected sound with the dry sound of your voice. Set to 100% to only hear the processed sound. Set to 0% to only hear the dry sound.

1.Freq. 设置滤波器的频率。

2.类型。在三种滤波器类型中选择。噪声、锯齿、矩形

3.湿/干。将受影响的声音与你的声音的干音混合。设置为100%，只听到处理后的声音。设置为0%则只听到干的声音。

音。

Ring Modulator

A Ring Modulator basically takes two separate signals (your voice and an oscillator) and creates a new signal that is made up of the sum and differences of the original sources. All of this is a fancy way of saying: it makes you sound like a robot.



1. **Dist.** Controls the amount of distortion from zero to over-the-top.
2. **Freq.** Sets the frequency of the oscillation.
3. **SC Freq.** Sets the frequency of the Sub Carrier.
4. **Sub Carrier.** You can choose to add a low frequency oscillation to your signal or not by engaging or disengaging the Sub Carrier.
5. **Wet/Dry.** Blends the affected sound with the dry sound of your voice. Set to 100% to only hear the processed sound. Set to 0% to only hear the dry sound.

环形调制器

环形调制器基本上是将两个独立的信号（你的声音和一个振荡器），创造出一个由原始信号源的和与差组成的新信号。所有这些都是一种华丽的说法：它使你的声音像一个机器人。

1. **Dist.** 控制失真量，从零到超过顶点。
2. **Freq**（频率）。设定振荡的频率。
3. **SC Freq.** 设定副载波的频率。
4. **Sub Carrier**（副载波）。你可以选择在你的信号中加入一个低频振荡，或者不加入副载波。
5. **湿/干**。将受影响的聲音与你的聲音的干音混合。设置为100%，只听到处理后的声音。设为0%，则只听到干声音。

Filters 过滤器

This is a custom filter bank that allows you to create some truly otherworldly effects!



1. **Tune:** Adjusts the pitch of the affected signal from high to low.
2. **Damping:** Adjusts the amount of high-frequency content sent through feedback (4.) in the affected signal.
3. **Wet/Dry:** Blends the affected ("wet") sound with the un-affected, ("dry") sound of your voice. Set to 100% to only hear only the processed sound. Set to 0% to only head the dry sound.
4. **Feedback:** Adjusts length of echo effect.
5. **Distortion:** Add some grit and edge to the affected sound, like an overdriven guitar amplifier.

这是一个自定义的滤镜库，可以让你创造出一些真正的异世界的效果！

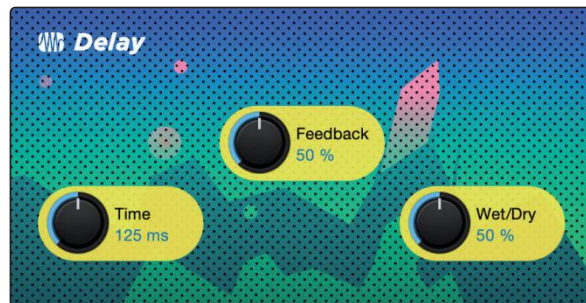
1. 调音。调整受影响的信号的音调，从高到低。
2. 阻尼。调整受影响信号中通过反馈（4.）发送的高频内容的数量。
3. 湿/干。将受影响的（"湿"）声音与未受影响的（"干"）声音混合。设为100%，只听到处理后的声音。设为0%，则只听到干的声音。
4. 反馈。调整回声效果的长度。
5. 失真。给受影响的声音增加一些砂砾和边缘，就像一个过度驱动的吉他放大器。

Delay

A delay essentially creates an echo, although you can often use delays to create more complex time-based effects. The source signal is delayed so that it is heard later than it actually occurred.

延迟

延迟基本上是创造一个回声，尽管你经常可以用延迟来创造更复杂的基于时间的效果。源信号被延迟，所以它被听到的时间比实际发生的时间晚。



1. **Time.** This is the time (in milliseconds) between the source signal and its echo. The simplest delay effect is a single repeat. A short delay between 30 and 100 ms can be used to create slap-back echo, while longer delay times produce a more distant echo.
2. **Feedback.** Variable feedback, or regeneration, produces multiple decaying repeats. Increasing the feedback value increases the number of echoes, as well as the resonance that is created as one echo disappears into another.
3. **Wet/Dry.** Blends the affected sound with the dry sound of your voice. Set to 100% to only hear the processed sound. Set to 0% to only hear the dry sound.

- 1.时间。这是源信号和它的回声之间的时间（以毫秒为单位）。最简单的延迟效果是单一的重复。30到100毫秒之间的短延迟可以用来产生拍打回声，而更长的延迟时间则产生更远的回声。
- 2.反馈。可变的反馈，或再生，产生多个衰减的重复。增加反馈值可以增加回声的数量，也可以增加一个回声消失在另一个回声时产生的共鸣。
- 3.湿/干。将受影响的聲音与你的聲音的干音混合。设为100%，只听到处理过的声音。设置为0%则只听到干的声音。

8 Studio One Artist Quick Start Guide Studio One 艺术家快速入门



All PreSonus professional recording products come with Studio One Artist recording and production software. Whether you are about to record your first album or your fiftieth, Studio One Artist provides you with all of the tools necessary to capture and mix a great performance.

Power User Tip: As a valued PreSonus customer, you are eligible for a discount upgrade to Studio One Professional. For more details on the Studio One upgrade program for PreSonus customers, please visit <https://shop.presonus.com/products/software/studio-one-prods>.

所有PreSonus专业录音产品都配有Studio One Artist录音和制作软件。无论你要录制你的第一张专辑还是第五十张专辑，Studio One Artist都为你提供了所有的

的所有工具，以捕捉和混合一个伟大的表演。

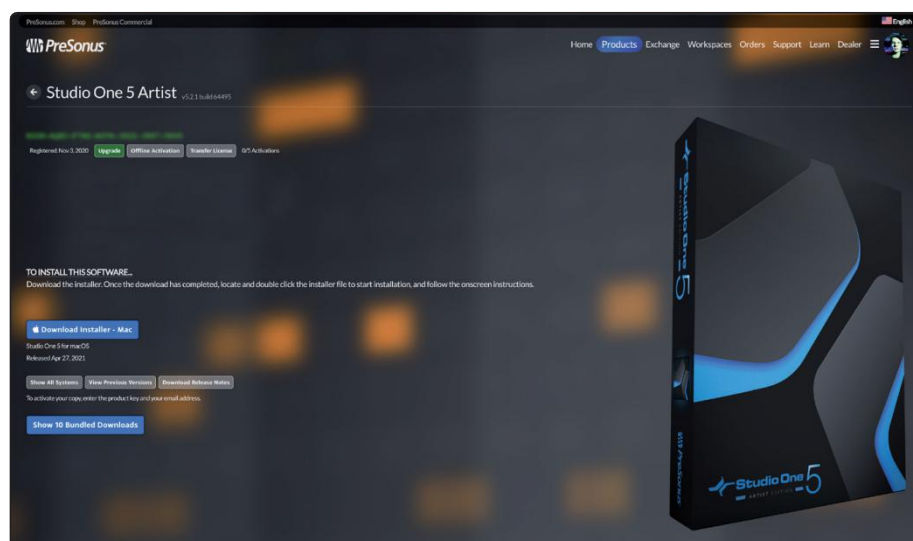
强大的用户提示。作为PreSonus的重要客户，你有资格获得升级到Studio One Professional的折扣。关于PreSonus客户的Studio One升级计划的更多细节，请访问<https://shop.presonus.com/products/software/studio-one-prods>。

8.1 Installation and Authorization 安装和授权

Once you have installed the drivers for your Revelator io24 and connected it to your computer, you can use the included PreSonus Studio One Artist music-production software to begin recording, mixing, and producing your music. To install Studio One Artist, log into your My.PreSonus account and register your Revelator io24. Your product key for Studio One Artist will automatically be registered to your My.PreSonus account, along with your hardware registration.

一旦你为你的Revelator io24安装了驱动程序并将其连接到电脑上，你就可以使用附带的PreSonus Studio One Artist音乐制作软件开始录音、混音和制作音乐。要安装Studio One Artist，请登录您的My.PreSonus账户并注册您的Revelator io24。你的Studio One Artist的产品密钥将自动被 你的Studio One Artist的产品密钥将自动注册到你的My.PreSonus账户中，同时你的硬件也会被注册。

Downloading and Running the Studio One Installer



To install Studio One Artist, download the Studio One Artist installer from your My.PreSonus account to the computer on which you will use it.

Windows: Launch the Studio One Artist installer and follow the onscreen instructions.

Mac: Drag the Studio One Artist application into the Applications folder on your Mac hard drive.

下载并运行Studio One安装程序

要安装Studio One Artist，请从你的My.PreSonus账户下载Studio One Artist安装程序到你要使用的电脑上。

Windows: 启动Studio One Artist安装程序并按照屏幕上的指示操作。

苹果电脑。 将Studio One Artist应用程序拖入你的Mac硬盘上的 "应用程序" 文件夹。

Authorizing Studio One

When Studio One is launched for the first time on your computer, it will communicate with your My.PreSonus account and verify your registration. To ensure a seamless authorization process, make sure to download your installer to the computer on which you will be using it, and be sure that your computer is connected to the Internet when you launch the application for the first time.

Power User Tip: You may be prompted to enter your My.PreSonus user account information. Clicking "Remember Credentials" will allow you to have immediate access to any content you purchase from the PreSonus Marketplace.

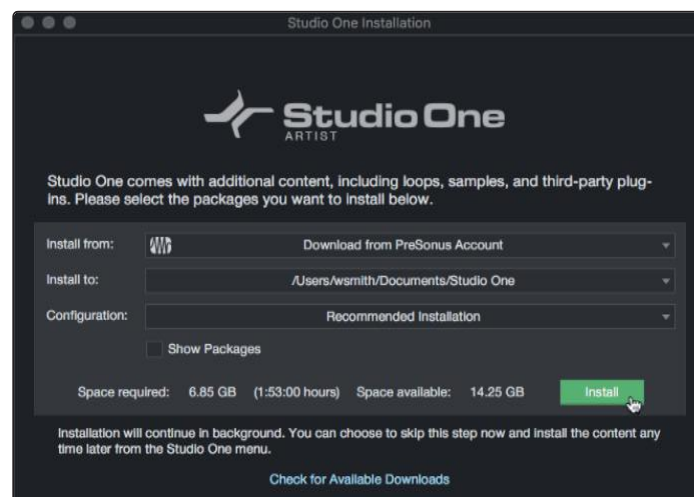
授权给 Studio One

当 Studio One 第一次在你的电脑上启动时，它将与你的 My.PreSonus 账户进行通信，并验证你的注册。为了确保无缝的授权过程，请确保将安装程序下载到你要使用的电脑上，并确保你的电脑在第一次启动应用程序时连接到互联网。

高级用户提示：您可能被提示输入您的 My.PreSonus 用户账户信息。点击 "记住凭证" 将使您能够立即访问您从 PreSonus 市场购买的任何内容。

Installing Bundled Content for Studio One Artist

Studio One Artist comes bundled with an array of demo and tutorial materials, instruments, loops, and samples. The Studio One Artist bundle includes all that you need to begin producing music.



为 Studio One Artist 安装捆绑的内容

Studio One Artist 捆绑了一系列的演示和教程材料、乐器、循环和采样。Studio One Artist 的捆绑内容包括你开始制作音乐所需的所有内容。

The first time you launch Studio One Artist, you will be prompted to install its companion content. Select the content you wish to add and click "Install." The content will automatically begin to download and install from your My.PreSonus user account.

Power User Tip: To select only a portion of the available content, click on "Show Packages". From here you can customize your content installation.

当你第一次启动 Studio One Artist 时，你会被提示安装其配套内容。选择你想添加的内容，然后点击 "安装"。该内容将自动开始从你的 My.PreSonus 用户账户中下载和安装。

高级用户提示。要只选择一部分可用的内容，请点击 "显示包"。从这

里你可以定制你的内容安装。

8.2 Setting Up Studio One 设置 Studio One

Studio One Artist was designed to work with PreSonus interfaces and provides unique interoperability and simplified setup. When Studio One Artist is launched, by default you will be taken to the Start page. On this page, you will find document-management and device-configuration controls, as well as a customizable artist profile, a news feed, and links to demos and tutorials from PreSonus. If your computer is connected to the Internet, these links will be updated as new tutorials become available on the PreSonus website.

Complete information on all aspects of Studio One Artist is available in the Reference Manual PDF located within Studio One. The information in this tutorial covers only the basic aspects of Studio One Artist and is intended to get you set up and recording as quickly as possible.

Studio One Artist的设计是为了与PreSonus接口配合使用，并提供独特的互操作性和简化的设置。当Studio One Artist启动时，默认情况下，你会被带到 "开始 "页面。在这个页面上，你会发现 在这个页面上，你会发现文件管理和设备配置控制，以及一个可定制的艺术家的档案，一个新闻提要，还有PreSonus的演示和教程链接。如果你的电脑连接到互联网，当PreSonus网站上有新的教程时，这些链接将被更新。

关于Studio One Artist各方面的完整信息，可以在Studio One的《参考手册》PDF中找到。本教程中的信息只包括Studio One Artist的基本方面，目的是让你尽快设置和录制。

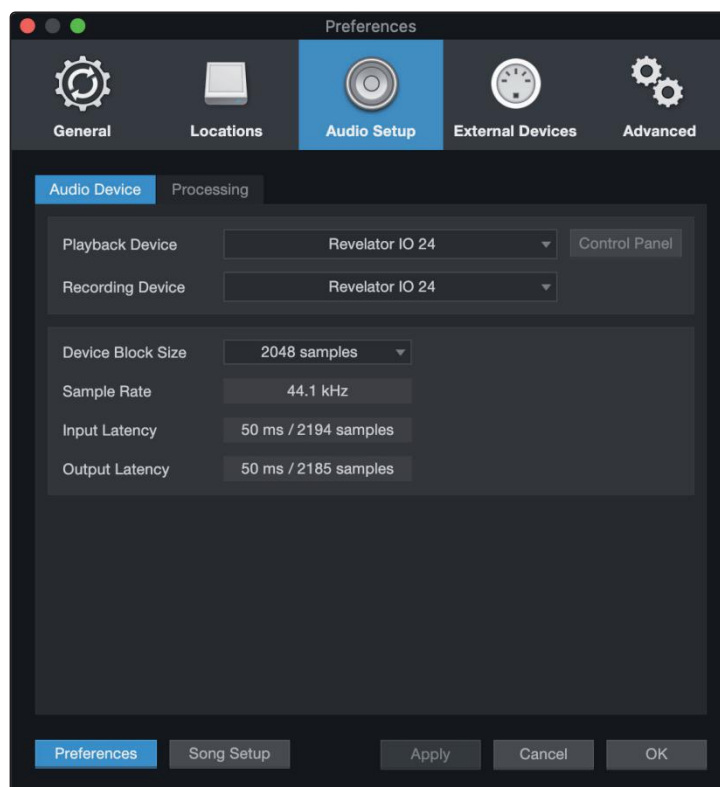
8.2.1 Configuring Audio Devices 配置音频设备

In the middle of the Start page, you will see the Setup area. Studio One Artist automatically scans your system for all available drivers and selects a driver. By default, it will choose a PreSonus driver if one is available.



在开始页面的中间，你会看到设置区域。Studio One Artist会自动扫描你的系统，寻找所有可用的驱动，并选择一个驱动。默认情况下，如果有PreSonus的驱动程序，它将选择一个。

If you do not see your device listed on the Start page when you launch Studio One, click on the Configure Audio Devices link in the Setup area to open the Options window. 如果你在启动Studio One时没有看到你的设备列在“开始”页上，请点击设置区域中的配置音频设备链接，打开选项窗口。



In the Options window, click on the Audio Setup tab and select your device driver from the pull-down.

在选项窗口中，点击音频设置标签，从下拉菜单中选择你的设备驱动程序。

8.2.2 Configuring MIDI Devices 配置MIDI设备

From the External Devices window in Studio One Artist, you can configure your MIDI keyboard controller, sound modules, and control surfaces. This section will guide you through setting up your MIDI keyboard controller and sound modules. Please consult the Reference Manual located within Studio One for complete setup instructions for other MIDI devices. 在 Studio One Artist 的外部设备窗口中，你可以配置你的MIDI键盘控制器、声音模块和控制面。本节将指导你设置你的MIDI键盘控制器和声音模块。有关其他MIDI设备的完整设置说明，请查阅Studio One中的《参考手册》。

If you are using a third-party MIDI interface or USB MIDI-controller keyboard, you must install any required drivers for these devices before beginning this section. ***Please consult the documentation that came with your MIDI hardware for complete installation instructions.***

If you do not have any MIDI devices, please skip to Section 8.3.

如果你使用的是第三方的MIDI接口或USB MIDI控制器键盘，你必须在开始本节之前安装这些设备所需的驱动程序。请查阅您的MIDI硬件附带的文件，了解完整的安装说明。如果你没有任何MIDI设备，请跳到第8.3节。

Setting up an External MIDI Keyboard Controller from the Start Page

A MIDI keyboard controller is a hardware device that is generally used for playing and controlling other MIDI devices, virtual instruments, and software parameters. In Studio One Artist, these devices are referred to as Keyboards, and they must be configured before they are available for use. In some cases, your MIDI keyboard controller is also used as a tone generator. Studio One Artist views the controller and tone-generation functions as two different devices: a MIDI keyboard controller and a sound module. The MIDI controls (keyboard, knobs, faders, etc.) will be set up as a Keyboard. The sound modules will be set up as an Instrument.

You can set up your external MIDI devices from the Setup area in the Start page. Before setting up a new Song for recording, take a moment to configure external devices.

从开始页设置一个外部MIDI键盘控制器

MIDI键盘控制器是一种硬件设备，通常用于演奏和控制其他MIDI设备、虚拟乐器和软件参数。在Studio One Artist中，这些设备被称为键盘，在使用前必须对它们进行配置。在某些情况下，你的MIDI键盘控制器也被用作音色发生器。Studio One Artist将控制器和音调发生器的功能视为两个不同的设备：一个MIDI键盘控制器和一个声音模块。MIDI控制器（键盘、旋钮、推子等）将被设置为键盘。将被设置为一个键盘。声音模块将被设置为一个乐器。

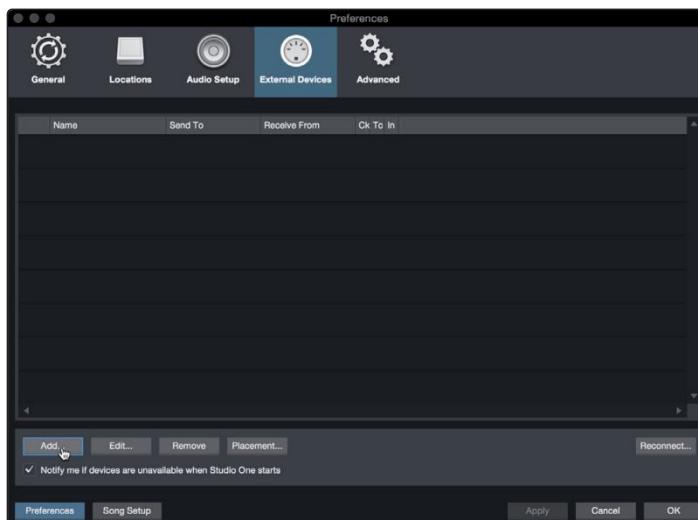
你可以在 "开始 "页面的 "设置 "区域设置你的外部MIDI设备。在设置新的歌曲进行录音之前，花点时间来配置外部设备。

Make sure you have connected the MIDI Out of your external MIDI controller to a MIDI In on your PreSonus audio interface (if available) or other MIDI interface. If you are using a USB MIDI controller, connect it to your computer and power it on. 确保你已经把外部MIDI控制器的MIDI输出连接到PreSonus音频接口（如果有的话）或其他MIDI接口的MIDI输入。如果你使用的是USB MIDI控制器，请将它连接到你的电脑上并接通电源。

1. Click on the Configure External Devices link in the Setup area on the Start page to launch the External Devices window. 点击 "开始 "页面设置区的 "配置外部设备 "链接，启动外部设备窗口。

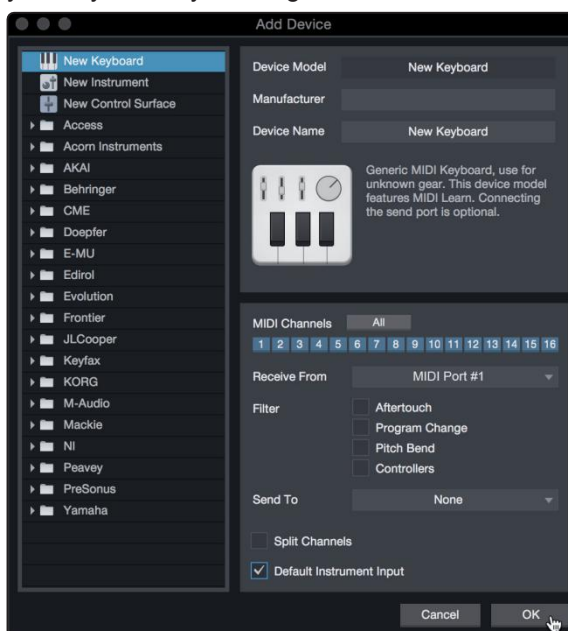


- Click the Add button. This will launch the Add Device window.



单击 "添加" 按钮。这将启动 "添加设备" 窗口。

- From the menu on the left, select your MIDI controller from the list of manufacturers and models. If you do not see your MIDI controller listed, select New Keyboard. At this point, you can customize the name of your keyboard by entering the manufacturer and device names. 从



左边的菜单中，从制造商和型号的列表中选择您的MIDI控制器。如果你没有看到你的MIDI控制器被列出，请选择新键盘。在这一点上，你可以通过输入制造商和设备名称来定制你的键盘名称。

- You must specify which MIDI channels will be used to communicate with this keyboard. For most purposes, you should select all MIDI channels. If you are unsure of which MIDI channels to choose, select all 16. 您必须指定哪些MIDI通道将被用来与该键盘通信。在大多数情况下，您应该选择所有的MIDI通道。如果您不确定要选择哪些MIDI通道，请选择全部16个。

5. Studio One allows you to filter out specific control functions. If you would like Studio One to ignore Aftertouch, Pitch Bend, Program Change, or all CC messages, enable filtering for any or all of these messages. Studio One 允许你过滤掉特定的控制功能。如果你想让 Studio One 忽略 Aftertouch、Pitch Bend、Program Change 或所有 CC 信息，请启用这些信息的过滤功能。
6. In the Receive From drop-down menu, select the MIDI interface input from which Studio One Artist will receive MIDI data (that is, the MIDI port to which your keyboard is connected).

Power User Tip: In the Send To drop-down menu, select the MIDI interface output from which your Studio One Artist will send MIDI data to your keyboard. If your keyboard controller doesn't need to receive MIDI data from Studio One, you can leave this unselected.

在 Receive From 下拉菜单中，选择 Studio One Artist 接收 MIDI 数据的 MIDI 接口输入（也就是你的键盘所连接的 MIDI 端口）。

用户提示：在发送至下拉菜单中，选择 Studio One Artist 将向键盘发送 MIDI 数据的 MIDI 接口输出。如果你的键盘控制器不需要从 Studio One 接收 MIDI 数据，你可以不选择此项。

7. If this is the only keyboard that you will use to control your external synthesizers and virtual instruments, you should check the box next to Default Instrument Input. This will automatically assign your keyboard to control all MIDI devices in Studio One Artist. 如果这是你用来控制外部合成器和虚拟乐器的唯一键盘，你应该勾选默认乐器输入旁边的方框。这将自动分配你的键盘来控制 Studio One Artist 中的所有 MIDI 设备。

8. Click "OK." 点击 "确定"。

If you have a sound module that you'd like to connect, leave the External Devices window open and proceed to the next part of this section.

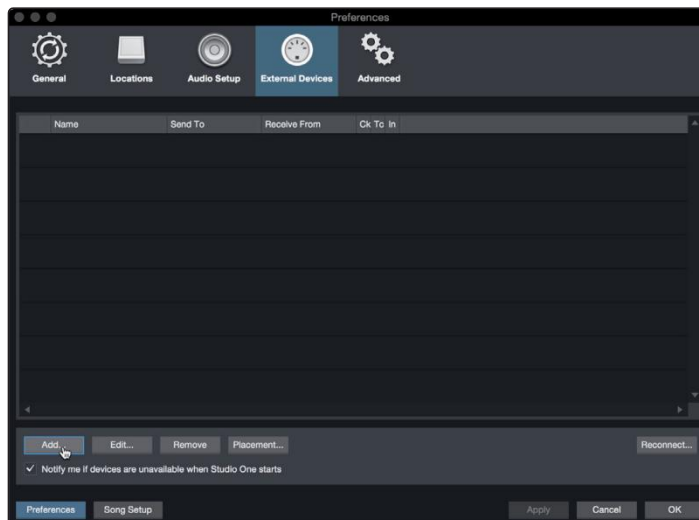
If not, you can close the window and skip to the next section. 如果你有一个你想连接的声音模块，让 "外部设备" 窗口保持开放，并继续本节的下一部分。如果没有，你可以关闭该窗口，跳到下一部分。

Setting up an External MIDI Sound Module from the Start Page 从开始页设置一个外部 MIDI 声音模块

MIDI instrument controllers (keyboards, MIDI guitars, etc.) send musical information, in the form of MIDI data, to tone modules and virtual instruments, which respond by generating sound as instructed. Tone modules can be standalone sound devices or can be integrated into a MIDI instrument, such as a keyboard synthesizer. Studio One Artist refers to all tone generators as Instruments. Once you have set up your MIDI keyboard controller, take a moment to configure your sound module. MIDI 乐器控制器（键盘、MIDI 吉他等）以 MIDI 数据的形式向音色模块和虚拟乐器发送音乐信息，音色模块按照指示产生声音来回应。音色模块可以是独立的声音设备，也可以集成到一个 MIDI 乐器中，比如键盘合成器。Studio One Artist 把所有的音色发生器都称为乐器。一旦你设置了你的 MIDI 键盘控制器，花点时间来配置你的声音模块。

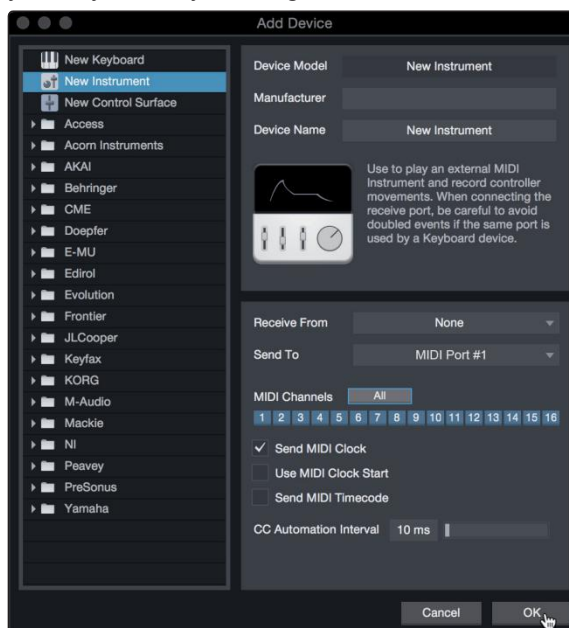
Make sure you have connected the MIDI In of your external sound module to the MIDI Out of your MIDI interface. 确保你已经把你的外部声音模块的MIDI输入连接到你的MIDI接口的MIDI输出。

1. In the External Devices window, click the Add button.



在 "外部设备" 窗口，点击 "添加" 按钮。

2. Select your device in the menu on the left. If your device is not listed, select New Instrument. At this point you can customize the name of your keyboard by entering the manufacturer and device names. 在



左边的菜单中选择你的设备。如果你的设备没有列出，选择 "新乐器"。这时你可以通过输入制造商和设备名称来定制你的键盘名称。

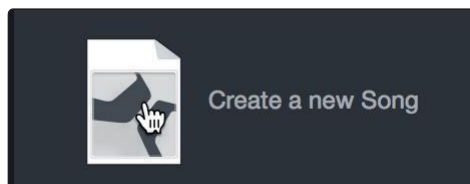
3. Specify which MIDI channels will be used to communicate with this sound module. For most purposes, you should select all MIDI channels. If you are unsure of which MIDI channels to select, we suggest you select all 16. 指定哪些MIDI通道将被用来与这个声音模块通信。在大多数情况下，你应该选择所有的MIDI通道。如果你不确定要选择哪些MIDI通道，我们建议你选择全部16个。
4. In the Send To menu, select the MIDI interface output from which Studio One Artist will send MIDI data to your sound module. Click "OK" and close the External Devices window. You are now ready to start recording in Studio One Artist. 在 "发送到 "菜单中，选择MIDI接口输出， Studio One Artist将从该接口向您的声音模块发送MIDI数据。点击 "确定"，关闭 "外部设备 "窗口。现在你已经准备好在Studio One Artist中开始录音了。

The rest of this Quick Start Guide will go over how to set up a Song and will discuss some general workflow tips for navigating through the Studio One Artist environment. 本快速入门指南的其余部分将介绍如何设置歌曲，并将讨论在Studio One Artist 中浏览时的工作流程提示。

8.3 Creating a New Song 创建一首新歌

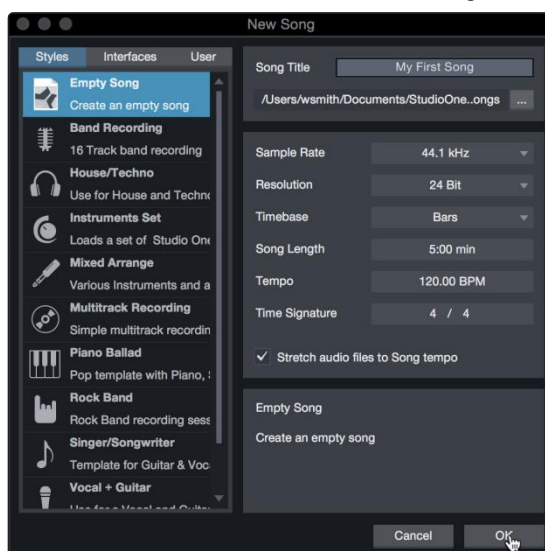
Now that you've configured your audio and MIDI devices, let's create a new Song. We'll start by setting up your default audio I/O. 现在你已经配置了你的音频和MIDI设备，让我们来创建一个新的歌曲。我们将从设置你的默认音频输入/输出开始。

1. From the Start page, select "Create a New Song."



从 "开始" 页面，选择 "创建一首新歌"。

2. In the New Song window, name your Song and choose the directory in which you'd like it saved. You'll notice a list of templates on the left. These templates provide quick setups for a variety of devices and recording situations. The section will describe creating a Song from an empty session.



在 "新建歌曲" 窗口中，为你的歌曲命名，并选择你希望它保存的目录。你会注意到左边有一个模板列表。这些模板为各种设备和录音情况提供快速设置。本节将描述从一个空的会话中创建一首歌曲。

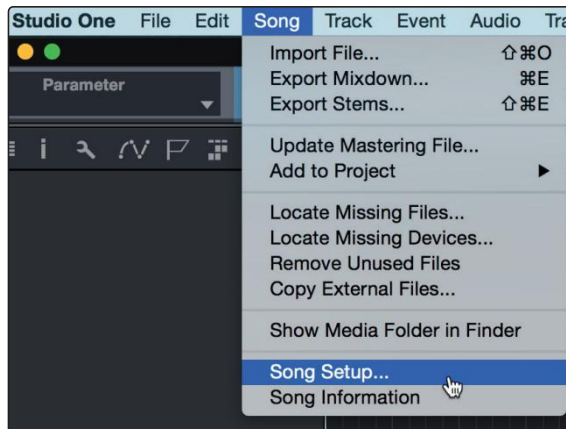
3. Select "Empty Song" from the Templates list. At this point, you should give your Song a name and select your preferred sample rate and bit depth for recording and playback. You can also set the length of your Song and the type of time format you would like the timeline to follow (notation bars, seconds, samples, or frames). Click the OK button when you are finished. 从模板列表中选择 "空的歌曲"。在这一点上，你应该给你的歌曲起一个名字，并选择你喜欢的采样率和比特深度来进行录音和播放。你还可以设置歌曲的长度和你希望时间线遵循的时间格式类型（记号条、秒、样本或帧）。完成后，点击 "确定" 按钮。

PowerUser Tip: If you plan to import loops into your Song, make sure that the *Stretch Audio Files to Song Tempo* option is selected. This will automatically import loops at the correct tempo.

用户提示：如果你打算把循环音乐导入你的歌曲，请确保选择 "将音频文件拉伸到歌曲速度" 选项。这将自动以正确的速度导入循环。

8.3.1 Configuring Your I/O 配置你的输入/输出

1. Click on Song | Song Setup to set your sample rate and resolution and configure your audio I/O. 点击歌曲|

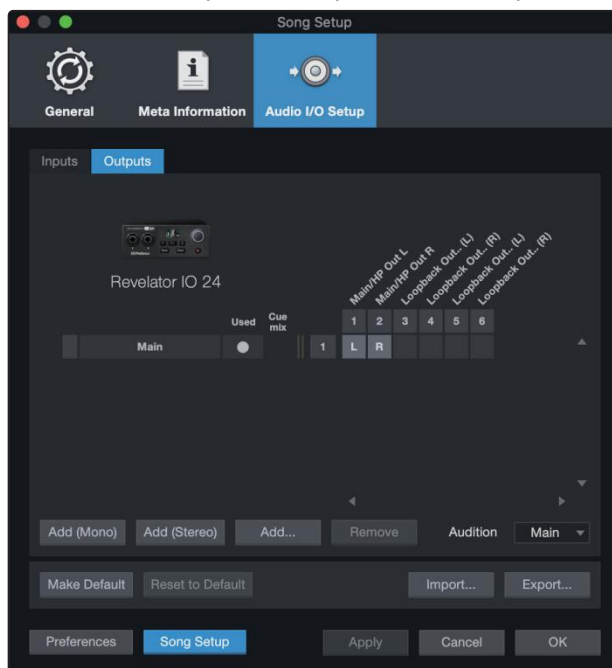


歌曲设置，设置你的采样率和分辨率，配置你的音频I/O。

2. Click on the Audio I/O Setup tab. 点击音频I/O设置标签。

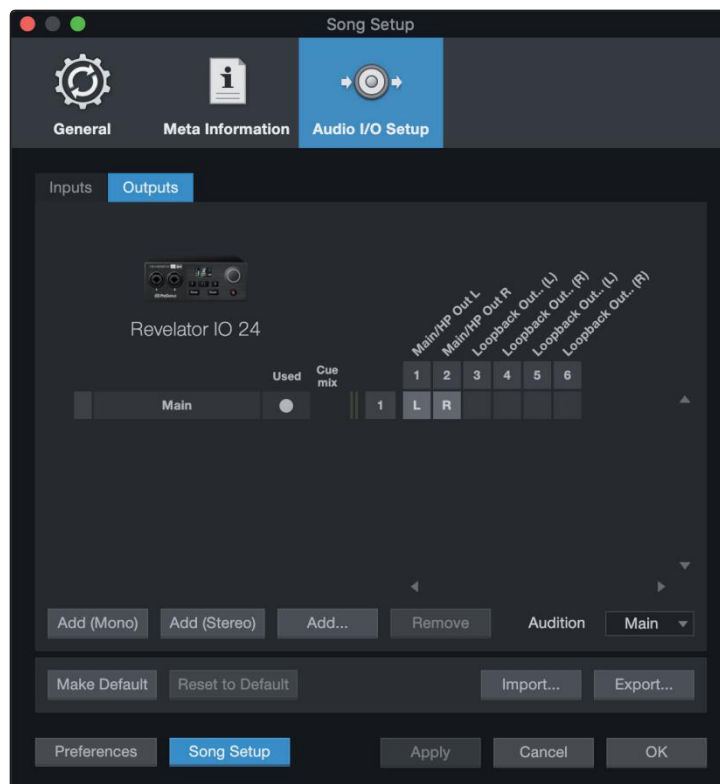


3. From the Inputs tab, you can enable the inputs for your Revelator io24, including the Loopback Inputs. that you'd like to have available. We recommend you create a mono input using Input 1 of your Revelator io24 and two Stereo Inputs; one for Loopback Streams 3-4 and another for Loopback Streams 5-6. These correspond to Loopback 1 and Loopback 2 respectively. 在



Inputs（输入）选项卡上，你可以为你的Revelator io24启用输入，包括你想用的Loopback输入。我们建议你使用Revelator io24的输入1创建一个单声道输入和两个立体声输入：一个用于回环流3-4，另一个用于回环流5-6。它们分别对应于环回1和环回2。

- Click on the Outputs tabs to enable any or all of the outputs on your Revelator io24. In the lower right corner, you will see the Audition Select menu. This allows you to choose the output from which you will audition audio files prior to importing them into Studio One Artist. In general, you will want this to be the main output bus. 点

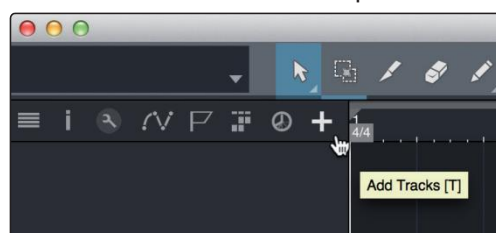


击输出选项卡，启用Revelator io24上的任何或所有的输出。在右下角，你会看到试听选择菜单。这允许你选择输出，在将音频文件导入Studio One Artist之前，你将从该输出进行试听。一般来说，你会希望这是主输出总线。

Power User Tip: If you would like this I/O configuration to be the same every time you open Studio One, click the Make Default button. **用户提示:** 如果你希望每次打开Studio One的时候，这个I/O配置都是一样的，请点击Make Default按钮。

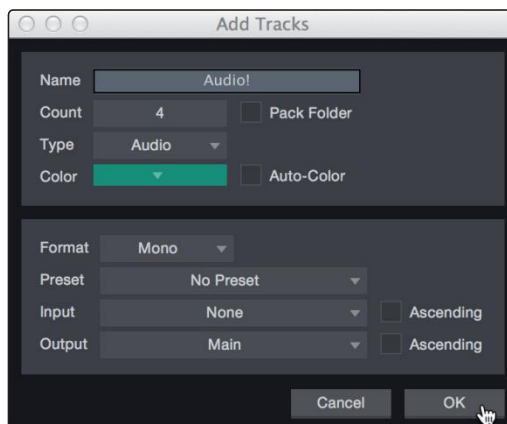
8.3.2 Creating Audio and Instrument Tracks 创建音频和乐器轨道

- In the upper left corner of the Arrange window, you will notice several buttons. The button furthest to the right is the Add Tracks button. Click on this button to open the Add Tracks window. 在



编曲窗口的左上角，你会注意到几个按钮。最右边的按钮是Add Tracks按钮。点击这个按钮可以打开“添加音轨”窗口。

2. In the Add Tracks window, you can customize the track name and color, add a preset track of effects, and set the physical source for the input and output of your audio tracks. Most important, you can select the number and type of tracks you'd



like to create. 在 "添加音轨" 窗口中，你可以自定义音轨的名称和颜色，添加预设的效果器，并为音轨的输入和输出设置物理源。最重要的是，你可以选择你想创建的轨道的数量和类型。

- **Audio.** Use this track type to record and playback audio files.
- **Instrument.** Use this track to record and playback MIDI data to control external MIDI devices or virtual instrument plug-ins.
- **Automation.** This track type lets you create automated parameter controls for your session.
- **Folder.** This track helps you to manage your session as well as to quickly edit multiple tracks at once.

Power User Tip: If you would like to add an audio track for each of the available inputs, go to **Track | Add Tracks for All Inputs**.

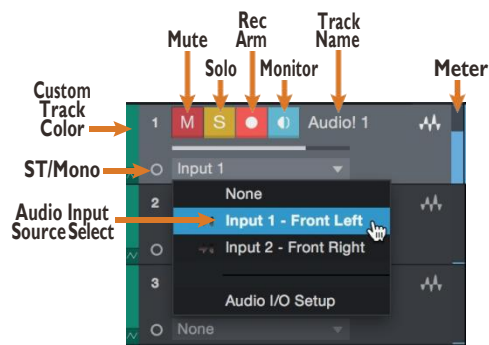
-音频。使用这种轨道类型来录制和播放音频文件。

-乐器。使用这种轨道来记录和播放MIDI数据，以控制外部MIDI设备或虚拟乐器插件。

-自动化。这种轨道类型可以让你为你的会话创建自动参数控制。

-文件夹。这种轨道可以帮助你管理你的会话，也可以一次快速编辑多个轨道。

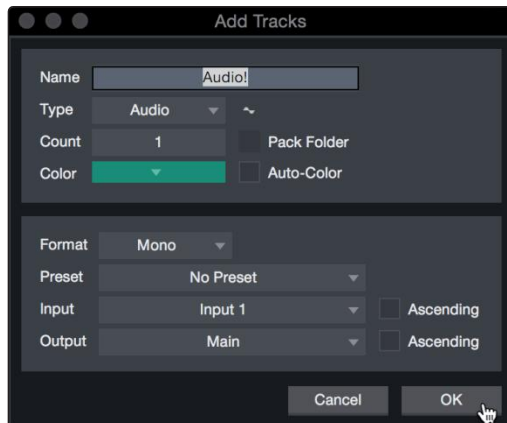
用户提示：如果你想为每个可用的输入添加一个音轨，请进入 **Track | Add Tracks for All Inputs**。



Note: Instrument tracks are nearly identical to audio tracks. The Input Source list for Instrument tracks lists available external MIDI devices as well as any virtual instruments that have been added to the Song. 注意：乐器轨道几乎与音频轨道相同。乐器轨道的输入源列表列出了可用的外部MIDI设备，以及已经添加到歌曲中的任何虚拟乐器。

8.3.3 Recording an Audio Track 录制一个音频轨道

1. To begin recording, create an audio track from the Add Tracks window, set its input to Input 1 on your Revelator io24, and connect a microphone to the same input.



2. Select Record Enable on the track. Turn up the Input 1 level on your Revelator io24 while speaking/singing into the microphone. You should see the input meter in Studio One Artist react to the input. Adjust the gain so the input level is near its maximum without clipping (distorting).



You are now ready to start recording. ***For complete instructions, please consult the Studio One Reference manual located in Help | Studio One Reference Manual.***

1.要开始录音，从"添加音轨"窗口创建一个音轨，将其输入设置为 Revelator io24的输入1，并将麦克风连接到同一输入。

2.在轨道上选择"启用录音"。在你的Revelator io24上调高输入1的电平，同时对着话筒说话/唱歌。你应该看到Studio One Artist中的输入表对输入的反应。调整增益，使输入电平接近其最大值而不发生削波（失真）。

现在您已经准备好开始录音了。有关完整的说明，请查阅位于帮助|Studio One参考手册的Studio One参考手册。

8.3.4 Adding Virtual Instruments and Effects 添加虚拟乐器和效果

You can add plug-ins and instruments to your Song by dragging-and-dropping them from the browser. You can also drag an effect or group of effects from one channel to another, drag in customized effects chains, and instantly load your favorite virtual-instrument preset without ever scrolling through a menu. 你可以通过从浏览器中拖放插件和乐器来增加你的歌曲。你还可以把一个或一组效果器从一个通道拖到另一个通道，拖入定制的效果器链，并立即加载你最喜欢的虚拟乐器预设，而无需滚动菜单。

Opening the browser. 打开浏览器。



In the lower right corner of the Arrange window are three buttons:

- The Edit button opens and closes the audio and MIDI editors.
- The Mix button opens and closes the Mixer window.
- The Browse button opens the browser, which displays all of the available virtual instruments, plug-in effects, audio files, and MIDI files, as well as the pool of audio files loaded into the current session.

在编曲窗口的右下角有三个按钮：

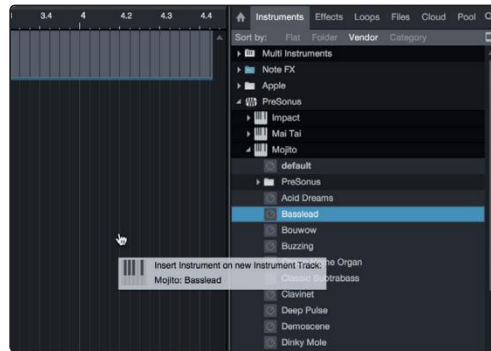
-编辑按钮可以打开和关闭音频和MIDI编辑器。

-混合按钮打开和关闭混合器窗口。

-浏览按钮打开浏览器，显示所有可用的虚拟乐器、插件效果、音频文件和MIDI文件，以及加载到当前会话的音频文件池。

Drag-and-Drop Virtual Instruments 拖放式虚拟乐器

Drag-and-Drop Effects 拖放效果器

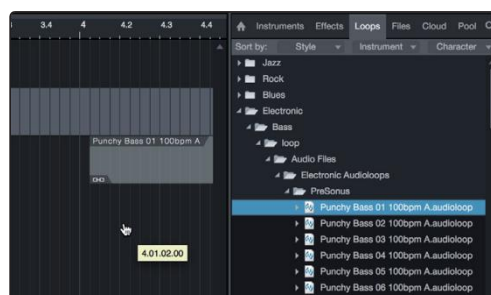


To add a virtual instrument to your session, open the browser and click on the Instrument button. Select the instrument or one of its patches from the Instrument browser and drag it into the Arrange view. Studio One Artist will automatically create a new track and load the instrument as the input. 要在你的会话中添加一个虚拟乐器，打开浏览器并点击乐器按钮。从乐器浏览器中选择乐器或它的一个补丁，然后把它拖到编曲视图中。Studio One Artist会自动创建一个新的音轨，并将该乐器作为输入载入。



To add a plug-in effect to a track, click the Effects button in the browser and select the plug-in or one of its presets in the effects browser. Drag-and-drop the selection over the track to which you would like to add the effect. 要给音轨添加插件效果，点击浏览器中的效果按钮，在效果浏览器中选择插件或其预置之一。在你想添加效果的音轨上拖放选择。

Drag-and-Drop Audio and MIDI Files 拖放音频和MIDI文件



Audio and MIDI files can be quickly located, auditioned, and imported into your Song by dragging them from the file browser into the Arrange view. If you drag the file to an empty space, a new track will be created with that file placed at the position to which you dragged it. If you drag the file to an existing track, the file will be placed as a new part of the track. 通过将音频和MIDI文件从文件浏览器拖到编曲视图中，可以快速定位、试听并导入你的歌曲中。如果你把文件拖到一个空的地方，就会创建一个新的轨道，把该文件放在你拖动它的位置上。如果你把文件拖到一个现有的轨道上，该文件将作为该轨道的一个新部分被放置。

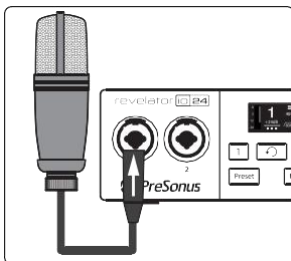
9 Resources 资源

9.1 Gain Staging 101: Begin at the Beginning

增益分期101：从头开始

It may seem counter intuitive to boost the signal closest to its source and cut it later in the signal path if it is too loud, but this is precisely the best way to get a noise- and feedback-free recording. That said, you don't want to gain it up too much at the beginning either. If you find that you must cut the signal at every component that sits after the input-trim stage to avoid distortion, you've probably set the trim too high. Then, and only then, should you gain it down. 提升最接近信号源的信号，并在信号路径的后面削减它，如果它太响的话，这似乎是违反直觉的，但这正是获得无噪音和无反馈的录音的最佳方法。也就是说，你也不想在一开始就把它增益得太高。如果你发现你必须削减信号在 如果你发现你必须在输入调整阶段之后的每一个组件上切断信号以避免失真，你可能已经把调整设置得太高了。那么，也只有在这个时候，你才应该把它增益下来。

Step 1: Setting the Microphone Gain 设置麦克风增益

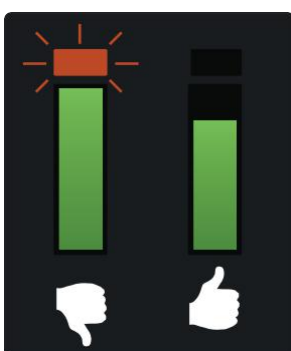


First, plug in your microphone into your desired Channel input and activate +48v if your mic requires it. Put on your headphones and listen.

首先，把你的话筒插入你所需要的通道输入，如果你的话筒需要的话，激活 +48v。戴上耳机，听一听。



Turn the Encoder knob clockwise while speaking into the microphone. Watching for the signal/clip indicator to turn red, then back it down until the level indicator is green only... 在对着话筒说话的同时顺时针转动编码器旋钮。观察信号/夹子指示灯变成红色，然后将其调回，直到电平指示灯变成绿色.....



Step 2: Setting the EQ and Dynamics**第2步：设置均衡器和动态器**

After you have set the input gain, you can use your channel EQ to sculpt your source. The more bands your EQ offers, the more control you will have, but you'll also add more potential for improper gain staging, so use with caution. This is also true with compression.

To set the EQ, you will need to adjust both the channel and the main faders to 0.0 dB. (AKA "unity.") This is just for the purposes of dialing in the sound you want. You'll dial in the mix next. 在你设置了输入增益后，你可以使用你的通道EQ来雕刻你的音源。你的EQ提供的频段越多，你的控制力就越强，但也会增加更多不适当的增益阶段的可能性，所以要谨慎地使用。对于压缩来说也是如此。要设置EQ，你需要将通道和主推子都调整到0.0dB。(又称 "统一"。)这只是为了调出你想要的声音。接下来你将拨入混音。

Often, when people are new to using an equalizer, they listen for what is missing from their source signal and try to boost it in. But that's not always the best solution. Sometimes removing the frequencies that are drowning out the ones you want works best. 通常情况下，当人们刚开始使用均衡器时，他们会聆听源信号中缺少的东西，并试图将其提升。但这并不总是最好的解决办法。有时，去除淹没你想要的频率，效果最好。

Dynamics processors can be difficult to work with at first, because they both reduce gain and amplify it. Let's take a look at a compressor for a moment. A compressor works by lowering the dynamic range—and by extension, the gain—of a signal, but it also gives you a make-up gain control that allows you to get some of that back. If you apply a lot of gain reduction to a signal, then boost it too far with the make-up gain, your sound can get very unwieldy very fast. As with an EQ, only compress a signal as much as you need to (unless you're using it for a creative effect), and only gain it back up as far as you have to for it to cut through your mix. 动态处理器一开始可能很难操作，因为它们既能减少增益又能放大增益。让我们先看一下压缩器。压缩器的工作原理是降低信号的动态范围，进而降低其增益，但它也给你提供了一个补偿增益控制，使你能重新获得一些增益。如果你将大量的增益降低到一个信号上，然后用补充增益将其提升得太远，你的声音就会很快变得非常不流畅。就像EQ一样，只有在你需要的时候才压缩信号（除非你用它来做创造性的效果），并且只有在你需要的时候才回升它的增益，使它能够通过你的混音。

Step 3: Setting Your Mix—The Unity Myth 第3步：设置你的混音

There is an unfortunate rumor that persists in the darker corners of the audio-nerd Internet. It states that all your faders should be set to unity (that bold line in the middle of the fader markings at 0 dB). But if you do this, you will limit the dynamic range of your signals—and not in a good way. 有一个不幸的传言，在音频专家互联网的黑暗角落里持续存在。它说，你所有的推子都应该设置为统一（推子标记中间的那条粗线为0dB）。但是，如果你这样做，你会限制你的信号的动态范围，而且不是一个好的方式。

That bold mark next to your faders means just one thing: The channel and output mix level controls are not adding or removing any amplitude (volume) to or from your signal. 你的推子旁边的粗体标记只意味着一件事。通道和输出混合电平控制并没有为你的信号增加或减少任何振幅（音量）。

Why do you need to know this? For input gain staging and dialing in your EQ and dynamics, of course! 为什么你需要知道这个？是为了输入增益阶段和拨动你的均衡器和动态。

With the channel and the main faders at unity, you can listen to an individual channel unadulterated while you're setting your input gain level and adjusting your EQ and dynamics to sculpt the sound. Once that's done, the fat line in the middle of the channel has largely served its purpose. Are you getting too much of your animated guest caller in your headphones? By all means, go ahead and lower it. Need to give your own channel a little gas to compete? That's what that 10 dB above unity is for. 在通道和主推子处于统一的情况下，你可以在设置输入增益水平和调整均衡器和动态来雕刻声音的时候，不加修饰地聆听单个通道。一旦这样做了，通道中间的肥厚线就基本上达到了它的目的。你是否在耳机中得到了太多你的动画嘉宾来电？通过各种手段，继续降低它。需要给你自己的频道加点油来竞争吗？这就是高于统一标准的10分贝的作用。

Like everything in audio, however, these rules aren't absolute, especially in a live sound situation. If you are gaining up a channel well above unity just for it to be heard in your mix, maybe your other channels are too loud. Try lowering the levels of the rest of your mix. 然而，像音频中的一切，这些规则不是绝对的，尤其是在现场的声音情况。如果你把一个通道的增益远远超过统一水平，只是为了让它在你的混音中被听到，也许你的其他通道太响了。试着降低其余混音的电平。

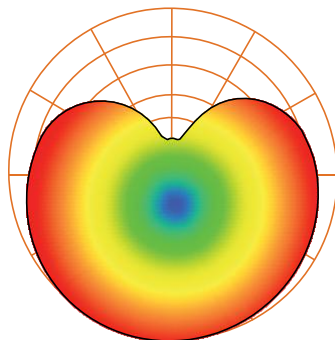
9.2 Microphone Tips and Tricks 麦克风技巧和窍门

Like any tool, a microphone must be used properly to get the best result. Professional broadcasters or vocalists will tell you that good microphone technique is crucial to getting a good recording. How many times have you listened to a podcast where it sounded like there was a wall between the on-air talent and their microphone? Or the microphone was so close you could hear each breath and every popping 'P' sounded like a mini explosion in your headphones? 像任何工具一样，麦克风必须正确使用才能获得最佳效果。专业播音员或歌唱家会告诉你，良好的麦克风技术是获得良好录音的关键。你听过多少次播客，听起来好像在播音员和麦克风之间有一堵墙？他们的麦克风？或者麦克风离得太近，你可以听到每一次呼吸，每一个 "P" 在你的耳机听起来像小型爆裂？

Proximity to the microphone is the most common issue when anyone begins the process of learning proper mic technique, but other issues, like background noise and improper gain staging, will exacerbate a poorly positioned microphone. Don't worry, we've all been there, and PreSonus has put together this tutorial to help you mitigate the most common mistakes people make when getting started recording their voice with a microphone. 当任何人开始学习正确的麦克风技术时，与麦克风的距离是最常见的问题，但其他问题，如背景噪音和不适当的增益阶段，将使位置不佳的麦克风更加恶化。别担心，我们都经历过这种情况，PreSonus 已经把这个教程放在一起，帮助你减轻人们在开始用话筒录音时最常见的错误。

9.2.1 Pickup Patterns 拾取模式

Microphones are designed with different pickup patterns. A pickup pattern represents the particular areas around the microphone's capsule where it is most sensitive to sound. The most common pattern for vocal and broadcast microphones is called Cardioid, because it's heart-shaped. 传声器被设计成不同的拾音模式。拾音模式代表了麦克风外壳周围对声音最敏感的特定区域。人声和广播话筒最常见的模式被称为心形，因为它是心形的。



9.2.2 Handling Noise 操作噪音

Holding a microphone too roughly will create problematic handling noise. While this is fine for a stage performance where the sheer volume of the instruments on stage will mask this noise, in an audio recording made from a quiet location, handling noise becomes a distraction from the primary sound source. And in this case, that source is you! Handling noise can be eliminated by mounting your microphone to a stand or boom arm, particularly one with a shock mount. 太握紧话筒会产生有问题的处理噪音。虽然这在舞台表演中没有问题，因为舞台上乐器的巨大音量会掩盖这种噪音，但在一个安静的地方进行的录音中，处理噪音会分散对主要声源的注意力。而在这种情况下，这个声源就是你！通过将话筒安装在支架或吊臂上，特别是带有减震装置的支架上，可以消除搬运噪音。

9.2.3 How Close is Too Close? 多大程度的接近是太接近？

Microphones are designed to pick up sound; that's their job. When folks are first learning to use a microphone, there is a natural tendency to speak too softly or too loudly. This is where monitoring yourself through headphones is especially helpful. As a general rule, if it sounds good in your headphones, it will sound good in your recording. 麦克风的设计是为了拾取声音，这是它们的工作。当人们第一次学习使用麦克风时，有一种自然的倾向，就是说话太轻或太大声。这时，通过耳机监测自己的声音就特别有帮助。一般来说，如果在耳机中听起来不错，那么在录音中也会听起来不错。

A good starting point is to position your mouth about four inches from the microphone. If you project your voice naturally, you may need to sit a little further back. The good news is that good microphone technique quickly becomes muscle memory once you get the hang of it, so the more you practice, the less awkward it becomes. 一个好的起点是将你的嘴放在离麦克风大约四英寸的地方。如果你的声音是自然投射的，你可能需要坐得更靠后一点。好消息是，一旦你掌握了良好的麦克风技术，很快就会成为肌肉记忆，所以你练习得越多，就越不觉得尴尬。

9.2.4 Problematic Pronunciation 有问题的音质

Depending on your natural speaking style, additional adjustments may be necessary:
根据你的自然说话风格，可能需要进行额外的调整。

Plosives. Plosives are bursts of air that are picked up by the microphone that sound like a sort of low thump or booming sound when recorded. They can occur with any consonant, but occur most commonly when you say 'P' or 'B' sounds. The audio industry has battled these natural speech events for so long that there is a specialized hardware tool to combat them: pop filters! A pop filter sits between your mouth and microphone and slows down and disperses these bursts of air, shielding the microphone from picking them up. The other advantage of a pop filter is that it they can be used for maintaining a fixed position in front of your microphone, and are especially useful when recording with a condenser microphone. **Plosives.** Plosives 是被麦克风接收到的空气爆裂声，在录音时听起来像一种低沉的砰砰声或轰鸣声。它们可以与任何辅音一起出现，但最常见的是当你说 "P" 或 "B" 音时。音频行业与这些自然语音事件斗争了很久，以至于有一种专门的硬件工具来对付它们：流行滤波器！流行滤波器位于你的嘴巴之间。弹出式过滤器位于你的嘴和麦克风之间，减缓并分散这些突发的空气，保护麦克风不被拾起。弹出式过滤器的另一个优点是，它们可以用来在你的话筒前面保持一个固定的位置，在用电容式话筒录音时特别有用。

Sibilance. Sibilance occurs when you make a consonant sound by directing your breath to the back of your teeth using your tongue. The most common examples of problematic sibilants are 'S' and 'Z' sounds. Depending on your speech pattern, you may naturally exaggerate these sounds without noticing—and this may be a habit that you wish to alter while you're recording. Luckily, if this is a habit you cannot or do not want to break, you can fix most sibilance issues in post-production as long as you are multi-tracking your podcast using a dynamics effect called a de-esser, which your Revelator io24 happens to have onboard! **See Section 5.1.3 for more information.** Professional DAW applications, like PreSonus Studio One, are also equipped with a de-esser plug-in especially for this purpose. 咝咝声。当你发出辅音时，就会出现咝咝声。有问题的咝音最常见的例子是 'S' 和 'Z' 音。根据你的说话方式，你可能会自然地夸大这些声音而不被注意到--这可能是你希望改变的习惯。

这可能是你希望在录音时改变的一个习惯。幸运的是，如果这是一个你不能或不想改掉的习惯，你可以在后期制作中解决大多数咝声问题，只要你在多轨播客中使用一种叫做 de-esser 的动态效果，而你的 Revelator io24 恰好就有这种效果。更多信息见 5.1.3 节。专业的 DAW 应用程序，如 PreSonus Studio One，也配备了专门用于此目的的去咝器插件。

Power User Tip: If you are recording a several speakers at once with your Revelator io24, using a de-esser can cause more problems than it solves, because over-using a de-esser or putting one where it is not needed can turn all your 'S' sounds to "Th" sounds, and you can easily give someone a lisp they don't have, which they are unlikely to appreciate.

用户提示：如果你用你的 Revelator io24 同时录制几个扬声器，使用去咝声可能会引起更多的问题，因为过度使用去咝声或把它放在不需要的地方，会把你所有的 "S" 音变成 "Th" 音，你很容易给别人一个他们没有的口音，他们不可能欣赏。

9.2.5 Putting it All Together

Once you've practiced your microphone placement and technique, do some practice recordings to find out what works for you and what doesn't. Just sit in front of the microphone and talk as you would if you were chatting with a friend. The more natural you feel behind the microphone, the more engaging your performance will be. Letting your natural charisma and charm come across is the best way to engage your audience. 一旦你练习了你的麦克风位置和技术，做一些练习录音，找出哪些适合你，哪些不适合。只要坐在话筒前，像和朋友聊天一样说话。你在话筒后面感觉越自然，你的表演就越有吸引力。让你的自然魅力体现出来，是吸引观众的最佳方式。

9.3 Technical Specifications 技术规格

Audio Interface

Type 型号	USB-C™ Compatible USB 2.0
Sample Rates 样品率	44.1kHz, 48kHz, 88.2kHz, 96kHz
Bit Depth 位深度	24 bit
ADC Converter Dynamic Range ADC转换器的动态范围	105 dB
DAC Converter Dynamic Range DAC转换器的动态范围	105 dB
Hardware Controls 硬件控制: Direct Monitor, Mic Gain, Headphone Level, Mute, Preset Select	
Software Controls 软件控制: Mic Gain, Monitor Mix, Preset Management	

Onboard DSP 板载 DSP

PreSonus StudioLive Fat Channel: High Pass Filter, Noise Gate / Expander, 3 Compressor models, 3 EQ models, and Limiter;
Voice Effects 语音效果: Doubler, Vocoder, Ring Modulator, Comb Filter, Detuner, Delay, Reverb

Microphone Inputs 麦克风输入

Maximum Level 最大电平	+10 dBu (±0.5 dBu, min gain)
Gain Range 增益范围	60 dB
Frequency Response 频率响应	20 Hz - 20 kHz (+0.1 dB/-0.3 dB, unity gain, unwt'd)
THD+N	0.005% (1 kHz, -1 dBFS, min gain)
EIN	-126 dBu (A-weighted, 150Ω, max gain)
Input Impedance 输入阻抗	1.4 kΩ
Phantom Power 幻象电源	+48 VDC (10 mA total)

Instrument Inputs

Maximum Level 最大电平	+10 dBu (min gain)
Gain Range 最大电平	50 dB
Frequency Response 频率响应	20 Hz - 20 kHz (+0.1 dB/-0.3 dB, unity gain, unwt'd)
THD+N	0.005% (1 kHz, min gain)
Input Impedance 输入阻抗	1MΩ

Main Outputs 主要输出

Type 型号	¼"TRS, Female
Maximum Level 最大电平	+10 dBu (1 kHz, unity gain, z-balanced)
Frequency Response 频率响应	20 Hz – 20 kHz (+0.1 dB/-0.3 dB, unity gain, unwtd)
THD+N	0.003% (1 kHz, -1 dBFS, unity gain)

Headphone Output 耳机输出

Maximum Power 最大功率	30 mW / channel @ 56Ω
Frequency Response 频率响应	20 Hz – 20 kHz (+0.1 dB/-0.5 dB, unity gain, unwtd)
THD+N	0.050 % (1 kHz, 0 dBFS, loaded)
Impedance Working Range 阻抗工作范围	32Ω to 300Ω

Physical

Height 高度	2.5" (63.5mm)
Width 宽度	6.25" (158.8mm)
Depth 深度	6.25" (158.8mm)
Weight 重量	2lbs (0.9kg)

Added bonus: PreSonus' previously Top Secret recipe for...

Andouille & German Red Cabbage Po-Boys

额外的奖励：PreSonus绝密食谱为...

Andouille和德国红包菜波波饼

Ingredients:

- 1 small Onion
- 3 Tbsp. fresh Ginger
- 1 small head Red Cabbage
- 1 tsp Salt
- 3 Tbsp. Honey
- ¼ cup Red Vinegar
- 12 oz Andouille or Bratwurst Sausage sliced lengthwise
- ¼ lb. Muenster Cheese
- Creole or German Mustard to taste
- 1 loaf French Bread

材料:

- -1个小洋葱
- -3汤匙新鲜生姜
- -1个小头红包菜
- -1茶匙盐
- -3汤匙蜂蜜
- -1/4杯红醋
- -12盎司安杜尔或布拉德沃斯特香肠纵向切片
- -1/4磅明斯特干酪
- -克里奥尔或德国芥末酱来调味
- -1条法国面包

Cooking Instructions: 烹饪说明:

1. Heat 2 tablespoons vegetable oil in large skillet. Add onions and ginger, then cook them for about 3 minutes until onions begin to wilt. Add cabbage, vinegar, and honey, and then cook for about 5 minutes. Add salt to taste and set aside.
2. Heat oil in a skillet till hot. Add sausage cut side down till nice and brown, turn and cook for about 5 minutes till thoroughly cooked.
3. Slice bread lengthwise, lay a bed of cabbage, then sausage, and cheese on top. Toast under the broiler or in a hot oven till cheese is melted and bread is crisp.
4. Spread mustard on bread. Sandwich can then be cut into 2-3 pieces and shared (or not if you're really hungry).

1. 在大平底锅中加热2汤匙植物油。加入洋葱和姜，然后煮约3分钟，直到洋葱开始萎缩。加入卷心菜、醋和蜂蜜，然后煮约5分钟。加入盐调味，放在一边。

2. 在平底锅中将油加热至热。将香肠切面朝下放入锅中，直到变成棕色，再翻面，煮约5分钟，直到完全煮熟。

3. 将面包纵向切开，铺上卷心菜，然后是香肠，再将奶酪放在上面。在烤炉下或热烤箱中烘烤，直到奶酪融化，面包变脆。

4. 在面包上涂抹芥末。然后可以将三明治切成2-3块并分享（如果你真的很饿的话，也可以不切）。

BONUS: Extra cabbage can be used as a condiment with meat, eggs, sandwiches, etc.

额外： 多余的卷心菜可以作为肉类、鸡蛋、三明治等的调味品。

Revelator io24

2-channel audio interface for streamers,
podcasters, and music creators

Owner's Manual 用户手册

