

# ioStation 24c

Audio Interface and Production Controller

兼容音频接口和制作台

Owner's Manual

用户手册





# Table of Contents

## 1 Overview — 1

- 1.1 Introduction — 1
- 1.2 What's in the Box? — 2
- 1.3 What's in your My PreSonus Account — 3
- 1.4 Firmware Updates — 3

## 2 Hookup — 5

- 2.1 BackPanel Connections — 5
- 2.2 Top-Panel — 6
- 2.3 Connection Diagram — 7

## 3 Connecting to a Computer — 8

- 3.1 Installation for Windows — 8
  - 3.1.1 Universal Control (Windows) — 8
  - 3.1.2 Loopback Recording (Windows only) — 10
- 3.2 Installation for macOS — 11
- 3.3 Using the ioStation 24c with Popular Audio Applications — 11

## 4 Studio One — 13

- 4.1 Getting Started — 13
- 4.2 Channel Strip — 14
- 4.3 Transport Controls — 14
- 4.4 The Session Navigator — 15
  - 4.4.1 F1-F4 Functions — 16
- 4.5 Automation Controls — 16
- 4.6 Control Link — 17

## 5 Pro Tools (HUI) — 18

- 5.1 Getting Started — 18
- 5.2 Channel Strip — 19
- 5.3 Transport Controls — 19
- 5.4 The Session Navigator — 20
- 5.5 Automation Controls — 20

## 6 Logic (MCU) — 21

- 6.1 Getting Started — 21
- 6.2 Channel Strip — 23

- 6.3 Transport Controls — 23
- 6.4 The Session Navigator — 24
- 6.5 Automation Controls — 25
- 6.6 Bypass — 25

## 7 Cubase/Nuendo (MCU) — 26

- 7.1 Getting Started — 26
- 7.2 Channel Strip — 28
- 7.3 Transport Controls — 28
- 7.4 The Session Navigator — 29
- 7.5 Automation Controls — 30

## 8 Live (MCU) — 31

- 8.1 Getting Started — 31
- 8.2 Channel Strip — 32
- 8.3 Transport Controls — 32
- 8.4 The Session Navigator — 33
- 8.5 Automation Controls — 34
- 8.6 Bypass — 34

## 9 Studio One Artist Quick Start — 35

- 9.1 Installation and Authorization — 35
- 9.2 Setting Up Studio One — 36
  - 9.2.1 Configuring Audio Devices — 37
  - 9.2.2 Configuring MIDI Devices — 37
- 9.3 Creating a New Song — 42
  - 9.3.1 Configuring Your Audio I/O — 43
  - 9.3.2 Creating Audio and Instrument Tracks — 44
  - 9.3.3 Recording an Audio Track — 45
  - 9.3.4 Adding Virtual Instruments and Effects — 46

## 10 Appendix — 48

- 10.1 Operation Modes — 48
- 10.2 ioStation 24c Multichannel Controller MIDI Protocol — 48
  - 10.2.1 SysEx — 48
  - 10.2.2 Fader — 49
  - 10.2.3 Session Navigator Encoder — 49
  - 10.2.4 Buttons and LEDs — 49

# Table of Contents 目录

## 1 Overview 概述 — 1

1.1 Introduction 简介 — 1

1.2 What's in the Box? 配套有什么 — 2

1.3 What's in your My PreSonus Account 您的PreSonus 帐户有什么 — 3

1.4 Firmware Updates 固件更新 — 3

## 2 Hookup 安装 — 5

2.1 Back Panel Connections 后面板链接 — 5

2.2 Top-Panel 顶面 — 6

2.3 Connection Diagram 连接示意图 — 7

## 3 Connecting to a Computer 连接到计算机 — 8

3.1 Installation for Windows Windows安装 — 8

3.1.1 Universal Control (Windows) 通用控制 (Windows) — 8

3.1.2 Loopback Recording (Windows only) 环回录制 (仅Windows) — 10

3.2 Installation for macOS macOS 的安装 — 11

3.3 Using the ioStation 24c with Popular Audio Applications 使用流行的音频应用程序 ioStation 24c — 11

## 4 Studio One — 13

4.1 Getting Started 入门 — 13

4.2 Channel Strip 声道控制排 — 14

4.3 Transport Controls 传输控制 — 14

4.4 The Session Navigator 会话导航器 — 15

4.4.1 F1-F4 Functions F1-F4功能 — 16

4.5 Automation Controls 自动化控制 — 16

4.6 Control Link 控制链接 — 17

## 5 Pro Tools (HUI) — 18

5.1 Getting Started 开始工作 — 18

5.2 Channel Strip 声道控制排 — 19

5.3 Transport Controls 传输控制 — 19

5.4 The Session Navigator 会话导航器 — 20

5.5 Automation Controls 自动化控制 — 20

## **6 Logic (MCU) — 21**

- 6.1 Getting Started 开始工作 — 21
- 6.2 Channel Strip 声道控制排 — 23
- 6.3 Transport Controls 传输控制 — 23
- 6.4 The Session Navigator 会话导航器 — 24
- 6.5 Automation Controls 自动化控制 — 25
- 6.6 Bypass 旁通 — 25

## **7 Cubase / Nuendo (MCU) Cubase/Nuendo 编曲软件 — 26**

- 7.1 Getting Started 开始工作 — 26
- 7.2 Channel Strip 声道控制排 — 28
- 7.3 Transport Controls 传输控制 — 28
- 7.4 The Session Navigator 会话导航器 — 29
- 7.5 Automation Controls 自动化控制 — 30

## **8 Live (MCU) 直播 — 31**

- 8.1 Getting Started 开始工作 — 31
- 8.2 Channel Strip 声道控制排 — 32
- 8.3 Transport Controls 传输控制 — 32
- 8.4 The Session Navigator 会话导航器 — 33
- 8.5 Automation Controls 自动化控制 — 34
- 8.6 Bypass 旁通 — 34

## **9 Studio One Artist Quick Start — 35**

- 9.1 Installation and Authorization 安装和授权 — 35
- 9.2 Setting Up Studio One Studio One 设置 — 36
  - 9.2.1 Configuring Audio Devices 配置音频设备 — 37
  - 9.2.2 Configuring MIDI Devices 配置 MIDI 设备 — 37
- 9.3 Creating a New Song 创建一首新歌 — 42
  - 9.3.1 Configuring Your Audio I/O 配置音频输入/输出 — 43
  - 9.3.2 Creating Audio and Instrument Tracks 创建音频和乐器轨道 — 44
  - 9.3.3 Recording an Audio Track 录制一个音轨 — 45
  - 9.3.4 Adding Virtual Instruments and Effects 添加虚拟乐器和效果器 — 46

## **10 Appendix 附录 — 48**

10.1 Operation Modes 操作模式 — 48

10.2 ioStation 24c Multichannel Controller MIDI Protocol ioStation 24c多通道控制器MIDI协议— 48

10.2.1 SysEx — 48

10.2.2 Fader 音量控制器 — 49

10.2.3 Session Navigator Encoder 会话导航编码器— 49

10.2.4 Buttons and LEDs 按钮和LED灯— 49

## 1 Overview 概述

### 1.1 Introduction 简介



Thank you for purchasing the PreSonus® ioStation 24c audio interface and production controller.

感谢您购买 PreSonus® ioStation 24c 音频接口和制作控制器。

Featuring a 2-in, 2-out USB-C™ compatible audio interface and ultra-smooth, touch-sensitive, motorized fader; complete automation and transport controls; and the unique Session Navigator, the ioStation 24c is your all-in-one recording and mixing assistant—making tracking and mixing in your favorite DAW application quick and easy.

ioStation 24c 具有一个 2 进 2 出的 USB-C™ 兼容音频接口和超平滑、触摸感应敏感的机动音量控制器；完整的自动化和传输控制；以及独特的会话导航器，是一体化录音和混音的最佳助手，可在您最喜爱的 DAW 应用程序中快速而轻松地进行跟踪和混音。

Loaded with high-headroom, Class A XMAX microphone preamplifiers; robust metering, high-definition 24-bit, 192 kHz conversion; and more, the ioStation 24c breaks new boundaries for music performance and production. All you need is a computer with a USB C, 2.0, or 3.0 connection, a few microphones and cables, powered speakers, and your instruments, and you are ready to record!

ioStation 24c 配备了高净空、A 级别 XMAX 麦克风前置放大器；强大的计量、高清 24 位、192kHz 转换等，为音乐表演和制作打破了新的界限。您只需要一台带有 USB C、2.0 或 3.0 连接的电脑、一些麦克风和电缆、有源音箱和您的乐器，就可以开始录音了！

PreSonus Audio Electronics is committed to constant product improvement, and we highly value your suggestions. We believe the best way to achieve our goal of constant product improvement is by listening to the real experts: our valued customers. We appreciate the support you have shown us through the purchase of this product and are confident that you will enjoy your ioStation 24c!

PreSonus 音频电子致力于不断改进产品，我们非常重视您的建议。我们相信，最好的方法是倾听客户的建议，可以实现我们产品不断改进的目标。我们感谢您通过购买该产品对我们的支持，并相信您会喜欢 ioStation 24c！

**About this manual:** We suggest that you use this manual to familiarize yourself with the features, applications, and correct connection procedures for your ioStation 24c before trying to connect it to your computer. This will help you avoid problems during installation and setup.

**关于本手册：**我们建议您在尝试将 ioStation 24c 连接到您的计算机之前，使用本手册，熟悉产品的功能、应用和正确的程序连接。

这将帮助您避免在安装和设置过程中出现问题。

This manual describes the ioStation 24c behavior in the DAWs for which each operation mode was designed. **Please see Section 10.1 for applications not listed in the Table of Contents.**

本手册描述了 ioStation 24c 在 DAW 中的特性，每个操作模式都是围绕它设计的。**请参阅第 10.1 中未列出的应用。**

Throughout this manual, you will find **Power User Tips** that can quickly make you an ioStation 24c expert and help you get the most out of your investment.

在本手册中，您会获得强大的**用户提示**，它可以迅速让您成为 ioStation 24c 的专家，绝对物有所值。



## 1.2 What's in the Box? 配套中有什么?

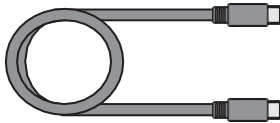
Your ioStation 24c package contains the following:  
ioStation 24c audio interface/production controller

您的 ioStation 24c 包包含以下内容:

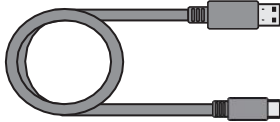
ioStation 24c 音频接口/制作控制器



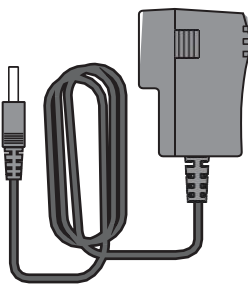
Quick Start Guide 快速入门



1m USB C cable 1m USB C 电缆



6' (1m) USB A-C cable 1m USB A-C 电缆



External Power Supply 外部电源



PreSonus Health, Safety, and Compliance Guide

PreSonus 健康、安全和合规指南

### 1.3 What's in your My PreSonus Account 您的My PreSonus 帐户中有什么？



Once you register your ioStation 24c, you will be able to download the following:  
Studio One Artist recording software and content

您的ioStation 24c一旦注册成功，以下内容就可下载：Studio One Artist 录音软件和相关内容



Universal Control (necessary for firmware updates) 通用控制（固件更新所需）

Visit <http://my.presonus.com> to register your ioStation 24c and download your software and license. 请您访问 <http://my.presonus.com> 进行ioStation 24c 的注册，并下载您的软件和许可证。

### 1.4 Firmware Updates 固件更新

PreSonus is committed to constant product improvement. As part of this commitment, we offer periodic firmware updates that add features, improve functionality, and resolve issues that are discovered in the field. Because of this, it is highly recommended that you download Universal Control from your My PreSonus account after registering your ioStation 24c.

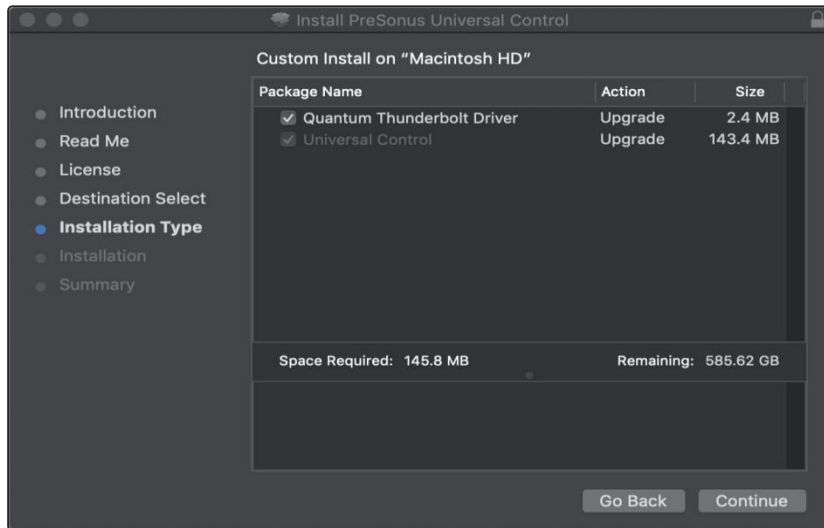
PreSonus 一直致力于不断改进产品，作为我们承诺的一部分，会定期提供固件更新，以增加功能，改善功能，并解决发现的问题。因此，您要特别注意：强烈建议从您的 My PreSonus 帐户下载 Universal Control，在您注册完成 ioStation 24c 以后。

**Note:** At the time of this manual's publication, a firmware update is required for full functionality of your ioStation 24c. You must download and install Universal Control and run the firmware update on your unit.

**注意：**在本手册出版之时，您的 ioStation 24c 需要进行固件更新以实现其全部功能。您必须下载并安装 Universal Control，并在您的设备上运行固件更新。

During installation, you will be given the option to install various PreSonus audio drivers. No driver installation is required for macOS. Windows users must install the ioStation 24c audio driver.

在安装过程中，您可以选择安装 PreSonus 各种音频驱动程序。MacOS 不需要安装驱动程序。Windows 用户必须安装 ioStation 24c 音频驱动程序。



## 1.4 Firmware Updates

## Owner's Manual

Once installed, connect your ioStation 24c to your computer.

安装完毕后，将您的 ioStation 24c 与您的电脑连接到。

Universal Control will alert you if there is new firmware available for your ioStation 24c. Clicking on the Update Firmware button will begin the update process. This process can take up to five minutes. At the end of the firmware update, you will be prompted to reboot your ioStation 24c.

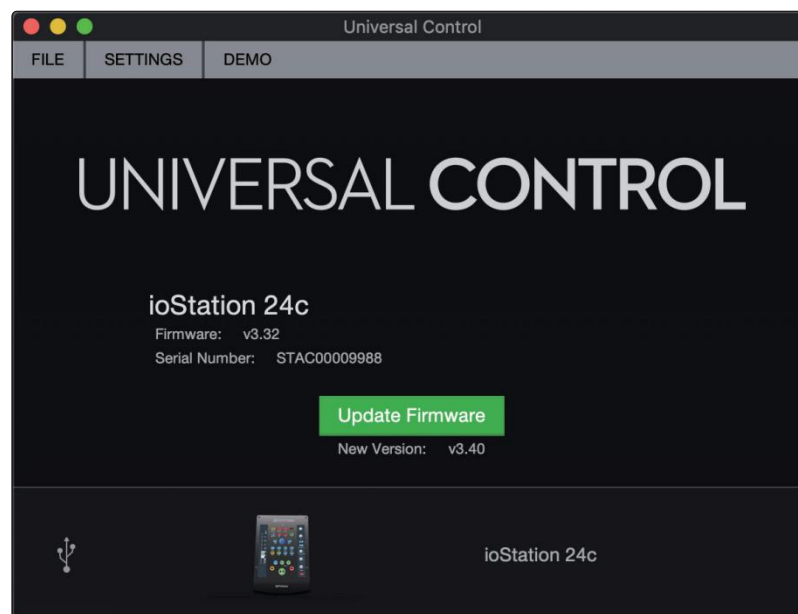
Once rebooted, your ioStation 24c fader may require recalibration. This is an automated process. Do not interfere with or interrupt the fader calibration process.

**Note:** One of the Operating Modes must be selected to perform a firmware update.

如果您的 ioStation 24c 有可用的新固件，Universal Control 会提醒您。点击 "更新固件" 按钮将开始更新过程。这个过程大概需要5分钟。在固件更新结束时，将提示您重新启动您的 ioStation 24c。

一旦重启，您的 ioStation 24c 音量控制器可能需要重新校准。这是一个自动过程，请勿干扰或中断。

**注意：** 必须选择其中一个操作模式来执行固件更新。



## 2 Hookup 安装

### 2.1 Back Panel Connections 后面板的连接



**Mic/Ins/Line inputs** Your ioStation 24c interface is equipped with high-quality XMAX microphone preamplifiers for use with all types of microphones.

Both input channels on your ioStation 24c interface are equipped with combo jacks. This convenient connector accepts:

- a 1/4-inch line-level phone plug (for synthesizers, signal processors, etc.)
- a 1/4 passive instrument cable (for guitar, bass, etc.),
- or an XLR plug.

**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 the life of your audio equipment.

**话筒/输入/线路输入** 您的 ioStation 24c 接口配备了高端的 XMAX 话筒前置放大器，可用于所有类型的话筒。

前置放大器可用于所有类型的话筒。

您的 ioStation 24c 接口的两个输入通道都配备了组合插孔。这种便捷的连接器可接受：

- 1/4 英寸线级电话插头（用于合成器、信号处理器等）。
- 1/4 无源的乐器电缆（用于吉他、贝斯等）。
- 或一个 XLR 插头。



**Headphone Output.** The rear-panel headphone output mirrors the same streams as the Main left/right outputs.

**耳机输出。**后面板耳机输出镜像相同的流作为主要的左/右输出。



**Main Outs.** These are the Main outputs for the ioStation 24c. 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 ioStation 24c 的主输出。主输出的输出电平由设备前面的主电平控制来控制。播放流1和2被路由到这些输出。



**USB C Port.** Use this port to connect your ioStation 24c to your computer. While the ioStation 24c 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 ioStation 24c if your computer has a USB 2.0 or 3.0 connection rather than a USB C connection. Do not connect your ioStation 24c to a USB 1.1 or lower connection on your computer.

**USB C 端口。**使用此端口将您的 ioStation 24c 连接到您的计算机。虽然 ioStation 24c 使用 USB C 连接，但它与 USB 2.0 和 3.0 连接完全兼容。如果您的电脑有 USB 2.0 或 3.0 连接，而不是 USB C 连接，请使用 ioStation 24c 附带的 USB C 转 A 电缆。请不要将您的 ioStation 24c 连接 USB 1.1 或更低的接口到您计算机上。



**Footswitch.** Use this port to connect a footswitch to your ioStation 24c to trigger start/stop or recording punch-ins. The ioStation 24c will auto-detect the footswitch polarity upon power-up and conform to the footswitch that is connected to it. Either a momentary or a latching switch can be used.

**脚踏开关。**使用此端口将脚踏开关连接到您的 ioStation 24c，以触发器启动/停止或录音打卡。ioStation 24c 会在开机时自动检测脚踏开关的极性，并与连接到它的脚踏开关保持一致。既可以使用瞬时开关，也可以使用闭锁开关。

## 2.2 Top-Panel



**Input Gain Controls.** These knobs provide 80 dB of variable gain for Mic and Instrument; 40 dB of range for Line (-20 to +20)

**Clip Indicators.** The red Clip LED will illuminate 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.

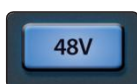
**输入增益控制。**这些旋钮为话筒和乐器提供80dB的可变增益；为线路提供40dB的范围（-20至+20）。

**剪辑指示灯。**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，并表现出削波的迹象。使用增益控制来保持信号低于这个电平。




**Line.** Use the Line switch to toggle between instrument-level and line-level sources. It will light up blue when selected; light off indicates high-impedance instrument-level compatibility.

**线路。**使用线路开关在乐器级和线路级信号源之间进行切换。当选择时，它将亮起蓝色的灯；灯灭表示高阻抗乐器级的兼容性。



**48V** The ioStation 24c provides 48V phantom power for the microphone inputs. Pressing the 48V button switches phantom power on and off for all microphone inputs; the button will illuminate in blue when phantom power is available on the microphone preamplifiers.

ioStation 24c 为麦克风输入提供**48V**幻像电源。按下**48V**按钮可以打开和关闭所有麦克风输入的幻像电源；当麦克风前置放大器上的幻像电源可用时，按钮将显示蓝色。

 **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.

**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。因此，在不需要幻象电源时，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。

**XLR connector wiring for phantom power:**

用于幻象电源的XLR连接器接线：

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



**Sync LED.** This light indicates if your ioStation 24c is in sync with your computer. When no sync is available, this light will flash red.

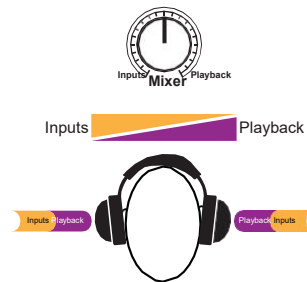
**Sync LED。** 这个灯指示您的 ioStation 24c 是否与您的计算机同步。当没有同步时，该灯将闪烁红色。





**Mix.** The Mix knob allows you to blend your input signals with the playback streams from your computer so that you can monitor your input signals without any latency (delay). If the knob is positioned at 12 o'clock, the input signal and the playback stream will be equally balanced. Turning the knob to the left will increase the level of the input signal relative to the playback stream; turning to the right will increase the level of the playback stream relative to the input signal as illustrated below:

**混合。** 混合旋钮可以使您的输入信号与电脑的播放流混合，这样您就可以在没有任何延迟的情况下监测您的输入信号。如果旋钮位于12点位置，输入信号和回放流将是同等的平衡。向左旋转旋钮将增加输入信号相对于播放流的电平；向右旋转将增加播放流相对于输入信号的电平，如下图所示。



**Headphone Level.** This knob controls the level of the rear panel headphone output.  
**耳机电平。** 这个旋钮控制后面板耳机输出的电平。



**Main.** The main knob controls the output level for the main left/right outputs on the back of your ioStation 24c and has a range of -80 dB to 0 dB. This control provides attenuation only.

**主控。** 主旋钮控制 ioStation 24c 背面的左/右主输出电平，其范围为 -80 dB 至 0 dB。该控制仅提供衰减。

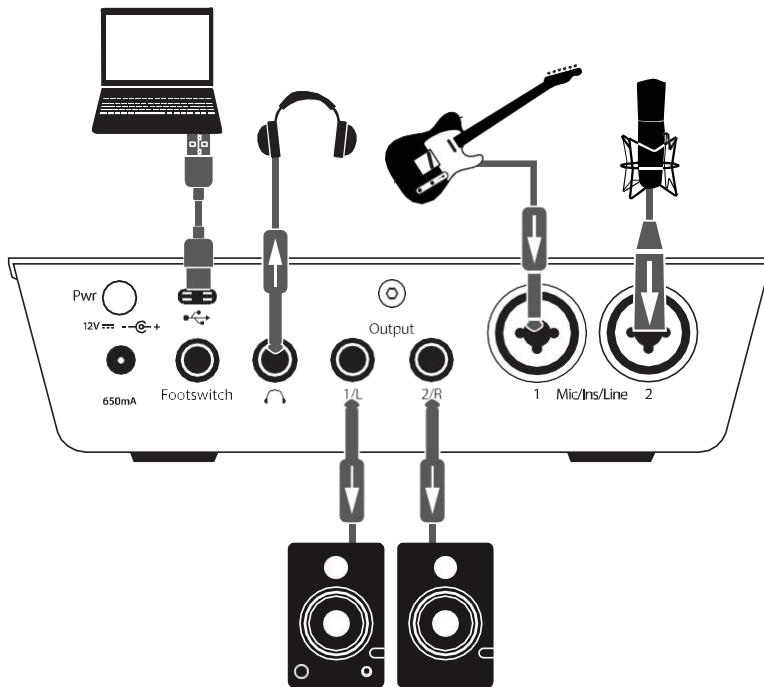


**Mute.** This button mutes the Main Outputs. The headphone output is unaffected by this mute switch.

**静音。** 该按钮可使主输出静音。耳机输出不受此静音开关的影响。



## 2.3 Connection Diagram 连接示意图



## 3 Connecting to a Computer 连接计算机

Before connecting your ioStation 24c to a computer, **please visit [www.presonus.com](http://www.presonus.com) to verify the latest system requirements.**

**Note:** The speed of your processor, amount of RAM, and capacity, size, and speed of your hard drives will greatly affect the overall performance of your recording system. A faster processor and more RAM can reduce signal latency (delay) and improve overall performance.

在将您的 ioStation 24c 连接到计算机之前，请访问 [www.presonus.com](http://www.presonus.com) 来验证最新的系统要求。

**注意：**您的处理器的速度、内存的数量以及硬盘的容量、大小和速度将极大地影响您的录音系统的整体性能。更快的处理器和更多的内存可以减少信号的延迟，提高整体性能。

The Windows ASIO driver, and Universal Control installer for macOS and Windows are available for download from your MyPreSonus user account. To begin, you must first visit <http://my.presonus.com>, create or log into your user account, and register your ioStation 24c. Once registered, all software downloads will be available from within your MyPreSonus user account.

Windows ASIO 驱动，以及 macOS 和 Windows 的 Universal Control 通用控制安装程序可以从您的 MyPreSonus 用户的账户中下载。开始时，您必须首先访问 <http://my.presonus.com>，创建或登录您的用户账户，并注册您的 ioStation 24c。一旦注册，所有的软件下载都可以从您的 MyPreSonus 用户账户中获得。

### 3.1 Installation for Windows 安装Windows

Download the Universal Control installer from your MyPreSonus account. Connect your ioStation 24c to an available USB C, 2.0, or 3.0 port and launch the installer. The installer will take you through each step of the installation process. This application will install the ASIO and WDM drivers, as well as Universal Control. Please read each message carefully.

Universal Control 通用控制安装程序从您的MyPreSonus账户下载。请将您的ioStation 24c连接一个可用的USB C、2.0或3.0端口，并启动安装程序。安装程序过程中，会带您完成安装每一步。这个应用程序将安装ASIO和WDM驱动，以及Universal Control。请仔细阅读每条信息。

It is recommended that you quit all applications before you start the installation.

建议您在开始安装前退出所有的应用程序。

The Universal Control installer will take you through each step of the installation process. Please read each message carefully so that you do not connect your ioStation 24c too soon.

**Power User Tip:** *It is recommended that you temporarily disable or turn off any anti-virus programs you have running to prevent installation issues.*

Universal Control 通用控制的安装程序过程中，将带领您完成安装的每一步。请仔细阅读每条信息，以免您过早地连接您的 ioStation 24c。

**强大的用户提示：** 建议您暂时禁用或关闭您正在运行的任何防病毒程序，以防止出现安装问题。

### 3.1.1 Universal Control (Windows)

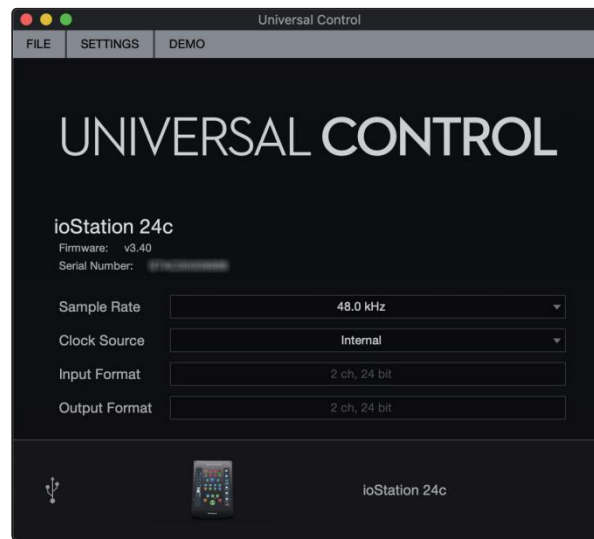


Universal Control is a powerful hardware-management application for all PreSonus interface products. It allows you to view any PreSonus interface product connected to your computer or your computer's network.

When Universal Control is launched, you will see the Launch window. From this window, you can manage all the ASIO driver settings.

Universal Control 通用控制是一个强大的硬件管理应用程序，适用于所有的 PreSonus 接口产品。它允许查看连接到您计算机或网络的任何 PreSonus 接口产品。

当 Universal Control 通用控制启动时，您将看到启动窗口。从这个窗口，您可以管理所有的 ASIO 驱动设置。



**Sample Rate.** Changes the sample rate.

You can set the sample rate to 44.1, 48, 88.2, 96, 176.4, or 192 kHz. A higher sample rate will increase the fidelity of the recording but will increase the file size and the amount of system resources necessary to process the audio. 271/5000

**采样率。** 改变采样率。

可设置采样速率为 44.1、48、88.2、96、176.4 或 192kHz。较高的采样率将增加记录的保真度，但系统将增加文件大小和处理音频所需资源的数量。

**Block Size.** Sets the buffer size.

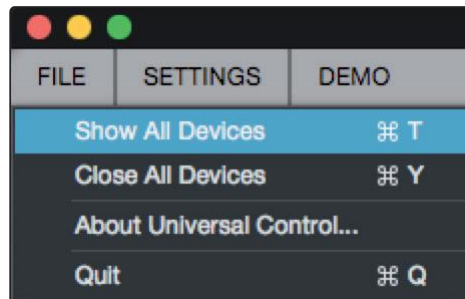
From this menu, you can set the buffer size. Lowering the buffer size will lower latency; however, this will also increase performance demands on your computer. In general, you will want to set the buffer size as low as your system can safely support. If you begin to hear pops, clicks, or distortion in your audio path, try raising the buffer size.

**Loopback (Windows only).** The ioStation 24c ASIO driver provides two loopback streams to record audio from one application to another. **See Section 3.1.2 for more information.**

程序块大小。设置缓冲区大小。

从这个菜单中，您可以设置缓冲区大小。缓冲区大小降低将降低延迟；然而，这样也会增加对您计算机性能的需求。通常，缓冲区大小将设置为系统能够安全支持的最小值。如果您开始听到弹出，点击，或在您的音频路径失真，请尝试提高缓冲区的大小。

**环回 (仅用于 Windows)。** ioStation 24c ASIO 驱动程序提供两个环回流从一个应用程序录制音频到另一个地方。更多信息请参见第3.1.2节。

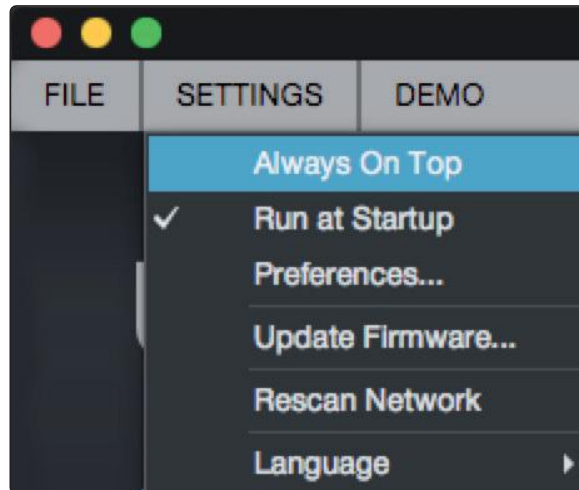


**File Menu.** Manages devices connected to Universal Control.

- **Show All Devices.** Launches all control windows for all supported devices connected to your computer.
- **Close All Devices.** Closes all open control windows.
- **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的设备。

- 显示所有设备** 启动所有控制窗口为连接到您计算机的所有支持设备。
- 关闭所有设备** 关闭所有打开的控制窗口。
- 关于通用控制** 显示版本和生成日期信息。
- 离开** 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 the network and local transport bus (USB or FireWire) for all supported PreSonus products.
- **Language.** Sets the language (English, French, German, Korean, Simplified Chinese, or Spanish).

**设置菜单** 提供定制选项，向您的通用控制提供个性化选择。

- **总在顶部** 保持通用控制启动窗口在顶部，无论它是否是当前活动的应用程序。
- **启动运行** 当您的电脑启动时，通用控制会自动启动。
- **性能** 语言设置和外观选项 (见下面)。
- **重新扫描网络** 扫描所有支持 PreSonus 产品的网络和本地传输总线 (USB或FireWire)。
- **语言** 语言设置 (英语、法语、德语、韩语、简体中文或西班牙语)。

### 3.1.2 Loopback Recording (Windows only) 环回录制（仅适合Windows）

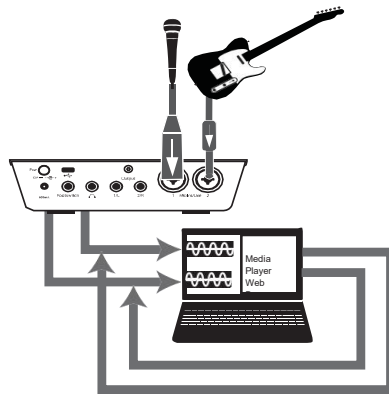
The Windows drivers for the ioStation 24c provides two virtual streams that allow you to record the output of one audio application in another application. Loopback can be useful in a variety of situations:

- Recording the audio from a video game or YouTube video for a podcast or livestream.
- Recording a vocal in real time over a karaoke track played from a web browser or media player.

**Power User Tip:** Because the ioStation 24c is a class compliant Core Audio device, these virtual streams are not available in macOS. However, there are several third-party applications that provide this functionality in macOS.

From Universal Control, you can enable or disable Loop back and pick the streams on which the loop back audio will be recorded.

When Loop back is enabled and "Merge Loop back with 1/2" is selected, the audio from another application will be recorded with the audio source connected to analog inputs 1 and 2 on your ioStation 24c.



ioStation 24c 的 Windows 驱动提供了两个虚拟流，允许您在另一个应用程序中记录一个音频应用程序的输出。Loopback 在各种情况下都很有用。

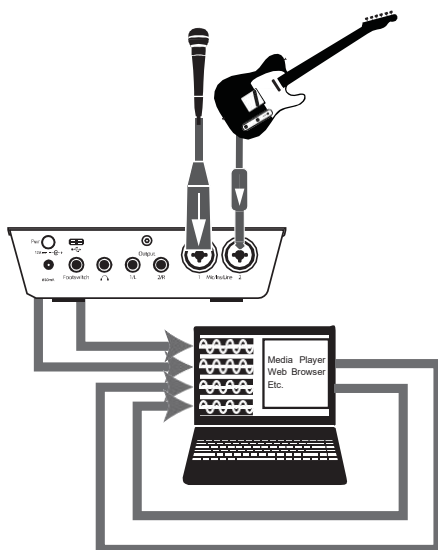
- 可录制视频游戏或 YouTube 视频的音频，用于播客或直播。
- 在从网络浏览器或媒体播放器播放的卡拉 OK 音轨上实时录制人声。

**强大的用户提示：** 由于 ioStation 24c 是一个符合类核心音频设备，这些虚拟流在 macOS 中不可用。然而，有几个第三方应用程序在 macOS 中提供这种功能。

在 Universal Control 中，您可以启用或禁用环回，并选择环回音频的流媒体，将其记录下来。

当启用循环播放并选择 "与 1/2 合并循环播放" 时，来自另一个应用程序的音频将与 ioStation 24c 连接到的模拟输入 1 和 2 的音频源一起录制。

When Loopback is enabled and "Dedicated Loopback Inputs" is selected, the audio from another application will be recorded on the last pair of driver inputs (3/4).



**PowerUser Tip:** When using either option, you will need to select Outputs 1 and 2 in the audio application you want to record. Make sure to select Outputs 3 and 4 in the audio application in which you're recording to avoid a feedback loop.

当启用环回功能并选择 "专用环回输入 "时，另一个应用程序的音频将被记录在最后一对驱动输入（3/4）上。

**强大的用户提示：** 当使用这两个选项时，您需要在您要录制的音频应用程序中选择输出1和2。请确保在您要录音的音频应用程序中选择输出3和4，以避免出现反馈回路。

### 3.2 Installation for macOS macOS 的安装

Your ioStation 24c is a class-compliant Core Audio device in macOS. No driver installation is necessary.

你的ioStation 24c是一个符合macOS的Core Audio设备类别。不需要安装驱动程序。

### 3.3 Using the ioStation 24c with Popular Audio Applications 使用流行的音频应用程序 ioStation 24c

Complete setup instructions for Studio One Artist and a brief tutorial on its features can be found in Section 9 of this manual. However, you can use your ioStation 24c with any audio-recording application that supports Core Audio or ASIO. Please consult the documentation that came with your audio application for specific instructions on how to select the ioStation 24c driver as the audio-device driver for your software.

Below are basic driver-setup instructions for a few popular audio applications.

Studio One Artist 的完整设置说明和其功能的简要教程，您可以在本手册的第9部分找到。然而，您可以在任何支持Core Audio或ASIO音频录制应用程序中使用您的ioStation 24c。关于如何选择ioStation 24c驱动作为软件的音频设备驱动，请查阅音频应用的相关文档。

以下是一些流行的音频应用程序的基本驱动设置说明。

#### Steinberg Cubase 4+

1. Launch Cubase.  
启动Cubase
2. Go to Devices | Device Setup.  
转到设备|设备设置。
3. Select "VST Audio System" from the Devices column in the Device Setup.  
在设备设置的设备栏中选择 "VST 音频系统"。
4. Select your ioStation 24c from the ASIO Driver dropdown list.  
从ASIO驱动下拉列表中选择您的ioStation 24c。
5. Click "Switch" to begin using the Studio-series Driver.  
点击 "Switch", 开始使用Studio系列驱动程序。
6. Once you have successfully changed the driver, go to Devices | VST Connections to enable your input and output buses.  
一旦您成功地改变了驱动程序，进入设备 | VST连接，启用您的输入和输出总线。

#### Ableton Live 5+

1. Launch Ableton Live.  
启动 Ableton Live。
2. Go to Options | Preferences | Audio.  
进入选项 | 首选项 | 音频
3. Choose Driver Type: ASIO | Audio Device: ASIO ioStation 24c  
选择驱动类型。ASIO | 音频设备。ASIO ioStation 24c
4. Go to Input Config: Enable and select the desired Input channels.  
转到输入配置。启用并选择所需的输入通道。



5. Go to Output Config: Enable and select the desired Output channels.  
转到输入配置。启用并选择所需的输入通道。
6. You may now select your ioStation 24c inputs and outputs for each track created in Live.  
现在您可以为Live中创建的每个音轨选择您的ioStation 24c输入和输出。

**Apple Logic Pro/Express 7+:**

1. Launch LogicPro/Express.  
启动Logic Pro/Express。
2. Go to Logic | Preferences | Audio.  
进入Logic | Preferences | Audio。
3. Click on the Devices Tab.  
点击 "设备 "标签。
4. On the Core Audio tab, check Enabled.  
在Core Audio标签上，选中 Enabled。
5. Select your ioStation 24c from the device menu.  
从设备菜单中选择您的 ioStation 24c。
6. You will be asked if you'd like to relaunch Logic. Click "try (re)launch."  
您会被问到是否要重新启动Logic。点击 "尝试（重新）启动"。
7. Your ioStation 24c features custom I/O labels for faster work flow. To enable these labels for use in Logic, go to Options | Audio | I/O Labels.  
您的 ioStation 24c 具有自定义I/O标签，以加快工作流程。要启用这些标签以便在Logic中使用，请进入选项|音频|I/O标签。
8. The second column in the pop-up window will be named "Provided by Driver." Activate each of these labels for your ioStation 24c. When you are done, close this window.  
弹出窗口中的第二栏将被命名为 "由驱动器提供"。为您的ioStation 24c激活这些标签。当您完成后，关闭这个窗口。
9. You are now ready to use your ioStation 24c.  
您的ioStation 24c现在可以开始使用了。

**3.3 Using the ioStation 24c with Popular Audio Applications**

使用流行的音频应用程序 ioStation 24c

**Cakewalk by Bandlab**

1. Launch ProTools.

启动 Pro Tools。

2. Go to Setup | Hardware and select your ioStation 24c from the Peripherals list. Click OK.

进入设置|硬件，从外围设备列表中选择您的ioStation 24c。点击确定。

3. Go to Setup | Playback Engine and select your ioStation 24c from the menu at the top of the window. Click OK.

进入设置|播放引擎，从窗口顶部的菜单中选择您的ioStation 24c。单击 "确定"。

1. Launch Cakewalk by Bandlab.

启动Cakewalk by Bandlab。

2. Go to Edit | Preferences

进入 "编辑" | "首选项"。

3. In the Devices tab, uncheck the output driver for the Generic Low Latency Driver. This is usually on by default, and will not let you check anything unless it's unchecked.

在 "设备" 选项卡中，取消对 "通用低延迟驱动程序" 输出驱动程序的选择。通常是默认打开的，并且不会让您勾选任何东西，除非勾选取消，否则不会让您检查任何东西。

4. Check all the ioStation 24c input and output driver boxes

勾选所有ioStation 24c的输入和输出驱动框。

5. Click the "Apply" and "OK" buttons.

点击 "Apply" 和 "OK" 按钮。

6. Click the Driver Settings tab

点击 "驱动设置" 标签。

7. Set the Playback Timing Master to: "ioStation 24c Main Out Left"

将播放定时主控设置为。"ioStation 24c主输出左"。

8. Set the Record Timing Master to: "ioStation 24c Main Out Right"

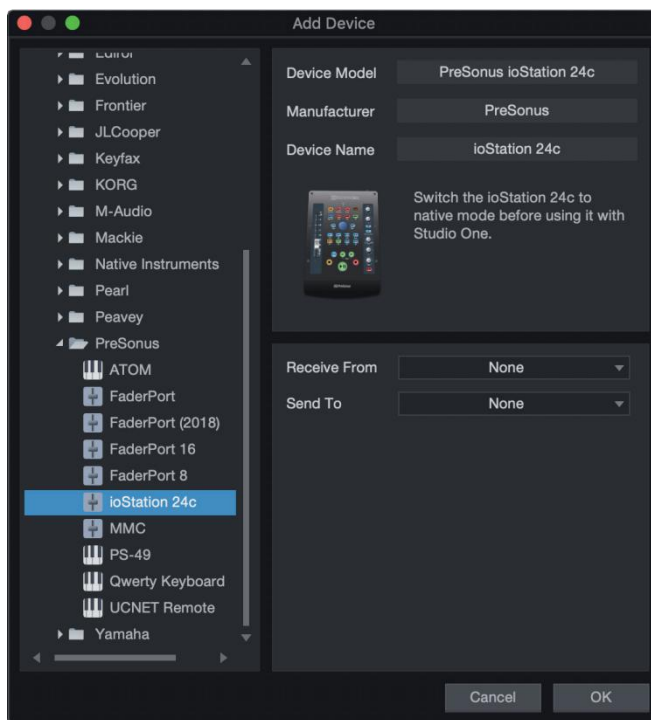
将录制时间主控设置为。"ioStation 24c Main Out Right"。

9. Click the "Apply" and "OK" buttons.

点击 "应用" 和 "确定" 按钮。

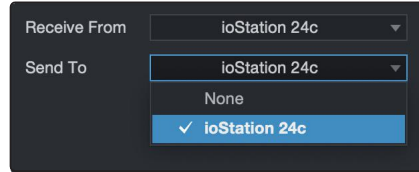


- From the manufacturers list at the left, click on PreSonus and then select ioStation 24c.



从左边的制造商列表中，点击PreSonus，然后选择 ioStation 24c。

Set the Send To and Receive From fields to "ioStation 24c"

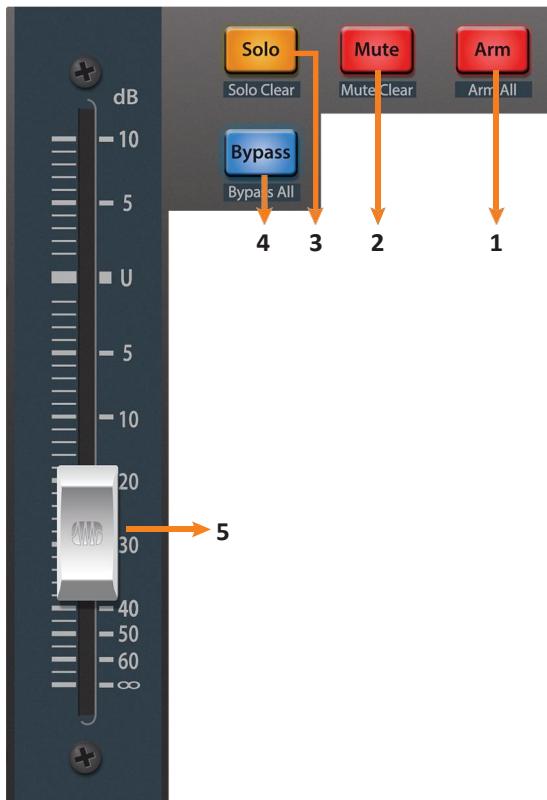


Your ioStation 24c is now ready for use.

将发送地和接收地字段设置为 "ioStation 24c"

您的ioStation 24c现在已经可以使用了。

## 4.2 Channel Strip 声道控制排



1. **Arm.** Pressing the Arm button will allow you to arm track for recording the currently selected track in Studio One. Press with SHIFT to arm all tracks for recording.
2. **Mute.** Mutes the corresponding channel's output signal. Press and hold to mute momentarily. Press with SHIFT for Mute Clear.
3. **Solo.** Isolates the corresponding channel's output signal in the mix. Press and hold to solo momentarily. Press with SHIFT for Solo Clear.
4. **Bypass / Bypass All.** Press the Bypass button to bypass every plug-in on the selected channel. Press SHIFT + Bypass to disable every plug-in in the Session.
5. **Touch-Sensitive Fader.** This 100 mm motorized fader can be used to control volume levels and panning in Pan Flip mode. **See Section 4.4 for details.**

1. 配备。按下Arm按钮，您就可以在Studio One中对当前选定的音轨进行布防录音。按下SHIFT键，可以将所有的音轨配备起来进行录音。

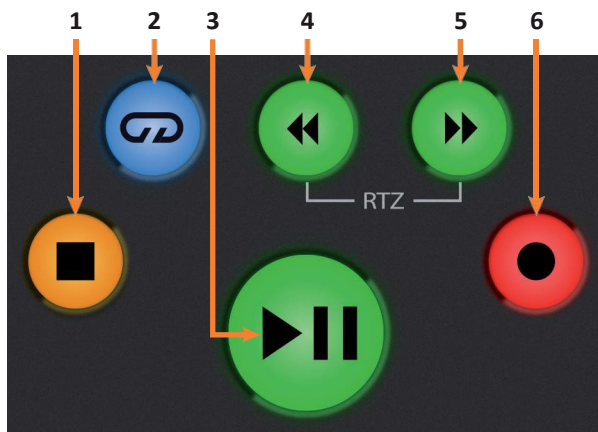
2. Mute（静音）。将相应通道的输出信号静音。按住不放可以瞬间静音。按下SHIFT键可以清除静音。

3. 独奏。在混音中隔离相应通道的输出信号。按住不放可以瞬间独奏。按住SHIFT键可以清除独奏。

4. Bypass / Bypass All. 按Bypass（旁路）按钮可以旁路所选通道上的每个插件。按SHIFT+Bypass键可以禁用会话中的每个插件。

5. 触摸感应推进器。这个100毫米的电动推进器可以用来控制音量大小和翻转模式下的平移。详见第4.4节。

## 4.3 Transport Controls 传输控制

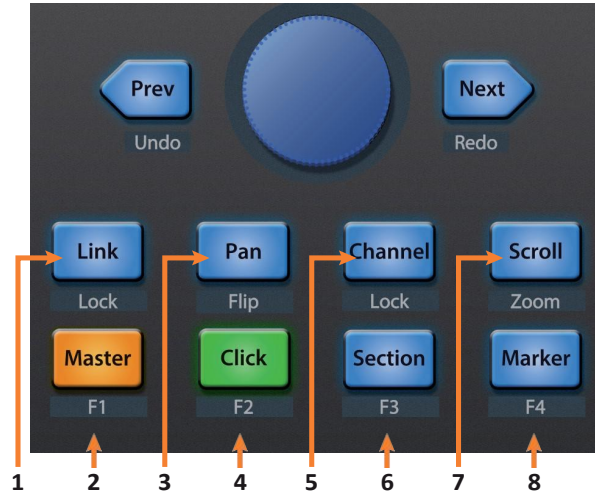


- 1. Stop.** Stops playback. Press twice to return playback-cursor to zero.  
停止。停止播放。按两次可以使播放光标返回到零。
- 2. Loop.** Engages / disengages Looping.  
循环。启用/取消循环播放。
- 3. Play / Pause.** Starts playback at the current playback- cursor position. Press again to pause playback.  
播放/暂停。在当前的播放光标位置开始播放。再按一次可以暂停播放。
- 4. Rewind.** Press and hold for continuous rewind. Press the Rewind and Fast Forward buttons simultaneously to Return to Zero.  
倒带。按住不放可以连续倒退。同时按倒带和快进按钮可以返回到零点。
- 5. Fast Forward.** Press and hold for continuous fast forward.  
快进。按住不放可以连续快进。
- 6. Record.** Press to start recording at the current playback- cursor position for record-enabled tracks.  
记录。按下开始在当前播放的光标位置进行录音，对于支持录音的轨道。

## 4.4 The Session Navigator 会话导航器

The Session Navigator provides quick navigation and session controls. Each button alters the functions of the push-button encoder and the Next and Prev buttons on either side.

Pressing SHIFT + Prev will Undo the last action. Pressing SHIFT + Next will Redo the last action.



**Link.** Encoder controls any parameter beneath your mouse. Navigation buttons select Next and Previous tracks respectively. To lock a parameter to this encoder, press SHIFT + Link.

会话导航仪提供快速导航和会话控制。每个按钮都改变了按钮编码器和两侧的“下一步”和“上一步”按钮的功能。按 SHIFT+Prev 可以撤销上一个动作。按 SHIFT + Next 将重做上一个动作。

**链接。** 编码器控制您鼠标下面的任何参数。导航按钮分别选择下一个和上一个轨道。要把一个参数锁定在这个编码器上，按 SHIFT + Link。



**Power User Tip:** The Channel Editor is a powerful feature in Studio One Professional that allows you to map multiple parameters to the same control, with independent range/polarity/curve controls. Additional XY vector pads can be assigned with individual parameters; and much more.

**强大的用户提示。** 通道编辑器是 Studio One Professional 中的一个强大功能，它允许您将多个参数映射到同一个控制上，并有独立的范围/极性/曲线控制。额外的 XY 矢量垫可以与单个参数进行分配；还有更多。

1. **Master.** Encoder controls the Master level. Push the Encoder to reset the Master level to 0 dB. While in this mode, the navigation buttons will control banking. Press SHIFT + Master to enable F1 User function. **See Section 4.4.1 for details.**

**主控。** 编码器控制主控电平。按下编码器可以将主控电平重置为 0dB。在这个模式下，导航按钮将控制银行。按 SHIFT + Master 键，启用 F1 用户功能。详见 4.4.1 节。



2. **Pan.** Encoder controls panning. Navigation buttons scroll through track list. Push the Encoder to reset the level to 0dB. Press SHIFT + Pan to use the fader to control panning.

**平移。** 编码器控制平移。导航按钮在轨道列表中滚动。按下编码器可以将电平重置为0dB。按 SHIFT + Pan 来使用推进器来控制平移。

3. **Click.** Turns the metronome on/off. The metronome can be engaged or disengaged while any mode is active. Press SHIFT + Click to enable F2 User function. **See Section 4.4.1 for details.**

**点击。** 将节拍器打开/关闭。节拍器可以在任何模式下被激活，也可以被解除。按 SHIFT + Click 来启用F2用户功能。详见4.4.1节。

4. **Channel.** Encoder controls individual channel scrolling. Navigation buttons adjust the currently visible fader on the ioStation 24c by one channel. Press SHIFT + Channel to lock the channel controls to the currently selected track.

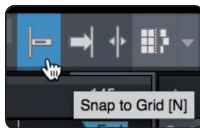
**Note:** Channel Lock is only available in Studio One v4 and higher.

**通道。** 编码器控制单个通道缩放。导航按钮在ioStation 24c上按一个通道调整当前可见的推进器。按 SHIFT + Channel 来锁定通道控制到当前选定的轨道。

**注意：** 通道锁定只在Studio One v4和更高版本中可用。

5. **Section.** Encoder nudges the selected event. Use the navigation buttons to navigate through the events on the Arranger track. Press SHIFT + Section to enable F3 User function. **See Section 4.4.1 for details.**

**节。** 编码器对选定的事件进行点动。使用导航按钮在编曲轨道上的事件中导航。按 SHIFT + Section 键，启用F3用户功能。详见第4.4.1节。



**Power User Tip:** Enable Snap to Grid for coarse nudging. Disable it for fine tuning.

**强大的用户提示。** 启用 "捕捉到网格" 以进行粗略的调整。禁用它来进行微调。

6. **Scroll / Zoom.** Encoder controls timeline scrolling. Push the encoder to fit the timeline to the window size. Use the navigation buttons to scroll through the track list. Press SHIFT + Scroll to enable Zooming. While Zoom is active, encoder controls horizontal zooming. Navigation buttons control vertical zooming. Press the encoder to undo zooming in both directions. **滚动/缩放。** 编码器控制时间线的缩放。按下编码器，使时间线适合窗口的大小。使用导航按钮来缩放轨道列表。按 SHIFT + Scroll 来启用 Zooming。当缩放处于活动状态时，编码器控制水平缩放。导航按钮控制垂直缩放。按编码器可以撤销两个方向的缩放。

7. **Marker.** Encoder moves the playback cursor in the Timeline. Use the navigation buttons to scroll through markers. Press Encoder to drop a marker. Press SHIFT + Marker to enable F4 User function. **See Section 4.4.1 for details.**

**标记。** 编码器在时间线中移动播放光标。使用导航按钮来滚动标记。按编码器来删除一个标记。按 SHIFT + Marker 来启用F4用户功能。详见4.4.1节。

#### 4.4.1 F1-F4 Functions F1-F4 功能

Using Shift plus the lower four Session Navigator button will access alternate functions for your ioStation 24c. By default, these are assigned as follows:

- **F1.** Open Inspector
- **F2.** Open Editor
- **F3.** Open Mixer
- **F4.** Open Browser

**Power User Tip:** The default assignments for the Function buttons can be customized using the ioStation 24c device editor. **See Section 4.6 for more information.**

使用Shift加下面的四个会话导航按钮，将访问ioStation 24c的备用功能。默认情况下，这些功能被分配如下。

- F1. 打开检查器
- F2. 打开编辑器
- F3. 打开混合器
- F4. 打开浏览器

**高级用户提示。** 功能按钮的默认分配可以使用 ioStation 24c 设备编辑器进行自定义。更多信息见第4.6节。

#### 4.5 Automation Controls 自动化控制



1. **Touch / Latch.** Engages Touch Automation on the currently selected track. Press the SHIFT and Touch buttons simultaneously to engage Latch Automation on the currently selected track.
2. **Write / Trim.** Engages Write Automation on the currently selected track. At the time of publication, Trim Automation is not available in Studio One.
3. **Read / Off.** Engages Read Automation on the currently selected track. Press the SHIFT and Read buttons simultaneously to turn automation off on the selected channel.

1. **触摸/锁定。** 在当前选定的轨道上启用触摸自动化。同时按 SHIFT 键和触摸键，在当前选定的轨道上实现锁存自动化。
2. **写入/修整。** 在当前选择的轨道上启用写自动化。在出版之时，修剪自动化在Studio One中是不可用的。
3. **读取/关闭。** 在当前选择的音轨上启用读自动化。同时按下SHIFT和Read按钮来关闭所选通道上的自动化。

## 4.6 Control Link 控制链接

Click on the pull-down menu in the ControlLink display to launch the ioStation 24c editor window.



点击控制链接中显示的下拉菜单，启动 ioStation 24c 编辑窗口。

Right-click on any ioStation 24c control and select "Assign Command" to customize your ioStation 24c.

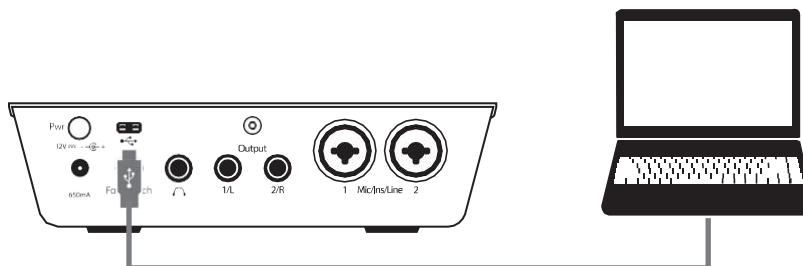
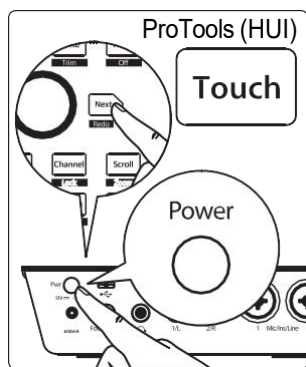


点击控制链接显示的下拉菜单，启动 ioStation 24c 编辑窗口。

## 5 Pro Tools(HUI)

### 5.1 Getting Started 开始工作

By default, the ioStation 24c is in Studio One operation mode. To switch to Pro Tools operation, press and hold the NEXT button while powering on your ioStation 24c, then press the Touch button to enable Pro Tools (HUI) operation.



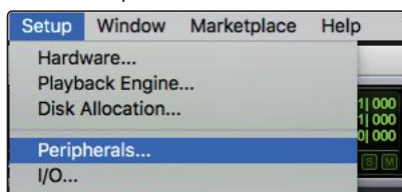
Once you have connected your ioStation 24c to your computer, launch Pro Tools to set up the ioStation 24c as a HUI device.

默认情况下，ioStation 24c 处于 Studio One 操作模式。要切换到 Pro Tools 操作，请在开机时按住 NEXT 按钮，然后按触摸按钮来启用 Pro Tools (HUI) 操作。

一旦您将 ioStation 24c 连接到您的电脑，启动 Pro Tools，将 ioStation 24c 设置为 HUI 设备。

1. Go to Setups | Peripherals.

进入 "设置" | "外围设备"。



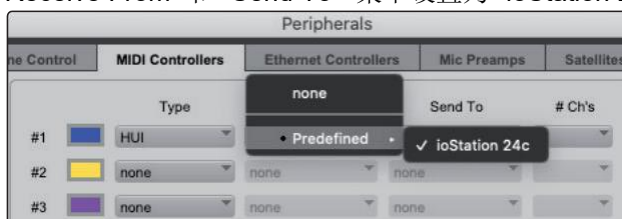
2. Create one HUI device under MIDI Controllers.

在 MIDI 控制器下创建一个 HUI 设备。



3. Set the Receive From and Send To menus to "ioStation 24c" and #Ch's to 8.

将 "Receive From "和 "Send To " 菜单设置为 "ioStation 24c"，将 #Chs 设置为8。

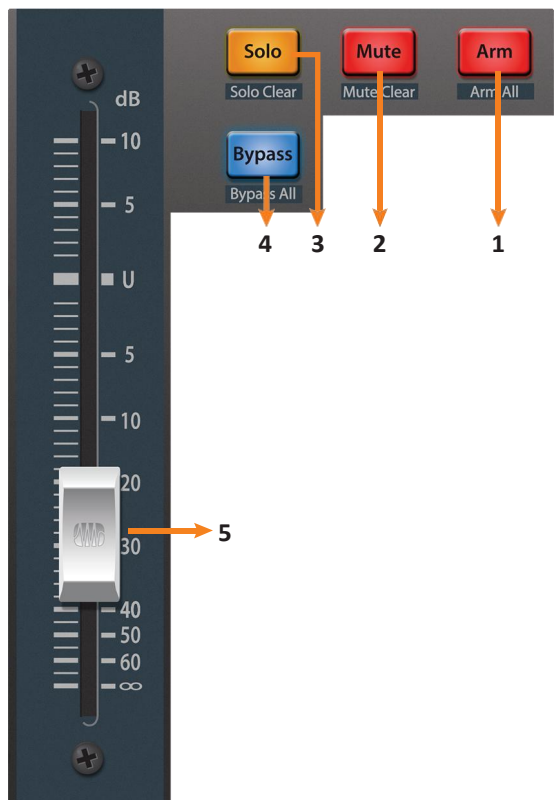


Click "OK." 点击 "OK"

Your ioStation 24c is now ready to use. Enjoy!

您的ioStation 24c现在就可以使用了。使用愉快!

## 5.2 Channel Strip 声道控制排



1. **Arm.** Pressing the Arm button will allow you to arm the currently selected track for recording. Press with SHIFT to arm all tracks for recording.
2. **Mute.** Mutes the corresponding channel's output signal. Press with SHIFT to clear mutes on the active bank.
3. **Solo.** Isolates the corresponding channel's output signal in the mix. Press with SHIFT clear solos on the active bank.
4. **Bypass / Bypass All.** At the time of publication, this button has no functionality in Pro Tools.
5. **Touch-Sensitive Fader.** This 100 mm motorized fader can be used to control volume levels and panning in Pan Flip mode. **See Section 5.4 for details.**

1. **配备。**按“配备”按钮，可以配备当前选定的轨道进行录音。按 SHIFT 键，可以将所有的音轨配备起来进行录音。

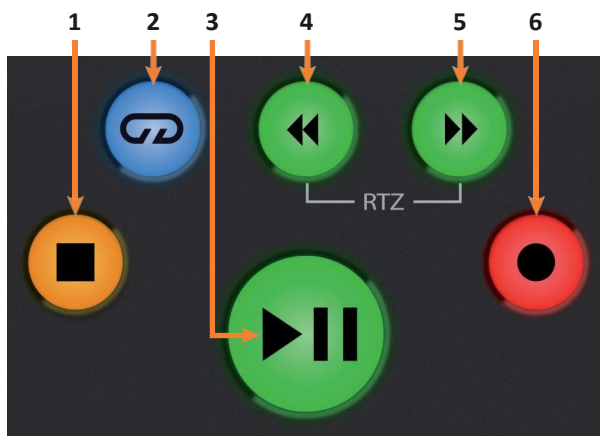
2. **Mute（静音）。**将相应通道的输出信号静音。按 SHIFT 键可以清除活动库的静音。

3. **独奏。**在混音中隔离相应通道的输出信号。用 SHIFT 键清除活动库上的独奏。

4. **Bypass / Bypass All. 旁通** 在出版之时，这个按钮在 Pro Tools 中没有任何功能。

5. **触摸感应推进器。**这个100毫米的电动推进器可以用来控制音量大小和平移模式下的平移。详见第5.4节。

## 5.3 Transport Controls 传输控制



1. **Stop.** Stops playback.

停止。停止播放。

2. **Loop.** Engages / disengages Looping.

循环。启用/取消循环播放。

3. **Play / Pause.** Starts playback at the current playback-cursor position.

**播放/暂停。**在当前播放光标的位置开始播放。

4. **Rewind.** Press once to regress playback by bar, second, frame, or base sample rate depending on mode. Press and hold to regress in finer increments. Press the Rewind and Fast Forward buttons simultaneously to Return to Zero.

**倒退。**按一次可以按小节、秒、帧或基本采样率回放，具体取决于模式。按住不放可以以更细的增量回放。同时按倒带和快进按钮可以返回到零点。

5. **Fast Forward.** Press once to advance playback by bar, second, frame, or base sample rate depending on mode. Press and hold to advance in finer increments.

**快进。**按一次可以按小节、秒、帧或基本采样率推进播放，具体取决于模式。按住不放可以以更细的增量推进。

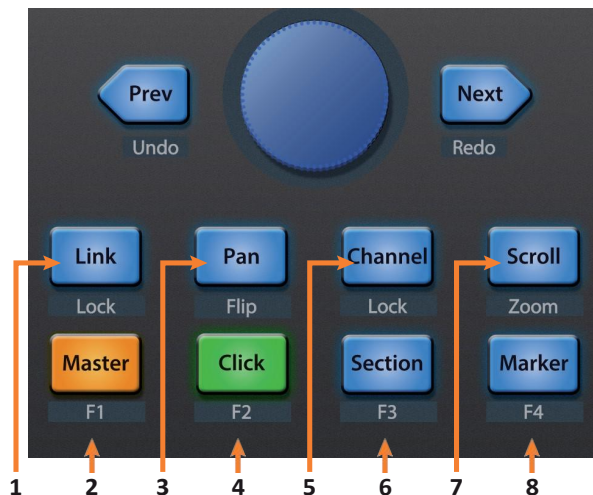
6. **Record.** Press to enable record ready. Press with Play to start recording at the current playback-cursor position for record-enabled tracks.

**记录。**按一下，使录音准备就绪。在播放时按下，可以在当前播放光标位置开始记录，用于支持录音轨道。

## 5.4 The Session Navigator 会话导航器

The Session Navigator provides quick navigation and session controls. Each button alters the functions of the push-button encoder and the Next and Prev buttons on either side.

Pressing SHIFT + Prev will Undo the last action. Pressing SHIFT + Next will Redo the last action.



会话导航仪提供快速导航和会话控制。每个按钮都改变了按钮编码器 and 两侧的 "下一步" 和 "上一步" 按钮的功能。

按 **SHIFT+Prev** 可以撤销上一个动作。按 **SHIFT + Next** 将重做上一个动作。

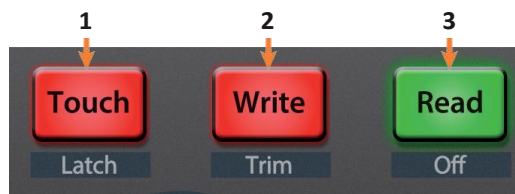
1. **Link.** At the time of publication, this button has no function in Pro Tools.
2. **Master.** This function is not available in HUI mode.
3. **Pan.** Encoder controls panning. Navigation buttons scroll through track list. Press SHIFT + Pan to use the fader to control panning. Pressing the encoder toggles pan control between Left and Right for stereo channels.
4. **Click.** Turns the metronome on/off. The metronome can be engaged or disengaged while any mode is active. **Note:** *This only functions if a click track has been created for the Pro Tools session.*
5. **Channel.** Encoder and navigation buttons select the previous or next channel. Press SHIFT + Channel to lock the channel controls to the currently selected track.
6. **Section.** This function is not available in HUI mode.
7. **Scroll/Zoom.** Press once to enable audio scrubbing. Press twice to enable faster audio scrubbing. Press Stop or any other Session Navigator button to disengage scrubbing. Press SHIFT + Scroll to enable Zooming. While Zoom is active, encoder and navigation buttons control horizontal zooming.
8. **Marker.** Encoder and navigation buttons scroll through markers 1-9. Press Encoder to drop a marker. Press Shift and Marker to cycle through the tools.

1. **链接。** 在发布之时，这个按钮在 Pro Tools 中没有任何功能。
2. **主控。** 这个功能在 HUI 模式下是不可用的。
3. **平移。** 编码器控制平移。导航按钮在轨道列表中缩放。按 **SHIFT + Pan** 来使用推进器来控制平移。按编码器可以在立体声通道的左和右之间切换平移控制。



4. **点击。**将节拍器打开/关闭。节拍器可以在任何模式下被激活，也可以被解除。注意：只有在为Pro Tools会话创建了点音轨的情况下才有此功能。
5. **通道。**编码器和导航按钮选择上一个或下一个通道。按 **SHIFT + Channel** 可以将通道控制锁定在当前选择的轨道上。
6. **节。**这个功能在HUI模式下是不可用的。
7. **滚动/缩放。**按一次可以启用音频刷新。按两下，可使音频刷新速度加快。按 "停止" 或任何其他会话导航仪按钮可解除擦洗功能。按 **SHIFT + Scroll** 键来启用缩放功能。当缩放激活时，编码器和导航按钮控制水平缩放。
8. **标记。**编码器和导航按钮滚动浏览标记1-9。按编码器可以放下一个标记。按 **Shift**和 **Marker** 来循环使用这些工具。

## 5.5 Automation Controls 自动化控制



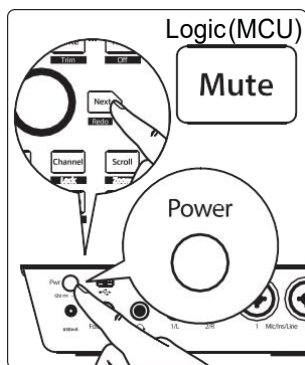
1. **Touch / Latch.** Engages Touch Automation on the currently selected track. Press the SHIFT and Touch buttons simultaneously to engage Latch Automation on the currently selected track.
2. **Write / Trim.** Engages Write Automation on currently selected track. Press the SHIFT and Write buttons simultaneously to engage Trim Automation on the currently selected track.
3. **Read / Off.** Engages Read Automation on the currently selected track. Press the SHIFT and Read buttons simultaneously to undo the last action.

1. **触摸/门锁。**在当前选定的轨道上启动触摸自动化。同时按 **SHIFT** 键和触摸键，在当前选定的轨道上实现锁存自动化。
2. **写入 / 修整。**在当前选择的音轨上进行写入自动化。同时按 **SHIFT** 键和 **Write** 键，在当前选定的轨道上启用Trim Automation。
3. **读取/关闭。**在当前选择的音轨上启用读取自动化。同时按下 **SHIFT** 和 **Read** 按钮，可以撤销上一个动作。

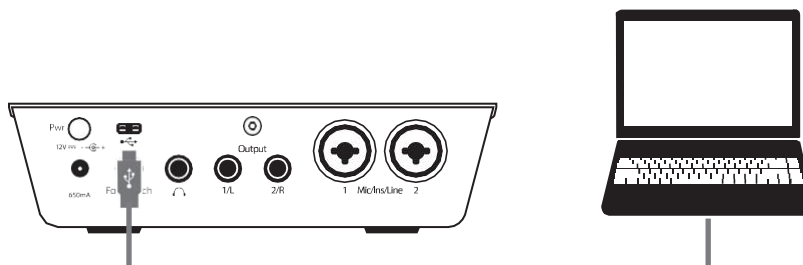


## 6 Logic (MCU)

### 6.1 Getting Started 开始工作



By default, the ioStation 24c is in Studio One operation mode. To switch to Logic operation, press and hold the NEXT button while powering on your ioStation 24c, then press the Mute button to enable Logic (MCU) operation.

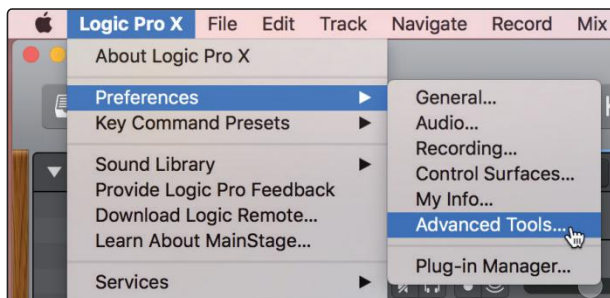


Once you have connected your ioStation 24c to your computer, launch Logic. The ioStation 24c will auto-configure as a Mackie Control Universal device. If for some reason this does not happen, you will need to enable it manually.

默认情况下，ioStation 24c处于Studio One操作模式。要切换到逻辑操作，请在开机时按住NEXT按钮，然后按静音按钮启用逻辑（MCU）操作。

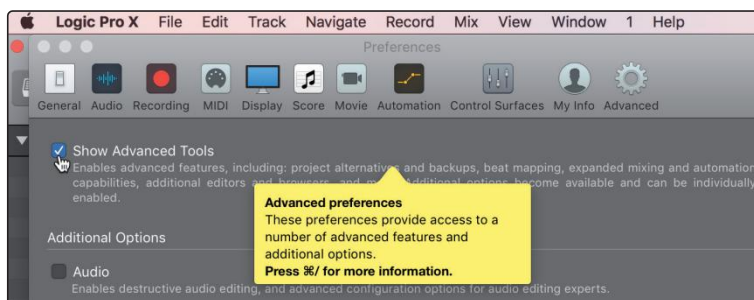
一旦您将ioStation 24c连接到您的电脑，Logic会启动。ioStation 24c将自动配置为Mackie Control Universal设备。如果由于某些原因没有配置成功，您需要手动启用它。

1. If you do not have Advanced preferences enabled, go to Logic Pro | Preferences | Advanced Tools...

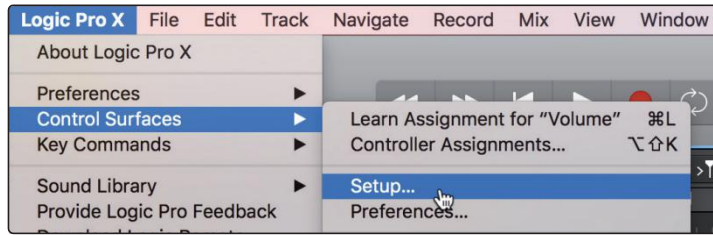


如果您没有启用 Advanced preferences，请进入Logic Pro | Preferences | Advanced Tools...

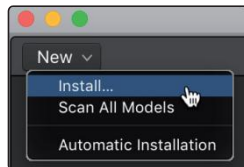
2. Enable "Show Advanced Tools." 启用 "显示高级工具"。



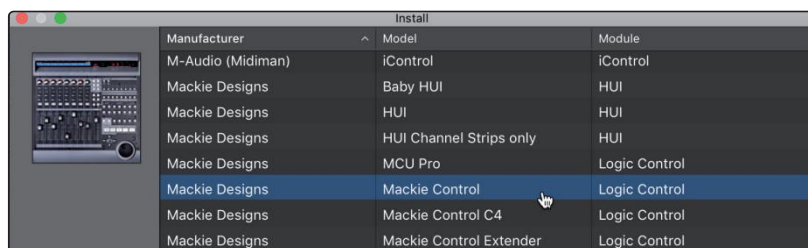
3. Go to Logic Pro | Control Surfaces | Setup... 转到Logic Pro | 控制界面 | 设置...



4. In the pop-up menu, go to New | Install... 在弹出的菜单中，进入 "新建"|"安装"...



5. From the list of devices, select Mackie Control. 从设备列表中，选择Mackie Control。



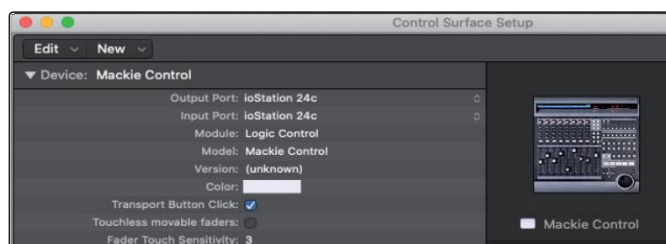
6. Click Add. 点击添加



7. Right-click on the Mackie Control in the Control Surface Setup and select Show/Hide Inspector. 点击右侧控制面设置中的 Mackie 控制，选择显示/隐藏检查器。

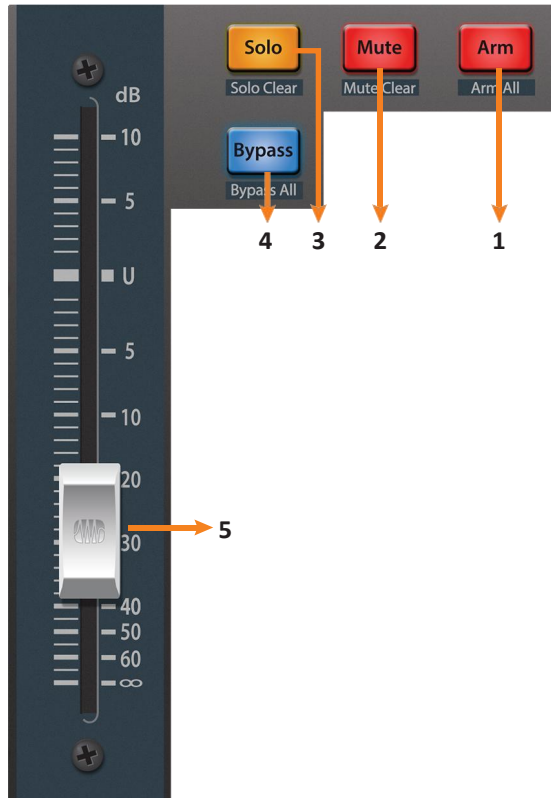


8. In the Inspector, set the Input and Output ports to "ioStation 24c." Your ioStation 24c is now ready to use. Enjoy!在检查器中，将输入和输出端口设置为 "ioStation 24c"。



您的ioStation 24c现在就可以使用了。使用愉快！！

## 6.2 Channel Strip



1. **Arm.** Pressing the Arm button will allow you to arm the currently selected track for recording. Press with SHIFT to arm all tracks for recording.
2. **Mute.** Mutes the corresponding channel's output signal. Press with SHIFT for Mute Clear.
3. **Solo.** Isolates the corresponding channel's output signal in the mix. Press with SHIFT for Solo Clear.
4. **Bypass / Bypass All.** Press to Show/Hide the Detail View.
5. **Touch-Sensitive Fader.** This 100 mm motorized fader can be used to control volume levels and panning in Pan Flip mode. *See Section 6.4 for details.*

1. 配备。按 "Arm"按钮，可以配备当前选定的轨道进行录音。按下SHIFT键，可以将所有的音轨配备起来进行录音。

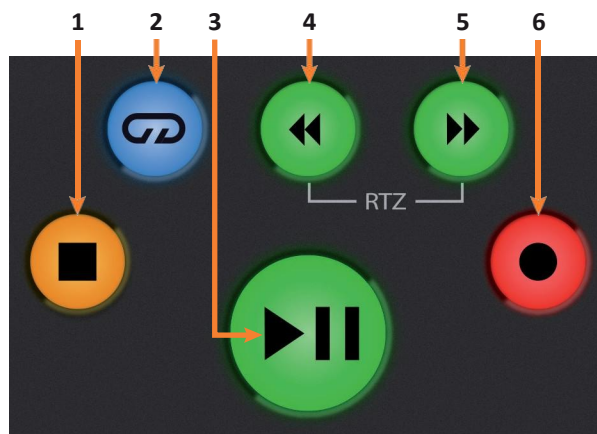
2. Mute（静音）。将相应通道的输出信号静音。按SHIFT键，可以清除静音。

3. 独奏。在混音中隔离相应通道的输出信号。按SHIFT键可以清除独奏。

4. Bypass / Bypass All 旁通。按下显示/隐藏细节视图。

5. 触摸感应推进器。这个100毫米的电动推进器可以用来控制音量大小和翻转模式下的平移。详见第6.4节。

## 6.3 Transport Controls 传输控制



1. **Stop.** Stops playback. Press again to return to zero.

2. **Loop.** Engages / disengages cycle/loop playback.  
Press and hold the Loop and Rewind button simultaneously to set the cycle start point at the current timeline position.  
Press and hold the Loop and Fast Forward buttons simultaneously to set the cycle end point at the current timeline position.

3. **Play / Pause.** Starts playback at the current playback-cursor position. Press again to restart playback at the previous play position.  
Hold the Shift button and press Play to Pause playback.
4. **Rewind.** Press and hold to move the cursor backward through the timeline.
5. **Fast Forward.** Press and hold to move the cursor forwards through the timeline. Repeated pressing will accelerate speed.
6. **Record.** Starts recording at the current playback- cursor position for record-enabled tracks.

1. **停止。** 停止播放。再按一次就可以返回到零点。

2. **循环。** 启用/取消循环/回环播放。

同时按住 "循环 "和 "回放 "按钮，将循环的起点设置在当前的时间线位置。

同时按住 "循环 "和 "快进 "按钮，将循环的终点设置在当前的时间线位置。

3. **播放/暂停。** 在当前的播放光标位置开始播放。再按一次，在前一个播放位置重新开始播放。

按住 Shift 键并按下 Play 键来暂停播放。

4. **倒带。** 按住不放可以使光标在时间轴上向后移动。

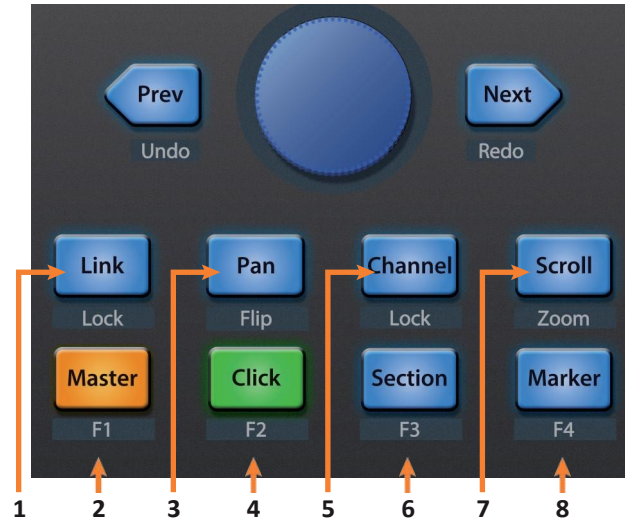
5. **快进。** 按住不放可以将光标在时间轴上向前移动。反复按压会加快速度。

6. **录制。** 在当前的播放光标位置开始录音，用于支持录音的轨道。

## 6.4 The Session Navigator 会话导航器

The Session Navigator provides quick navigation and session controls. Each button alters the functions of the push-button encoder and the Next and Prev buttons on either side.

Pressing SHIFT + Prev will Undo the last action. Pressing SHIFT + Next will Redo the last action.



会话导航仪提供快速导航和会话控制。每个按钮都改变了按钮编码器和两侧的“下一步”和“上一步”按钮的功能。

按SHIFT+Prev可以撤销上一个动作。按SHIFT+Next将重做上一个动作。

1. **Link.** Press to return to Arrangement.
2. **Master.** Encoder controls the Master Level. Navigation buttons control Channel mode. Press SHIFT + Master triggers Logic ScreenSet 1.
3. **Pan.** Encoder controls panning. Navigation buttons scroll through track list. Press SHIFT + Pan to use the fader to control panning. Press the encoder to reset panning to C.
4. **Click.** Engages the Punch-in switch. Press SHIFT + Click triggers Logic ScreenSet 2.
5. **Channel.** Encoder and navigation buttons control individual channel scrolling. Press SHIFT + Channel to lock the channel controls to the currently selected track.
6. **Section.** Engages Punch In switch. Press SHIFT + Section triggers Logic ScreenSet 3.
7. **Scroll / Zoom.** While in Arranger view, the encoder controls horizontal zooming. Navigation buttons control vertical zooming for the currently selected track.

While in Session view, pressing Zoom once will engage clip/scene launch mode. Zoom and Scroll will both light up.

- Encoder selects the next/previous scene. Navigation buttons select the next/previous track.
  - Press Zoom to launch the currently selected clip.
  - Press Scroll to launch the currently selected scene.
  - Press any other mode to leave clip/scene launch mode.
8. **Marker.** Encoder scrolls through timeline in Arranger view. Use the Navigation button to jump to Next or Prev markers. Logic ScreenSet 4.

- 1. 链接。** 按一下，返回到安排。
- 2. 主控。** 编码器控制主等级。导航按钮控制通道模式。按 **SHIFT + Master** 可以触发逻辑屏幕设置1。
- 3. Pan (平移)。** 编码器控制平移。导航按钮在轨道列表中缩放。按 **SHIFT + Pan** 可以使用推进器来控制平移。按编码器可将平移重置为C。
- 4. 点击。** 启用 "打入" 开关。按 **SHIFT + Click** 触发逻辑屏幕设置2。
- 5. 通道。** 按 **SHIFT + Channel** 可以将通道控制锁定在当前选择的轨道上。
- 6. 节。** 启用Punch In开关。按 **SHIFT+Section** 触发逻辑屏幕设置3。
- 7. 滚动/缩放。** 在编曲器视图中，编码器控制水平缩放。导航按钮控制当前选定轨道的垂直缩放。在会话视图中，按一次 "缩放" 将进入片段/场景启动模式。缩放和滚动将同时亮起。
  - 编码器选择下一个/上一个场景。导航按钮选择下一个/前一个音轨。
  - 按 "缩放" 可以启动当前选择的片段。
  - 按 "滚动" 键，启动当前选定的场景。
  - 按任何其他模式，离开剪辑/场景启动模式。
- 8. 标记。** 编码器在编排器视图中滚动时间线。使用导航按钮，跳到下一个或上一个标记。逻辑屏幕设置 4。

## 6.5 Automation Controls 自动化控制



- 1. Touch / Latch.** Engages Touch Automation on the currently selected track. Press the SHIFT and Touch buttons simultaneously to engage Latch Automation on the currently selected track.
  - 2. Write / Trim.** Engages Write Automation on currently selected track. Press the SHIFT and Write buttons simultaneously to toggle Trim automation when Latch or Touch modes are active.
  - 3. Read / Off.** Engages Read Automation on the currently selected track. Press the SHIFT and Read buttons simultaneously to undo the last action.
- 1. 触摸/锁定。** 在当前选定的轨道上启动触摸自动化。同时按SHIFT键和触摸键，在当前选定的轨道上实现锁存自动化。
  - 2. 写入 / 修整。** 在当前选择的音轨上进行写入自动化。当Latch或Touch模式激活时，同时按下SHIFT和Write按钮，可以切换Trim自动化。
  - 3. 读取/关闭。** 在当前选择的音轨上启用读取自动化。同时按下SHIFT和Read按钮，可以撤销上一个动作。

## 6.6 Bypass



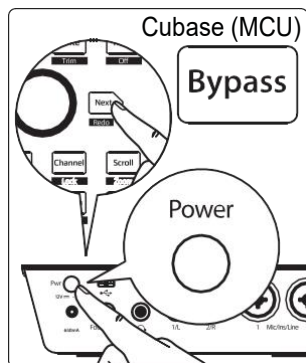
**Bypass** 旁通. Switch faders to control Return tracks.



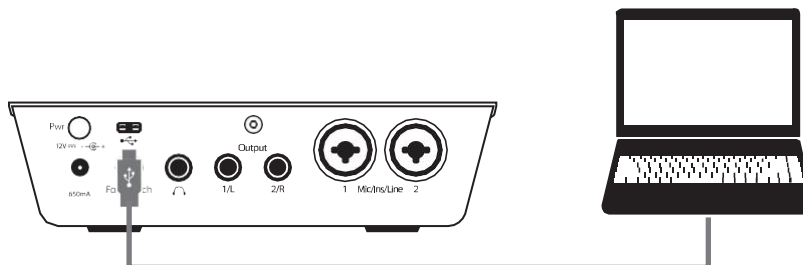
**旁路**。切换推进器来控制返回音轨。

## 7 Cubase / Nuendo (MCU)

### 7.1 Getting Started 开始工作



By default, the ioStation 24c is in Studio One operation mode. To switch to Cubase/Nuendo operation, press and hold the NEXT button while powering on your ioStation 24c, then press the Bypass button to enable Cubase / Nuendo (MCU) operation.

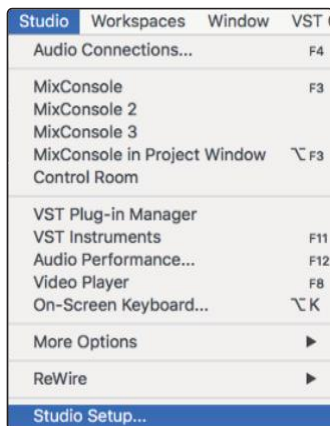


Once you have connected your ioStation 24c to your computer, launch Cubase or Nuendo to set up the ioStation 24c as a Mackie Control Universal device.

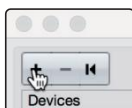
默认情况下，ioStation 24c处于Studio One操作模式。要切换到Cubase/Nuendo操作，请在开机时按住NEXT按钮，然后按Bypass按钮，启用Cubase/Nuendo（MCU）操作。

一旦你将ioStation 24c连接到你的电脑，启动Cubase或Nuendo，将ioStation 24c设置为Mackie Control Universal设备。

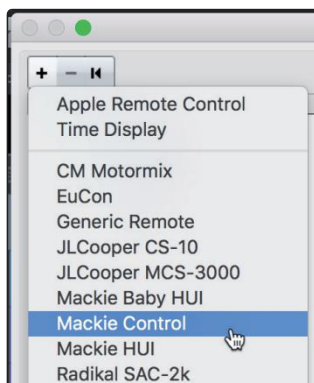
1. Go to Studio | Studio Setup.



2. In the Setup window, click the "Add/Remove" menu to add the first Mackie Control device.

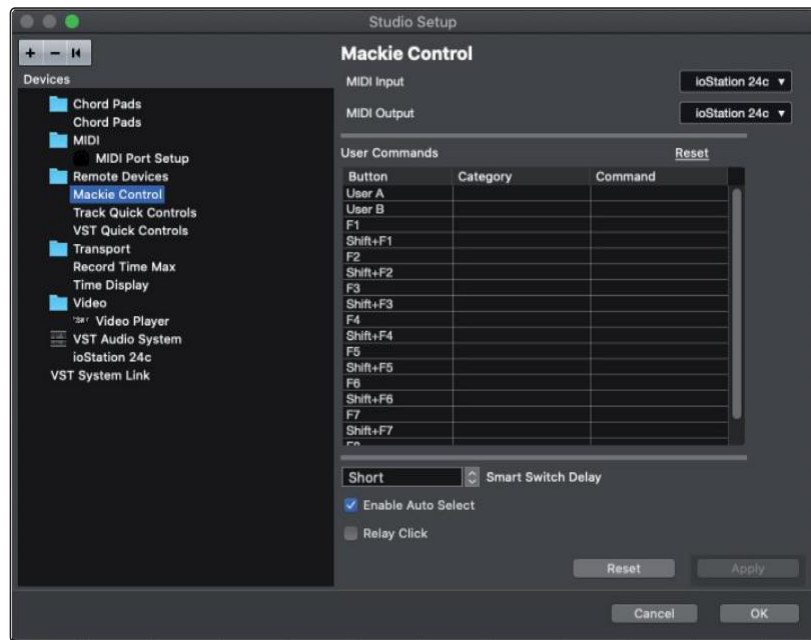


3. Select "Mackie Control" from the pull-down menu.

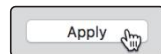




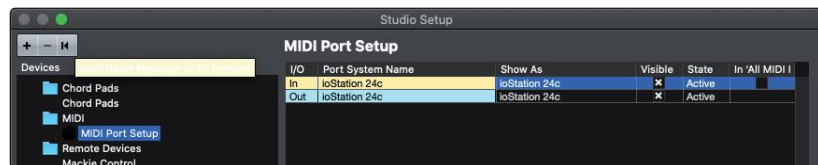
- Set the MIDI Input and Output to “ioStation 24c.”



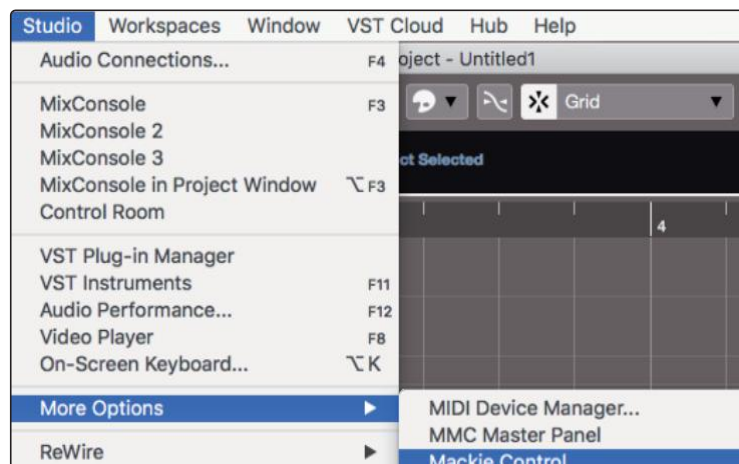
- Click “Apply.”



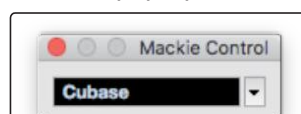
- Select MIDI Port Setup and make sure that “In All MIDI” box is unchecked and then click “OK.”



- You will need to switch the Mackie Control device to Compatibility mode. To do this, select the Mackie Control from the Devices menu.



- From the pop-up windows, select Cubase from the menu.

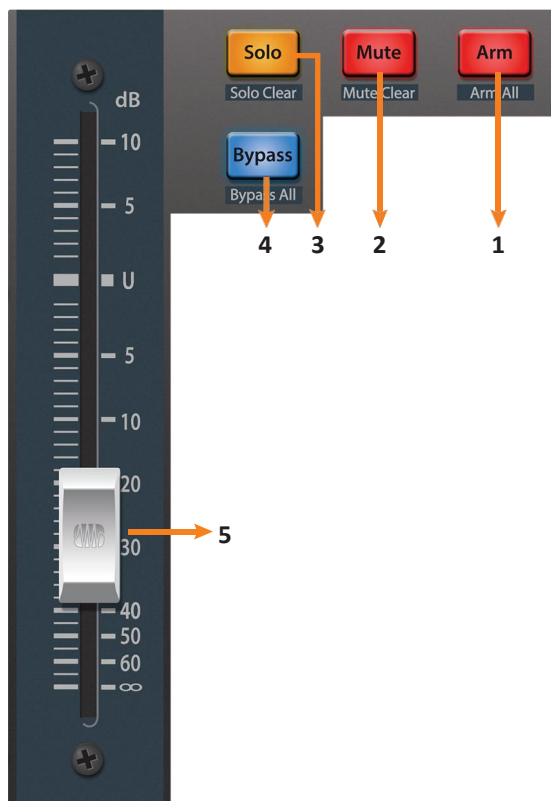


Your ioStation 24c is now ready to use. Enjoy!

您的 ioStation 24c 现在可以使用了。使用愉快!

- 1.到Studio |工作室设置。
- 2.在安装窗口中，单击“添加/删除”菜单添加第一个Mackie Control设备。
- 3.从下拉菜单中选择“Mackie Control”。
- 4.将MIDI输入和输出设置为“ioStation 24c”。
- 5.单击“应用”。
- 6.选择MIDI端口设置，并确保“在所有MIDI”框未选中，然后单击“确定”。
- 7.您需要将Mackie Control设备切换到兼容性模式。为此，从设备菜单中选择Mackie Control。
- 8.在弹出窗口中，从菜单中选择Cubase。

## 7.2 Channel Strip 声道控制排



1. **Arm.** Pressing the Arm button will allow you to arm the currently selected track for recording. Press with SHIFT to arm all tracks for recording.
2. **Mute.** Mutes the corresponding channel's output signal. Press and hold to mute momentarily. Press with SHIFT for Mute Clear.
3. **Solo.** Isolates the corresponding channel's output signal in the mix. Press and hold to solo momentarily. Press with SHIFT for Solo Clear.
4. **Bypass / Bypass All.** At the time of publication, this button has no function in Cubase or Nuendo.
5. **Touch-Sensitive Fader.** This 100 mm motorized fader can be used to control volume levels and panning in Pan Flip mode. **See Section 7.4 for details.**

1. **配备。** 按下 Arm 按钮将允许您配备当前选择的轨道录音。按下 **SHIFT**，以配备所有轨道记录。

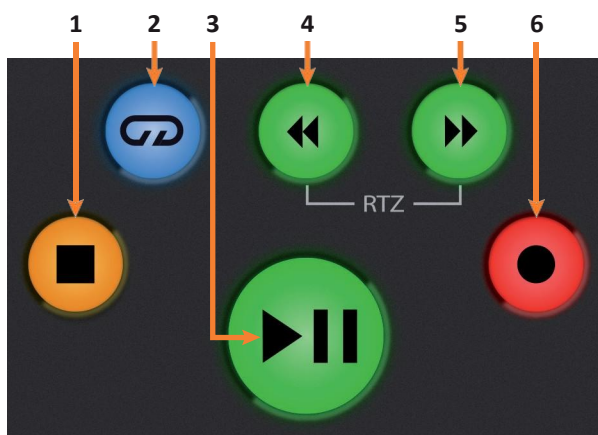
2. **静音。** 静音相应通道的输出信号。按下并保持静音片刻，按 **SHIFT** 键静音清除。

3. **独奏。** 隔离混合中相应通道的输出信号。暂时保持单飞状态。按 **SHIFT** 键 Solo Clear。

4. **旁通。** 在发布时，该按钮在 Cubase 或 Nuendo 中没有作用。

5. **感应推进器。** 这 100 毫米电动推进器可以用来控制音量水平和平移翻转模式。详见 7.4 节。

## 7.3 Transport Controls 传输控制



1. **Stop.** Stops playback. Press twice to return to the initial playback position.
2. **Loop.** Engages / disengages Looping.
3. **Play/Pause.** Starts playback at the current playback- cursor position. Pause is not available in Cubase.
4. **Rewind.** Press and hold to move the cursor backward through the timeline. Press the Rewind and Fast Forward buttons simultaneously to Return to Zero.
5. **Fast Forward.** Press and hold to move the cursor forward through the timeline.
6. **Record.** Starts recording at the current playback- cursor position for record-enabled tracks.

1. **停止。** 停止播放。按两次返回初始播放位置。

2. **循环。** engage / disengage 循环。

3. **播放/暂停。** 在当前播放光标位置开始播放。

Cubase 中无法使用暂停。

4. **倒带。** 按住不放可将光标在时间轴上向后移动。同时按“倒带”和“快进”按钮返回到零。

5. **快进。** 按住不放，光标在时间轴上向前移动。

6. **记录。** 在当前播放位置开始录制-光标位置用于启用录制的轨道。

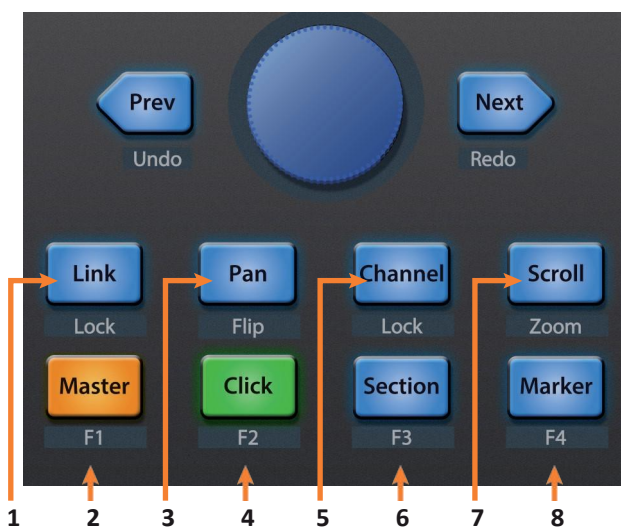
## 7.4 The Session Navigator 会话导航器

The Session Navigator provides quick navigation and session controls. Each button alters the functions of the push-button encoder and the Next and Prev buttons on either side.

Pressing SHIFT + Prev will Undo the last action. Pressing SHIFT + Next will Redo the last action. 273/5000

会话导航器提供快速导航和会话控制。每个按钮改变按钮编码器的功能和下一步和前v按钮在任何一边。

按SHIFT + Prev将撤消最后一个动作。按SHIFT + Next将重做最后一个动作。



1. **Link.** Pressing the Link button toggles the Channel Setting Window. Press SHIFT + Link to bring the Arrangement into focus.

**链接。** 按Link按钮切换频道设置窗口。按 SHIFT + Link将安排为关注焦点。

2. **Master.** The Encoder controls the Master bus level. Navigation buttons switch between the left / right panning and front / rear panning. Press SHIFT + Master to open Channel Visibility Configuration 1.  
**控制。** 编码器控制主总线级别。导航按钮在左右平移和前后平移之间切换。

3. **Pan.** Encoder controls panning. Navigation buttons scroll through track list. Press SHIFT + Pan to use the fader to control panning.

**移动。** 编码器控制平移。导航按钮滚动跟踪列表。按SHIFT + Pan来使用推杆控制平移。

4. **Click.** Pressing the Click button toggles the Mixer. Press SHIFT + Click to open Channel Visibility Configuration 2.  
**点击。** 按下Click按钮切换混合器。按SHIFT+点击打开通道可见配置2。

5. **Channel.** Encoders scrolls and selects individual channels. Navigation buttons adjust the current bank by one channel. Press SHIFT + Channel to lock the channel controls to the currently selected track.

**通道。** 编码器滚动并选择单个通道。导航按钮通过一个通道来调整当前的银行。按 SHIFT + Channel 锁定频道控制到当前选择的轨道。

6. **Section.** Enables scrubbing control with the encoder and navigation buttons. Press SHIFT + Section to open Channel Visibility Configuration 3.  
**节。** 启用编码器和导航按钮可控制数据清理。按SHIFT +Section 打开通道可见配置3。

7. **Scroll / Zoom.** Encoder and navigation buttons control timeline scrolling. By default, Scroll mode is set to Coarse tune scrolling, press the Scroll button a second time to engage Finetune scrolling.

Press SHIFT+ Scroll to enable Zooming. While Zoom is active, encoder controls horizontal zooming. Navigation buttons control vertical zooming.

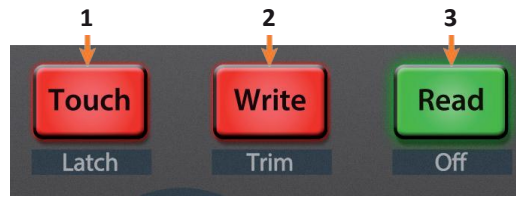
**滚动/缩放。** 编码器和导航按钮可控制时间轴滚动。默认情况下，滚动模式被设置为“粗调”滚动，按滚动按钮第二次进入“细调”滚动。按SHIFT+滚动可启用缩放。当Zoom处于激活状态时，编码器控制水平缩放。导航按钮控制垂直缩放。

8. **Marker.** Encoder and navigation buttons scroll through markers.

Press the Encoder to drop a marker. Press SHIFT+ Marker to open Channel Visibility Configuration 4.

**标识。** 编码器和导航按钮滚动标识。按下编码器放下一个标识。按SHIFT + Marker 打开通道可见配置4。

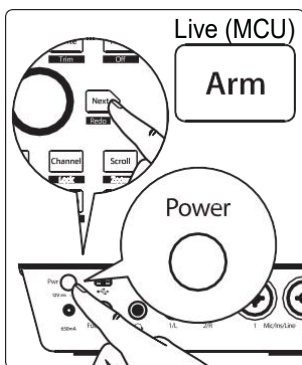
## 7.5 Automation Controls 自动化控制



1. **Touch / Latch.** Press Touch to open the dialog prompt in Cubase to revert to the last saved version of your session.
2. **Write / Trim.** Engages Write Automation on the currently selected track.
3. **Read / Off.** Engages Read Automation on the currently selected track. Press again to turn automation off on the currently selected track.

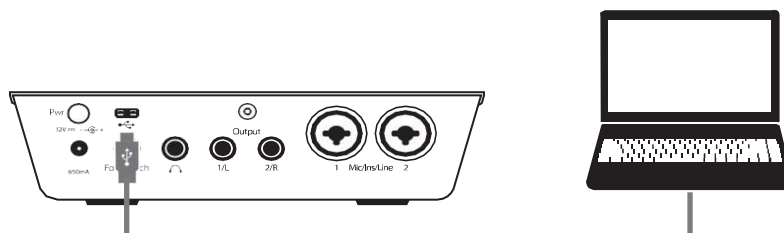
## 8 Live (MCU) 直播

### 8.1 Getting Started 开始工作



By default, the ioStation 24c is in Studio One operation mode. To switch to Live operation, press and hold the NEXT button while powering on your ioStation 24c, then press the Arm button to enable Live (MCU) operation.

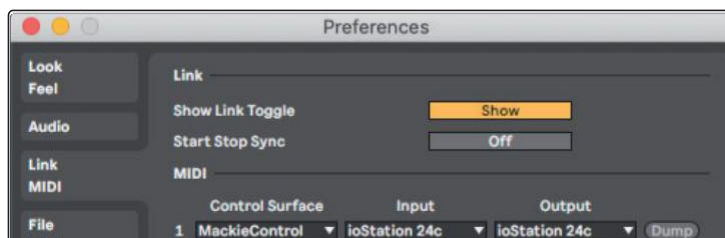
默认情况下，ioStation 24c 处于 Studio One 操作模式。要切换到 Live 操作，启动您的 ioStation 24c 同时按住 NEXT 按钮，然后按 Arm 按钮，可开启 Live (MCU) 操作。



Once you have connected your ioStation 24c to your computer, launch Live to set up the ioStation 24c as a Mackie Control Universal device.

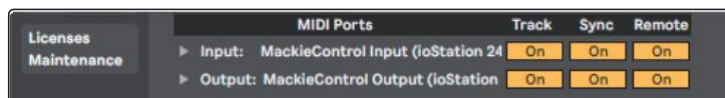
一旦您把 ioStation 24c 连接到您的电脑上，启动 Live 将您的 ioStation 24c 设置为 Mackie Control Universal 设备。

1. Go to Live | Preferences 进入 Live | 首选项
2. Choose the Link MIDI tab and set Control Surface 1 to Mackie Control and the Input and Output to "ioStation 24c."



选择链接 MIDI 选项卡，设置控制面 1 为 Mackie Control，输入和输出为 "ioStation 24c"。

3. Make sure that Track, Sync, and Remote are all enabled for both the Input and the Output of "MackieControl."



确保 "MackieControl" 的输入和输出都启用了跟踪、同步和远程。

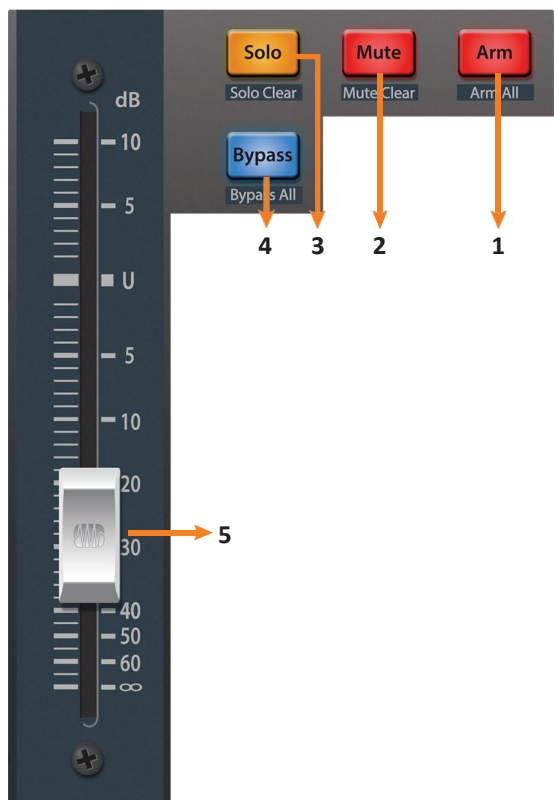
4. Select MIDI Port Setup and make sure that "In All MIDI" box is unchecked and then click "OK."

选择 MIDI 端口设置，确保 "在所有 MIDI" 框未选中，然后单击 "确定"。

Your ioStation 24c is now ready to use. Enjoy!  
你的 ioStation 24c 现在可以使用了。使用愉快!



## 8.2 Channel Strip 声道控制排



1. **Arm.** Pressing the Arm button will allow you to arm the currently selected track. Press with SHIFT to arm the currently focused bank of tracks for recording.
2. **Mute.** Mutes the corresponding channel's output signal. Press with SHIFT to clear all mutes for the currently focused bank.
3. **Solo.** Isolates the corresponding channel's output signal in the mix. Press with SHIFT to clear all solos for the currently focused bank.
4. **Bypass / Bypass All.** Press to Show/Hide the Detail View.
5. **Touch-Sensitive Fader.** This 100 mm motorized fader can be used to control volume levels and panning in Pan Flip mode. *See Section 8.4 for details.*

1. **配备。** 按 Arm 按钮将允您配备当前所选的轨道。按下 SHIFT，以配备当前集中的轨道记录。

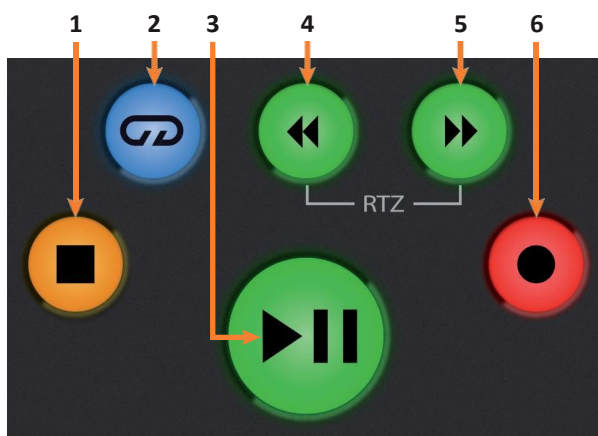
2. **静音。** 静音相应通道的输出信号。按 SHIFT 键清除当前集中轨道记录的所有静音。

3. **独奏。** 隔离混合中相应通道的输出信号。按 SHIFT 键清除当前集中轨道记录的独奏的所有静音。

4. **旁通。** 按显示/隐藏细节视图。

5. **感应推进器。** 这100毫米电动推进器可以用来控制音量水平和平移翻转模式。详见8.4节。

## 8.3 Transport Controls



1. **Stop.** Stops playback. Press again to return to zero.
2. **Loop.** Engages / disengages Looping.
3. **Play / Pause.** Starts playback at the current playback-cursor position.  
Press again to restart playback at the previous play position.
4. **Rewind.** Press and hold to move the cursor backward through the timeline.
5. **Fast Forward.** Press and hold to move the cursor forwards through the timeline.
6. **Record.** Starts recording at the current playback- cursor position  
for record-enabled tracks.

1. **停止。** 停止播放。再按一次返回“0”。
2. **循环。** engage / disengage 循环。
3. **播放/暂停。** 在当前播放光标位置开始播放。再次按下，重新开始上一次的播放。
4. **倒带。** 按住不放可将光标在时间轴上向后移动。
5. **快进。** 按住不放，光标在时间轴上向前移动。
6. **记录。** 在当前播放位置开始录制-光标位置用于启用录制的轨道。

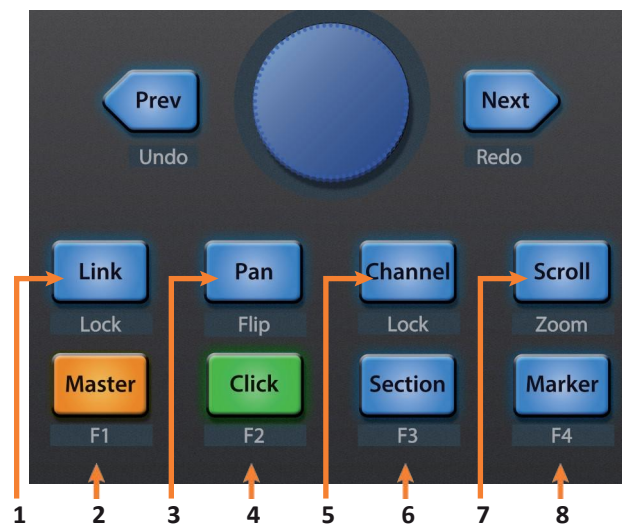
## 8.4 The Session Navigator 会话导航器

The Session Navigator provides quick navigation and session controls. Each button alters the functions of the push-button encoder and the Next and Prev buttons on either side.

会话导航器提供快速导航和会话控制。每个按钮改变按钮编码器和Next和Prev按钮的功能。

Pressing SHIFT + Prev will Undo the last action.  
Pressing SHIFT + Next will Redo the last action.

按SHIFT + Prev 将撤消最后一个动作。按SHIFT + Next将重做最后一个动作。



1. **Link.** Press to return to Arrangement.  
链接。按返回“安排”。
2. **Master.** Encoder controls the Master Level. Navigation buttons control Channel mode. Press SHIFT + Master triggers MIDI Note F#2.  
主控。编码器控制主级别。导航按钮控制频道模式。按SHIFT + Master键触发MIDI Note f# 2。
3. **Pan.** Encoder controls panning. Navigation buttons scroll through track list. Press SHIFT + Pan to use the fader to control panning. Press the encoder to reset panning to C.  
移动。编码器控制平移。导航按钮滚动跟踪列表。按SHIFT + 平移可推进控制平移。按下编码器将平移重置为C。
4. **Click.** Engages the Punch-in switch. Press SHIFT + Click triggers MIDI Note G2.  
点击。使用打卡开关。按SHIFT + Click 触发MIDI Note G2。
5. **Channel.** Encoder and navigation buttons control individual channel scrolling. Press SHIFT + Channel to lock the channel controls to the currently selected track.  
频道。编码器和导航按钮控制各个频道的滚动。按SHIFT + 频道锁定频道控制到当前选择的轨道。

6. **Section.** Encoder nudges the selected event. Use the navigation buttons to navigate through the events on the Arranger track. Press SHIFT + Section triggers MIDI Note G#3. Section = Punch Out Switch, MIDI note G#2

节。编码器轻推选定的项目。使用导航按钮来导航在安排器轨道上的项目。按 SHIFT + Section 触发 MIDI Note g# 3。Section = Punch Out Switch, MIDI注意g# 2

7. **Scroll / Zoom.** While in Arranger view, the encoder controls horizontal zooming. Navigation buttons control vertical zooming for the currently selected track.

While in Session view, pressing Zoom once will engage clip/ scene launch mode. Zoom and Scroll will both light up.

滚动/缩放。而在排列器视图中，编码器控制水平缩放。导航按钮控制当前选定轨道的垂直缩放。

在Session视图中，按Zoom一次将进入剪辑/场景启动模式。缩放和滚动都将亮起。

- Encoder selects the next/previous scene. Navigation buttons select the next/previous track.
  - Press Zoom to launch the currently selected clip.
  - Press Scroll to launch the currently selected scene.
  - Press any other mode to leave clip/scene launch mode.
- 
- 编码器选择下一个/上一个场景。导航按钮选择下一个/前一个轨道。
  - 按Zoom启动当前选择的剪辑。
  - 按下滚动启动当前选择的场景。
  - 按任何其他模式离开剪辑/场景启动模式。

8. **Marker.** Encoder scrolls through timeline in Arranger view. Use the Navigation button to jump to Next or Prev markers. MIDI Note A2.

标记。编码器在安排器视图中通过时间轴滚动。使用“导航”按钮跳转到“Next”或“Prev”标记。MIDI音符A2。

## 8.5 Automation Controls 自动控制



1. **Touch / Latch.** Press to Show/Hide Browser.
2. **Write / Trim.** Press to toggle Clip and Device views.
3. **Read / Off.** Press to toggle Session and Arrangement views.

1. 轻按/闭锁。按显示/隐藏浏览器。
2. 写入/修整。按下可切换“剪辑”和“设备”视图。
3. 读取/离开。按切换“会议”和“安排”视图。

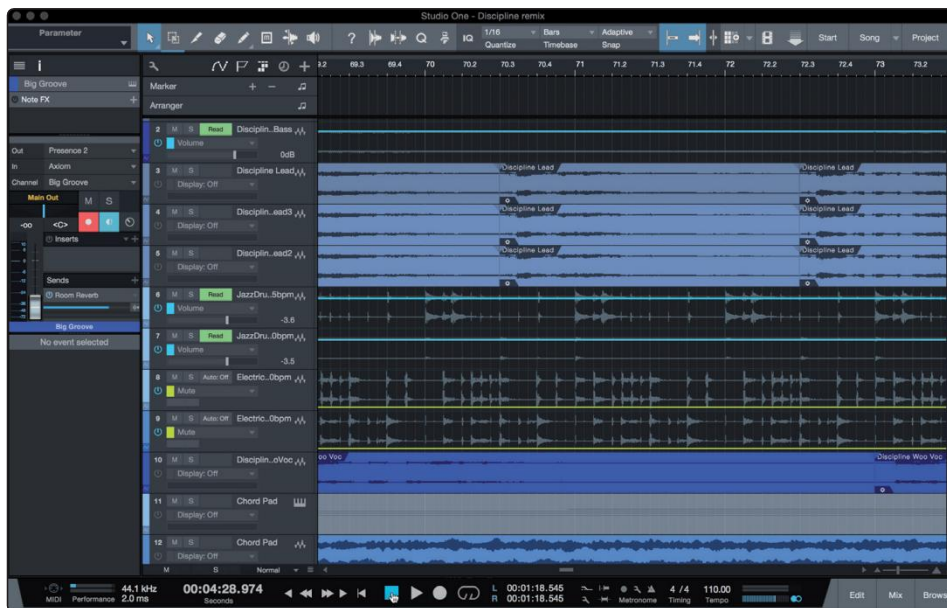
## 8.6 Bypass 旁通



**Bypass.** Show/Hide detail view.

**旁通。** 显示/隐藏细节视图。

## 9 Studio One Artist Quick Start 快速入门 Studio One Artist



All registered ioStation 24c users receive 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>.

所有注册的 ioStation 24c 的用户会收到 Studio One Artist 录音和制作软件。无论您即将录制您的第一张专辑还是您的第五十张，Studio One Artist 会提供所有必要的工具来为您捕捉和混合一个超赞的演出。

**超级用户提示:** 作为一个有价值的 PreSonus 客户，您有资格享受折扣升级到 Studio One Professional。欲了解更多关于 Studio One 升级计划的详细信息，请访问 <https://shop.presonus.com/products/software/studio-one-prods>。

### 9.1 Installation and Authorization 安装和授权

Once you have installed the drivers for your audio interface 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 ioStation 24c. Your product key for Studio One Artist will automatically be registered to your My PreSonus account, along with your hardware registration.

一旦您安装了音频接口的驱动程序并将其连接到您的计算机，您就可以使用 PreSonus Studio One Artist 音乐制作软件开始录制、包括混音和制作您的音乐。

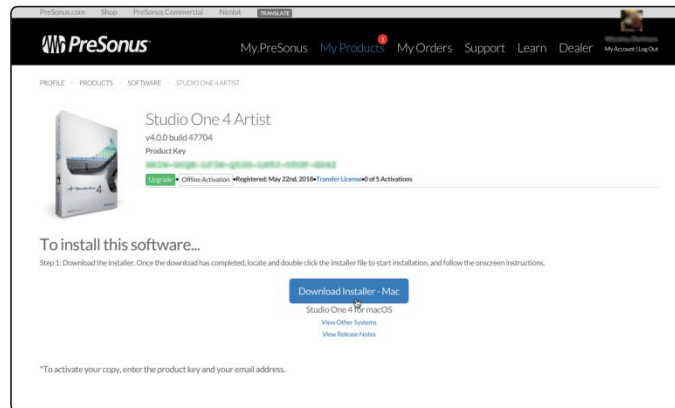
要安装 Studio One Artist，请登录 My PreSonus 账户并注册您的 ioStation 24c。您的 Studio One Artist 产品密钥将自动注册到您的 My PreSonus 帐户，以及您的硬件注册。

## Downloading and Running the Studio One Installer

### 下载并运行 Studio One 安装程序

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

要安装 Studio One Artist，请从您的 MyPreSonus 帐户下载 Studio One Artist 安装程序到您将使用它的计算机上。



**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，并按照屏幕上的说明操作。

**Mac:** 将 Studio One Artist 应用程序拖到 Mac 硬盘上的 Applications 文件夹中。

## Authorizing Studio One

### 授权 “Studio One”

When Studio One is launched for the first time on your computer, it will communicate with your MyPreSonus 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.

当 Studio One 第一次在您的电脑上启动时，它会与您的 MyPreSonus 帐户进行通信，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将使用它的计算机上，并确保您的计算机在第一次启动应用程序时已连接到 Internet。

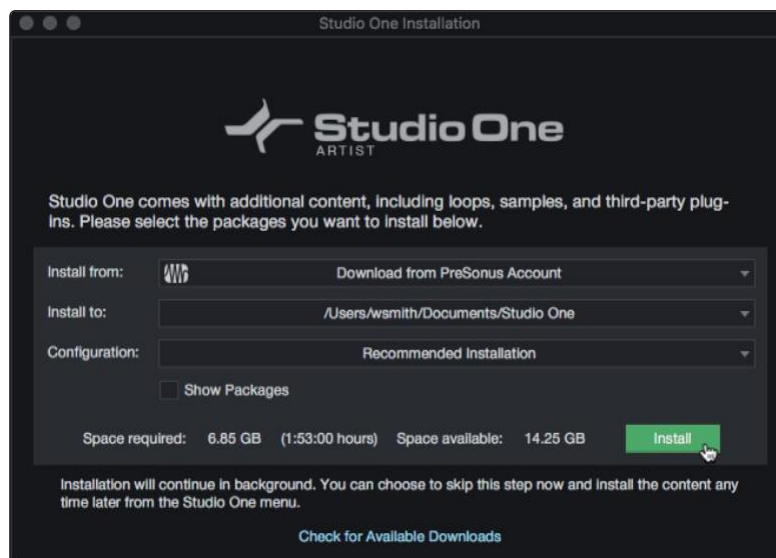


## Installing Bundled Content for Studio One Artist

### 为 Studio One 艺术家安装捆绑内容

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.

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 MyPreSonus user account.



**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.

Studio One Artist 提供了一系列的演示和教程材料，乐器，循环，和样本。Studio One Artist 还包含了开始制作音乐所需的所有内容。

当您第一次启动 Studio One Artist 时，您会被提示安装它的配套内容。选择您想要添加的内容，然后单击“安装”。内容将自动开始从您的 My PreSonus 用户帐户下载和安装。

**超级用户提示：**您可能会被提示输入您的 My PreSonus 用户帐户信息。点击“记住凭证”将允许您立即访问您从 PreSonus 市场购买的任何内容。



## 9.2 Setting Up Studio One Studio One 设置

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 的设计是为了配合 PreSonus 界面，并提供独特的互操作性和简化的设置。当 Studio One Artist 启动时，默认情况下您会被带到开始页面。在这一页，您将找到文档管理和设备配置控制，以及一个可定制的艺术家的简介，一个新闻提要，以及从 PreSonus 到演示和教程的链接。如果您的电脑连接到互联网上，这些链接将更新为新的教程在 PreSonus 网站上。

关于 Studio One 艺术家的所有方面的完整信息可以在位于 Studio One 的参考手册 PDF 中找到。本教程中的信息只涵盖 Studio One Artist 的基本方面，旨在让您尽快设置和录制。

### 9.2.1 Configuring Audio Devices 配置音频设备

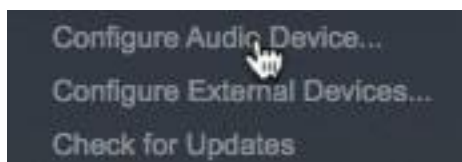
In the middle of the Start page, you will see the Setup area. Studio One Artist automatically scans your system for all available drivers and selects a driver. By default, it will choose a PreSonus driver if one is available.



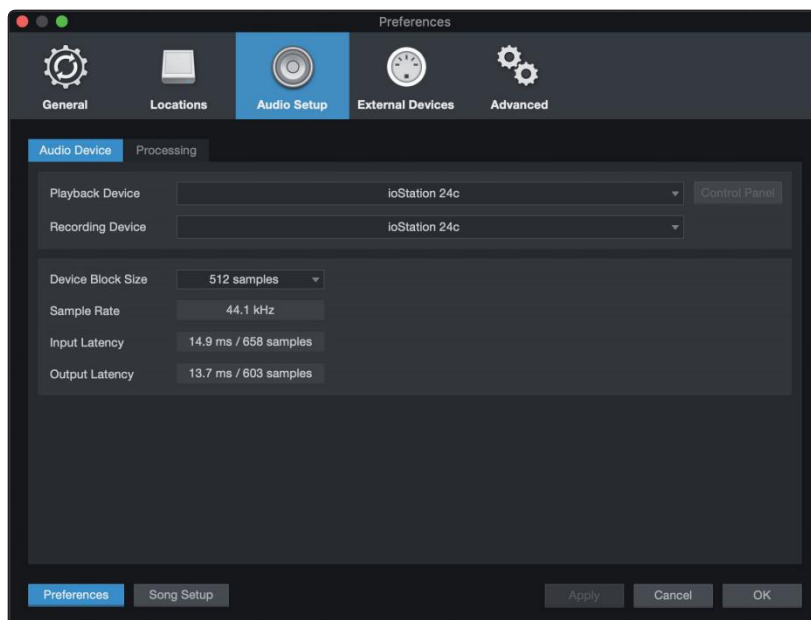
在开始页面的中间，你会看到设置区域。Studio One Artist会自动扫描你的系统，寻找所有可用的驱动，并选择一个驱动。默认情况下，如果有PreSonus的驱动程序，它将选择一个。

1. Click on the Configure Audio Interface link to select your audio interface driver.

点击配置音频接口链接，选择你的音频接口



2. Select your audio interface from the Audio Device pull-down menu. From this page, you can also adjust your device buffer block size. Click OK when you are finished.



从音频设备下拉菜单中选择您的音频接口。在这个页面，您也可以调整您的设备缓冲区块大小。完成后点击确定。

## 9.2.2 Configuring MIDI Devices 配置 MIDI 设备

From the External Devices window in Studio One Artist, you can configure your ioStation 24c, MIDI keyboard controller, sound modules, and control surfaces. This section will guide you through setting up your ioStation 24c as well as MIDI keyboard controllers and sound modules. Please consult the Reference Manual located within Studio One for complete setup instructions for other MIDI devices.

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.

在Studio One Artist的外部设备窗口中，您可以配置您的 ioStation 24c、MIDI 键盘控制器、声音模块和控制界面。本节将指导您如何设置您的ioStation 24c以及MIDI键盘控制器和声音模块。关于其他MIDI设备的完整设置说明，请查阅Studio One中的《参考手册》。

如果您使用的是第三方MIDI接口或USB MIDI控制器键盘，您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。

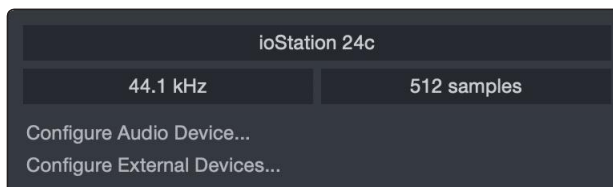
### Setting up the ioStation 24c

#### 设置 ioStation 24c

You can set up your ioStation 24c from the Setup area in the Start page. Before you begin, make sure your ioStation 24c is connected to one of your computer's USB ports, is powered on, and set to Studio One mode.

您可以在 "开始" 页面的 "设置" 中设置您的 ioStation 24c。在您开始之前，请确保您的 ioStation 24c 连接到电脑的一个 USB 端口，并接通电源，并设置为 Studio One 模式。

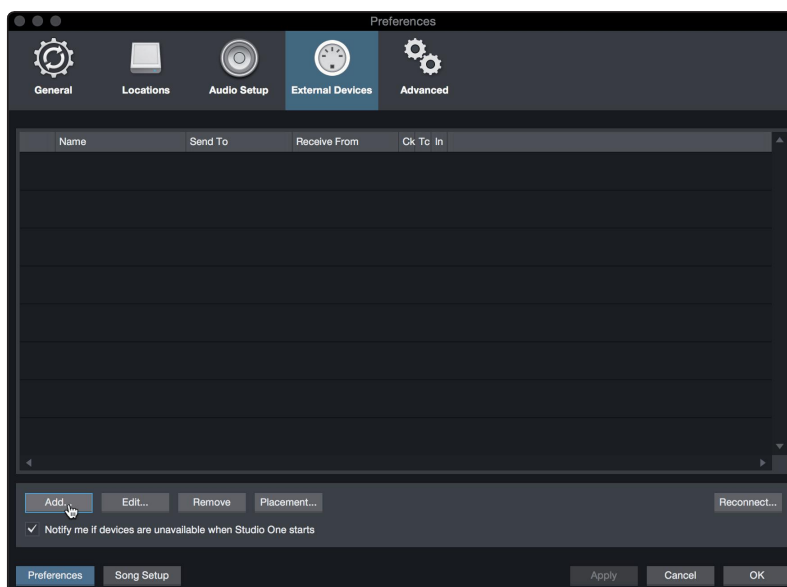
1. Click on the Configure External Devices link in the Setup area on the Start page to launch the External Devices window.



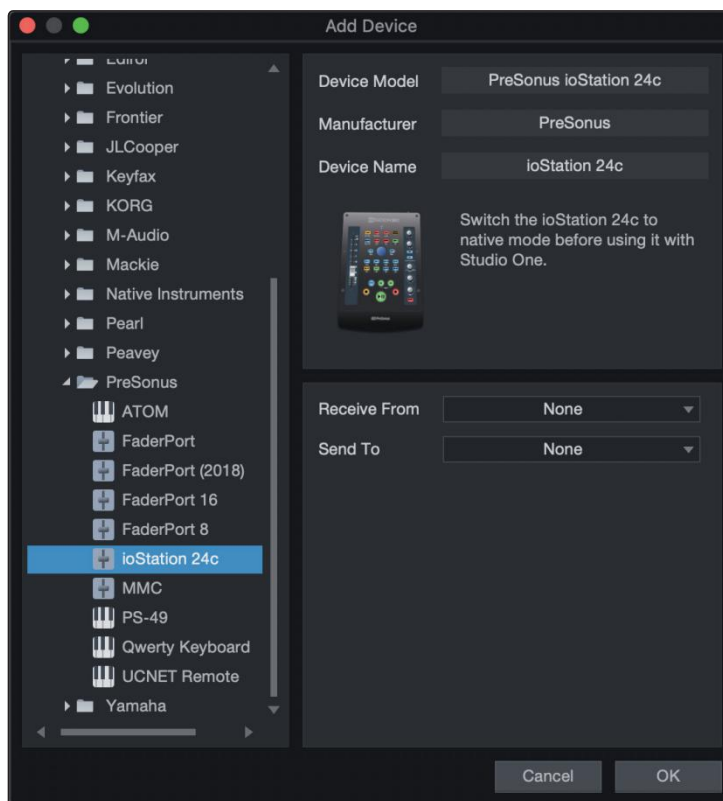
点击 "开始" 页面设置区域中的 "配置外部设备" 链接，启动外部设备窗口。

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

点击 "添加" 按钮。这将启动 "添加设备" 窗口。

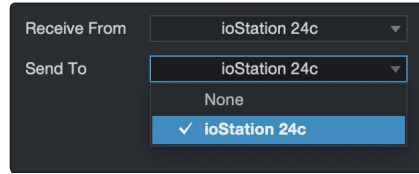


- From the menu on the left, click on the PreSonus folder and select "ioStation 24c."



从左边的菜单中，点击 PreSonus 文件夹并选择 “ioStation 24c。”

In the Receive From and Send To drop-down menus, select "ioStation 24c."



在接收“来自”和发送“至”下拉菜单中，选择 "ioStation 24c"。

4. Click "OK."

点击 "Ok"

### Setting up a MIDI Keyboard controller 设置一个MIDI键盘控制器

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.

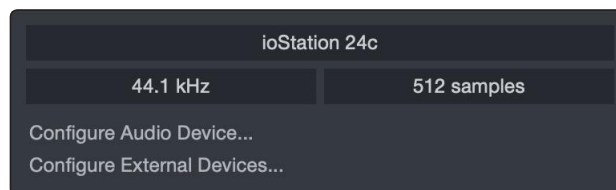
Make sure you have connected the MIDI Out of your external MIDI controller to a MIDI In on your PreSonus audio interface (if available) or another MIDI interface. If you are using a USB MIDI controller, connect it to your computer and power it on.

MIDI键盘控制器是一种硬件设备，一般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，您的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。

您可以在 "开始" 页面的 "设置" 区域设置您的外部MIDI设备。在设置新的歌曲进行录音之前，花点时间配置一下外部设备。

确保您已经将外部MIDI控制器的MIDI输出连接到 PreSonus 音频接口（如果有）或其他MIDI接口的MIDI输入。如果您使用的是USB MIDI控制器，请将它连接到您的电脑上并接通电源。

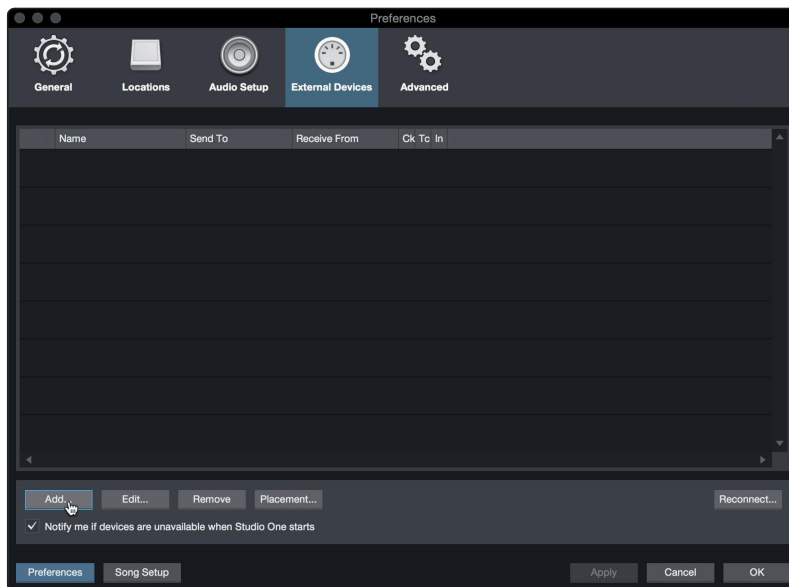
1. Click on the Configure External Devices link in the Setup area on the Start page to launch the External Devices window.



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。

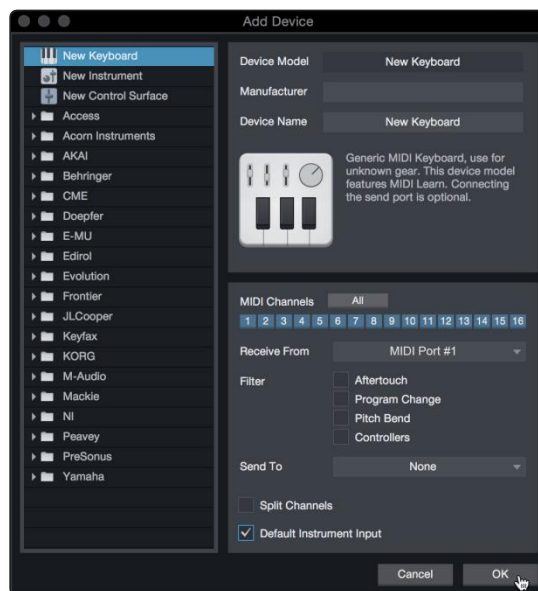
Click the Add button. This will launch the Add Device window.

点击 "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。如果您没有看到您的MIDI控制器被列出，请选择新键盘。在这一点上，您可以通过输入制造商和设备名称来定制您的键盘名称。



- 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 通道将被用来与这个键盘通信。对于大多数用途，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。

4. Studio One allows you to filter out specific control functions. If you would like Studio One to ignore After touch, Pitch Bend, Program Change, or all CC messages, enable filtering for any or all of these messages.

Studio One 允许您过滤掉特定的控制功能。如果您想让 Studio One 忽略 After touch、Pitch Bend、Program Change 或所有 CC 信息，请启用这些信息的过滤。所有的 CC 信息，请启用任何或所有这些信息的过滤功能。

5. 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).

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

**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.

**高级用户提示:** 在“发送到”下拉菜单中，选择 MIDI 接口输出，Studio One Artist 将从该接口向您的键盘发送 MIDI 数据。如果您的键盘控制器不需要从 Studio One 接收 MIDI 数据，您可以不选择此项。

6. If this is the only key board 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.

如果这是您用来控制外部合成器和虚拟乐器的唯一键盘，您应该勾选默认乐器输入旁边的方框。这将自动分配您的键盘来控制 Studio One Artist 中的所有 MIDI 设备。

7. Click “OK.”

点击 “OK”

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”窗口打开，然后继续本节的下一部分。

如果没有，您可以关闭该窗口，跳到下一节。

### Setting up an External MIDI Sound Module 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.

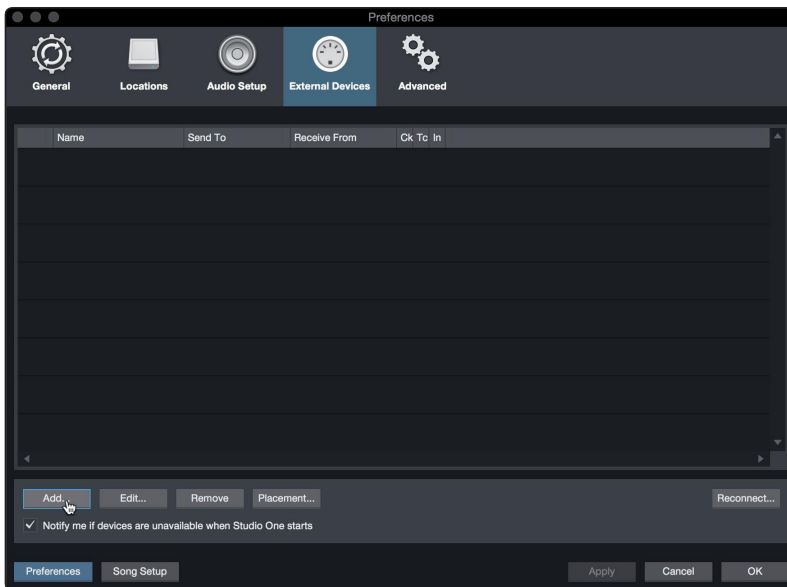
Make sure you have connected the MIDI In of your external sound module to the MIDI Out of your MIDI interface.

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响应。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。一旦您设置好了您的 MIDI 键盘控制器，花点时间来配置您的声音模块。确保您已经将外部声音模块的 MIDI 输入连接到您的MIDI接口的MIDI输出。

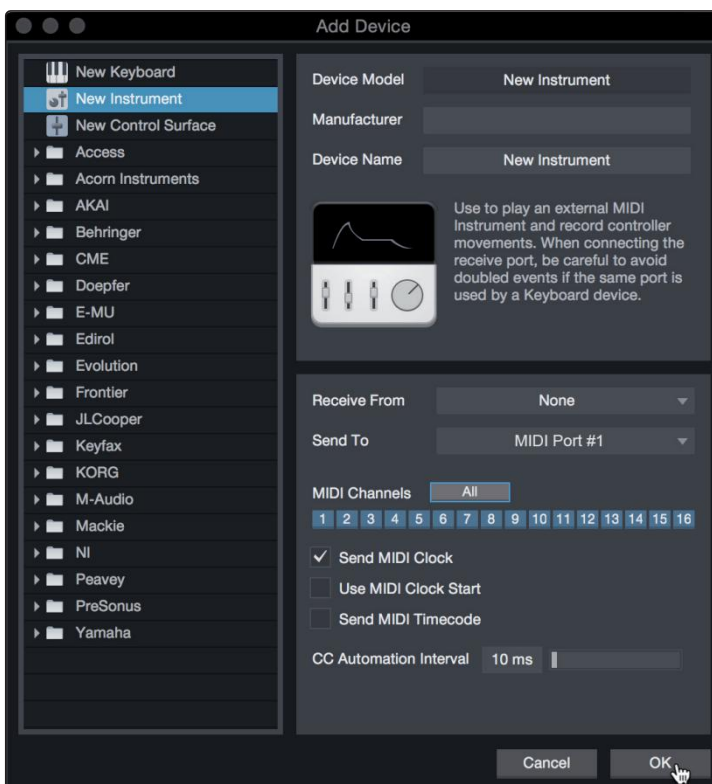
1. In the External Devices window, click the Add button.



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您的设备。如果您的设备没有列出，请选择 "新仪器"。在这一点上，您可以通过输入制造商和设备名称来定制您的键盘名称。



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。对于大多数用途，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，我们建议您选择全部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.

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.

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。现在您已经准备好在 Studio One Artist 中开始录音了。

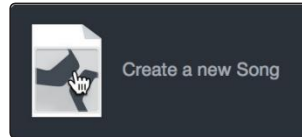
本快速入门指南的其余部分将介绍如何设置歌曲，并将讨论在 Studio One Artist 环境中导航的一般工作流程提示。

### 9.3 Creating a New Song 创建一首歌曲

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.

现在您已经配置了您的音频和MIDI设备，让我们来创建一个新的歌曲。我们将从您设置的默认音频输入/输出开始。

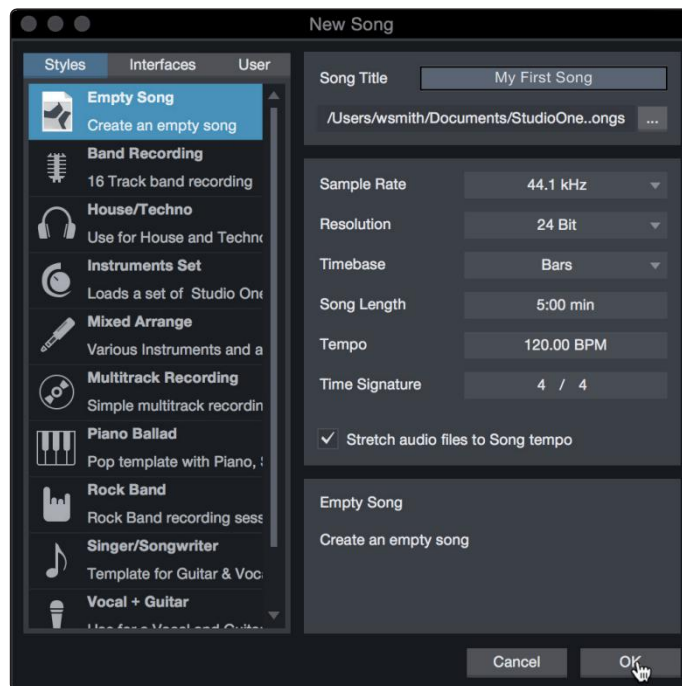
1. From the Start page, select "Create a New Song."



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，为您的歌曲命名，并选择您希望它保存的目录。您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白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.

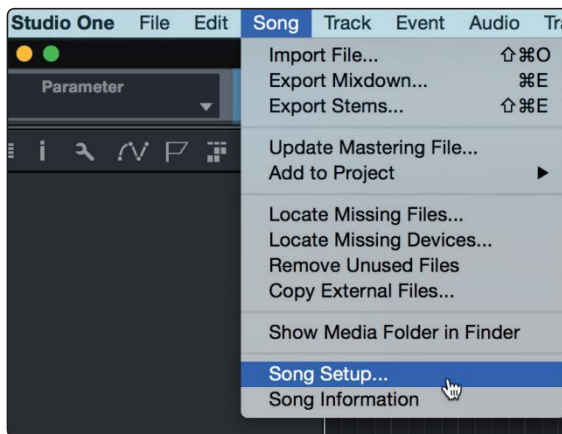
**Power User Tip:** If you plan to import loops into your Song, make sure that the *Stretch Audio Files to Song Tempo* option is selected. This will automatically import loops at the correct tempo.

从模板列表中选择 "空白的歌曲"。在这一点上，您应该给您的歌曲起个名字，并选择您喜欢的采样率和比特深度来进行录音和播放。您还可以设置歌曲的长度和您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。

**高级用户提示：**如果您打算把循环音乐导入您的歌曲，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。

### 9.3.1 Configuring Your Audio I/O 配置您音频的输入/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，设置您的采样率和分辨率，配置您的音频输入和输出。

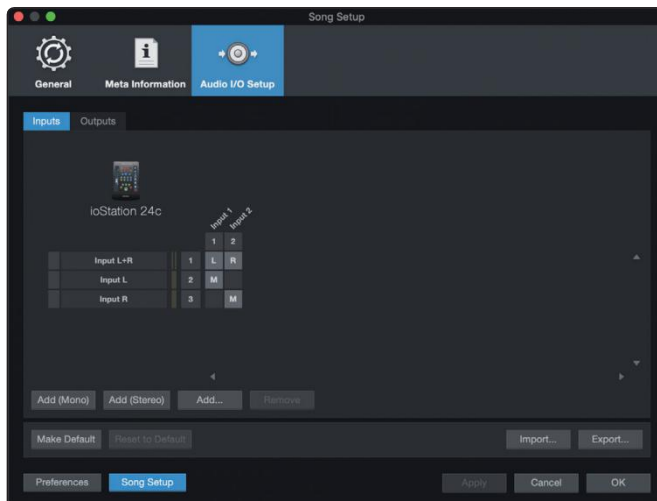
2. Click on the Audio I/O Setup tab.

点击“Audio I/O”设置标签

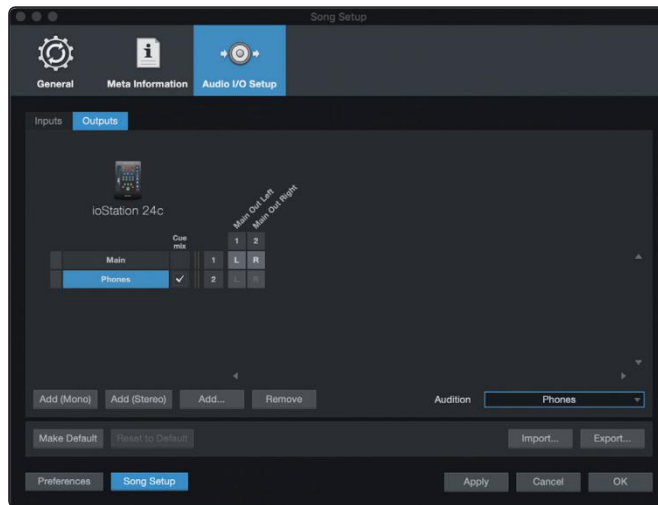


3. From the Inputs tab, you can enable any or all of the inputs on your audio interface that you'd like to have available. We recommend that you create a mono input for each of the inputs on your interface. If you plan on recording in stereo, you could create a stereo input.

在Inputs（输入）选项卡上，您可以在您的音频接口上启用任何或所有您想使用的输入。我们建议为您接口上的每个输入创建一个单声道输入。如果您打算用立体声录音，您可以创建一个立体声输入。



- Click on the Outputs tabs to enable any or all of the outputs on your audio interface. 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.



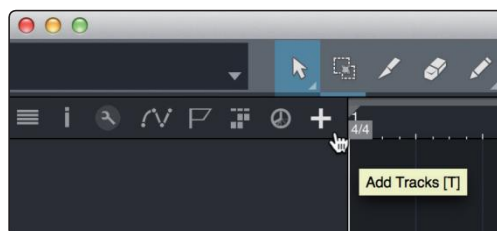
点击 "输出" 标签，启用您的音频接口上的任何或所有输出。在右下角，您会看到 Audition 选择菜单。这允许您选择输出，在将音频文件导入 Studio One Artist 之前，您将从该输出进行试听。一般来说，您会希望这是主输出总线。

**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.

**高级的用户提示:** 如果您希望每次打开 Studio One 时，这个 I/O 配置都是一样的，请点击 Make Default 按钮。

### 9.3.2 Creating Audio and Instrument Tracks 创建音频和音乐轨道

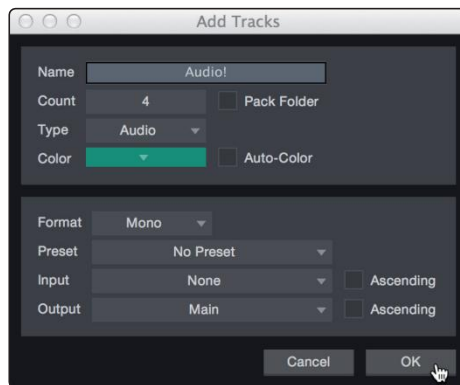
- In the upper left corner of the Arrange window, you will notice several buttons. The button furthest to the right is the Add Tracks button. Click on this button to open the Add Tracks window.



在编曲窗口的左上角，您会注意到几个按钮。最靠右的按钮是 "添加音轨" 按钮。点击这个按钮，打开 "添加音轨" 窗口。

- 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，您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，您可以选择您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.

**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。

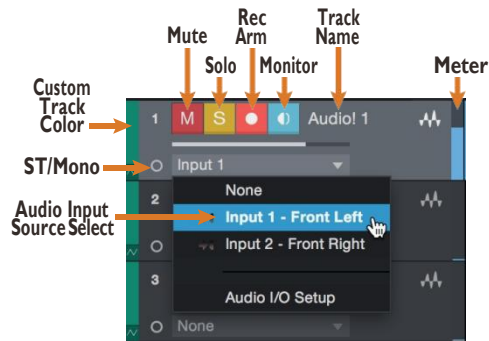
**Automation（自动化）。** 这种轨道类型允许您为您的会话创建自动参数控制。

**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.

**文件夹。** 这个音轨可以帮助您管理您的会话，也可以一次快速编辑多个音轨。

**强大的用户提示：** 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。

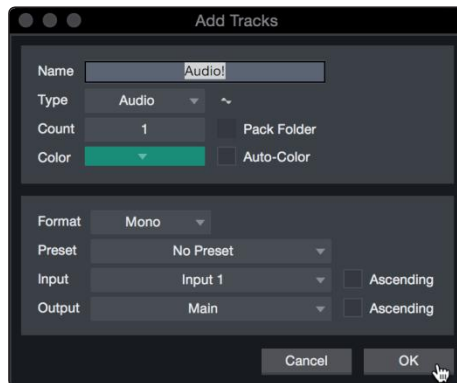


**Note:** Instrument tracks are nearly identical to audio tracks. The Input Source list for Instrument tracks lists available external MIDI devices as well as any virtual instruments that have been added to the Song.

**注意：** 乐器轨道与音频轨道几乎是一样的。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。

### 9.3.3 Recording an Audio Track 录制一个音轨

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

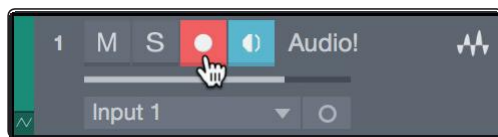


要开始录音，从 "添加音轨" 窗口创建一个音轨，将其输入设置为音频接口的输入1。并将一个麦克风连接到同一输入。

2. Select Record Enable on the track. Turn up the Input 1 level on your audio interface 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).

在轨道上选择 "启用录音"。在对着麦克风说话/唱歌时，调高音频接口上的输入1的电平。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）。

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



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。



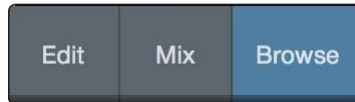
### 9.3.4 Adding Virtual Instruments and Effects 添加虚拟乐器和效果

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.

通过浏览器您可从其中拖放插件和乐器来增加您的歌曲。您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，并立即加载您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:



在编曲窗口的右下角有三个按钮。

**Edit.** The Edit button opens and closes the audio and MIDI editors.

**Mix.** The Mix button opens and closes the Mixer window.

**Browse.** 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.

**编辑。** 编辑按钮可以打开和关闭音频和MIDI编辑器。

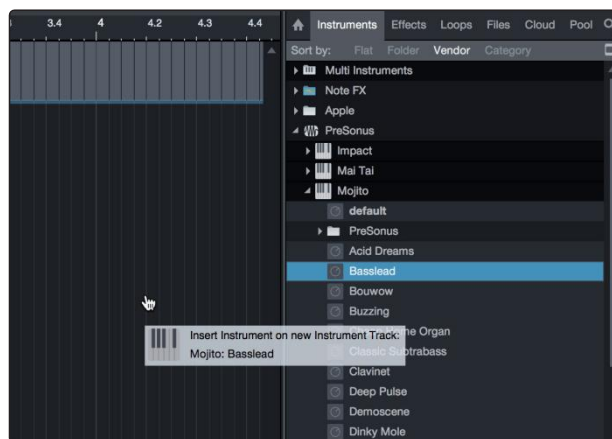
**混合。** 混合按钮打开和关闭混合器窗口。

**浏览。** 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

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.

要在您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。



### Drag-and-Drop Effects 拖放效果

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.

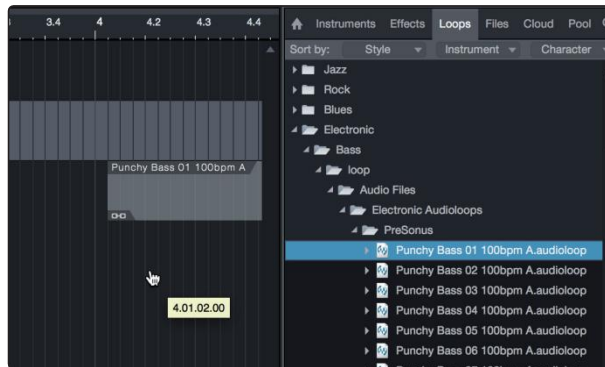


要将插件效果添加到轨道上，请单击浏览器中的 "效果 "按钮，并在效果浏览器中选择插件或其预置之一。将选择的效果拖放到你想添加效果的轨道上。

### Drag-and-Drop Audio and MIDI Files

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 o

f the track.



### 拖放音频和MIDI文件

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、试听并导入到歌曲中。

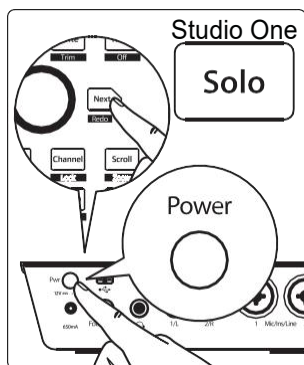
如果你把文件拖到一个空的地方，就会创建一个新的轨道，把该文件放在你所拖的位置。如果你把文件拖到一个现有的轨道上，该文件将作为该轨道的一个新部分被放置。

## 10 Appendix 附录

### 10.1 Operation Modes 操作模式

DAW	Recommended Mode
Ableton Live	MCU (Live)
Apple Logic	MCU (Logic)
Avid Pro Tools	HUI
MOTU Digital Performer	MCU (Logic)
PreSonus Studio One	Studio One
Steinberg Cubase	MCU (Cubase)
Steinberg Nuendo	MCU (Cubase)
Others	<p>MCU (Logic); If "ioStation 24c" is not listed as a supported device in your DAW, configure it as an Mackie Control Universal. Note that the ioStation 24c's control performance may vary depending your DAW's MCU implementation. 如果 "ioStation 24c" 在您的DAW中没有被列为支持的设备，请将其配置为 Mackie Control Universal。请注意，ioStation 24c 的控制性能可能会有所不同，这取决于您的DAW的MCU实现。</p> <p><b>OR 或是</b></p> <p>Studio One. If "ioStation 24c" is listed as a supported device by your DAW, it has been integrated into your application using the Studio One native protocol.</p> <p>Studio One。如果 "ioStation 24c" 在您的DAW中 被列为支持的设备，它已经使用Studio One本地协议集成到你的应用程序中。</p>

### 10.2 ioStation 24c MIDI Protocol



Studio One operation mode employs a native MIDI protocol. For advanced users or developers, this MIDI protocol can be used to access the ioStation 24c user interface elements directly.

To access this mode, press and hold the Next button on power up, then press Solo.

Studio One操作模式采用了本地 MIDI协议。对于高级用户或开发者来说，这个MIDI协议可以用来直接访问ioStation 24c的用户界面元素。

要进入这种模式，在开机时按住 Next 按钮，然后按Solo。

#### 10.2.1 SysEx

SysEx	
SysEx header <SysExHdr>	F0 00 01 06 16
Manufacturer ID	00 01 06
ioStation 24c Device ID	0x0208

### 10.2.2 Fader 推进器

Use MIDI pitch bend message to transmit fader moves and receive fader positions.  
Channel 0 is used to address the fader.

Faders 推进器	
Received	E0, ll, hh
Transmitted	E0, ll, hh
Low 7 bits	ll
High 7 bits	hh

使用MIDI pitch bend信息来传送推进器的移动和接收推进器的位置。通道0用来寻址推进器。

### 10.2.3 Session Navigator Encoder 会话导航仪编码器

Use CC messages to transmit increment and decrement values.

Transmitted endless rotary encoder delta values:

Session Navigator Encoder: **B0, 3C, xx**

**xx** delta value bit (Bit 7 = direction, Bits 0-6 = number of steps)

使用CC信息来传输增量和减量值。传输无尽的旋转编码器delta值。

会话导航仪编码器。B0, 3C, xx

xx delta值位（位7=方向，位0-6=步数）。

### 10.2.4 Buttons and LEDs 按钮和LED灯

**Buttons** use Note On/Off messages to transmit the pressed and released state on channel 0.

**LEDs** use Note On/Off messages to receive the on, off and flashing state on channel 0.

**按钮**使用注解开/关信息来传输通道0上的按下和释放状态。

**LED**使用音符开/关信息来接收通道0上的开、关和闪烁状态。

Transmitted	
Button press and release message	90, id, ss
ID	See ID Table
ss	State (Release: 00, Pressed, 7F)
Received (On, Off, Flashing)	
LED on / off message	90, id, ss
ID	See ID Table
ss	State (Off: 00, On: 7F, Flashing: 01)
Received (Color)	
LED Color message	MIDI channel 1-3 is used to set the RGB values of a LED color with 7-bit resolution per color
Red	91, id, cc
Green	92, id, cc
Blue	93, id, cc
ID	See ID table
cc	7-bit color value

Button and LED ID Tables: 按钮和LED ID 表格:

Channel Strip Controls		
Button Label	ID (Hex)	LED Type
Arm	00	LED
Bypass	03	LED
Solo	08	LED
Mute	10	LED
Fader Touch	68	n/a
SHIFT	46	LED

Session Navigator		
Button Label	ID (Hex)	LED Type
Prev	2E	LED
Session Navigator Push Encoder	20	n/a
Next	2F	LED
Link	05	RGB
Pan	2A	RGB
Channel	36	RGB
Scroll	38	RGB
Master	3A	LED
Click	3B	LED
Section	3C	LED
Marker	3D	LED

Automation		
Button Label	ID (Hex)	LED Type
Read	4A	RGB
Write	4B	RGB
Touch	4D	RGB

Transport		
Button Label	ID (Hex)	LED Type
Loop	56	LED
Rewind	5B	LED
Fast Forward	5C	LED
Stop	5D	LED
Play	5E	LED
Record	5F	LED
Footswitch	66	n/a

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

## Redfish Couvillion

### Ingredients:

- ¼ C Vegetable oil
- ¼ C flour
- 1 onion diced
- 1 clove garlic minced
- 1 green pepper diced
- 3 celery stalks diced
- 1 14oz can diced tomatoes
- 1 bottle light beer
- 2 bay leaves
- 1 tsp thyme
- 2 lbs Redfish fillets

### Cooking Instructions:

1. In a heavy saucepan or large skillet, heat oil on medium high and slowly add flour a tablespoon at a time to create a roux. Continue cooking the roux until it begins to brown, creating a dark blond roux.
2. Add garlic, onions, green pepper, and celery to roux.
3. Sauté vegetables for 3-5 minutes until they start to soften.
4. Add tomatoes, bay leaves, thyme, and redfish. Cook for several minutes.
5. Slowly add beer and bring to a low boil.
6. Reduce heat and simmer uncovered for 30-45 minutes until redfish and vegetables are completely cooked, stirring occasionally. Break up redfish into bite size chunks and stir in. Add pepper or hot sauce to taste. Do not cover.
7. Serve over rice

### Serves 6-8

While not one of Southeast Louisiana's more famous dishes, Redfish Couvillion is a favorite way to serve our favorite Gulf fish. Also known as Reds or Red Drum, Redfish is not only fun to catch, it's also delicious!

# 额外的奖励: PreSonus公司以前的绝密配方...

## 库瓦利鲑鱼

### 成分:

- 1/4 C 植物油
- 1/4 C 面粉
- 1个洋葱切丁
- 1瓣大蒜切碎
- 1个青椒切丁
- 3 根芹菜茎切丁
- 1个14盎司的西红柿丁罐头
- 1瓶淡啤酒
- 2片月桂叶
- 1茶匙百里香
- 2磅红鱼片

### 烹饪说明:

- 1.在大平底锅中（有一定厚度），用中高火加热油，每次慢慢加入一汤匙面粉，形成面糊。继续煮面糊，直到它开始变成棕色，形成深金色的面糊。
- 2.在面糊中加入大蒜、洋葱、青椒和芹菜。
- 3.翻炒蔬菜3-5分钟，直到它们开始变软。
- 4.加入西红柿，月桂叶，百里香，和红鱼。煮几分钟。
- 5.慢慢加入啤酒，并将其煮至低沸。
- 6.小火慢炖30-45分钟，直到红鱼和蔬菜完全熟透，偶尔搅拌一下。将红鱼打碎成一口大小的块状，并搅拌均匀。加入胡椒或辣酱以调味。不要加盖。
- 7.在米饭上享用



# ioStation 24c

## Audio Interface and Production Controller

### Owner's Manual



18011 Grand Bay Ct. • Baton Rouge,  
Louisiana 70809 USA • 1-225-216-7887  
[www.presonus.com](http://www.presonus.com)

Part# 70-52000148-A