

# ATOM

## Production and Performance Pad Controller

### Owner's Manual



# Table of Contents

## 1 Overview — 1

- 1.1 Introduction — 1
- 1.2 Product Registration — 1
- 1.3 What's in the Box — 2
- 1.4 What's in your My PreSonus Account — 2
- 1.5 Companion PreSonus Products — 3
- 1.6 Firmware Updates — 4

## 2 Controls — 5

- 2.1 Top Panel Overview — 5
- 2.2 Note Repeat — 6
- 2.3 Quick Setup Mode — 7
  - 2.3.1 Pad Modes — 7
  - 2.3.2 Pressure Type — 8
  - 2.3.3 Pressure Threshold — 9
  - 2.3.4 Strike Velocity — 9
  - 2.3.5 Internal MIDI Clock Tempo — 10
  - 2.3.6 Panic — 10

## 3 Advanced Studio One Integration — 11

- 3.1 Song Setup Mode — 11
  - 3.1.1 Controlling Tempo — 11
  - 3.1.2 Event Controls — 11
  - 3.1.3 Navigating Tracks — 12
  - 3.1.4 Adding an Instrument — 13
  - 3.1.5 User Pads — 15
- 3.2 Set Loop — 16
  - 3.2.1 Zooming — 17
- 3.3 Event Editor — 17
  - 3.3.1 Adjusting Pitch — 18
  - 3.3.2 Nudging — 19
- 3.4 Instrument Quick Controls — 19
- 3.5 Pattern Editor — 20
- 3.6 Transport Controls — 22

- 3.7 Zooming — 22
- 3.8 Customizing Knobs — 23

## 4 Advanced Ableton® Live Integration — 24

- 4.1 Pad Mode: Session — 24
- 4.2 Pad Mode: Channel — 24
- 4.3 Pad Mode: Note — 24
- 4.4 User Mode — 24
- 4.5 Encoder Assignments — 25
- 4.6 View Selection — 25
- 4.7 Transport Controls — 26

## 5 Studio One Artist Quick Start — 27

- 5.1 Installation and Authorization — 27
- 5.2 Setting Up Studio One — 29
  - 5.2.1 Configuring Audio Devices — 29
  - 5.2.2 Configuring MIDI Devices — 30
- 5.3 Creating a New Song — 33
  - 5.3.1 Configuring Your Audio I/O — 33
  - 5.3.2 Creating Audio and Instrument Tracks — 35
  - 5.3.3 Recording an Audio Track — 36
  - 5.3.4 Adding Virtual Instruments and Effects — 36

## 6 MIDI Mapping — 38

- 6.1 Pads and Banks — 38
- 6.2 Knobs — 39
- 6.3 Buttons — 40
- 6.4 Advanced Setup Mode — 41
  - 6.4.1 Select Pad MIDI Channel — 41
  - 6.4.2 Select Knob MIDI Channel — 41
  - 6.4.3 Select Button MIDI Channel — 42
  - 6.4.4 Select Pressure MIDI Channel — 42
  - 6.4.5 Turn Pad Note On/Off — 43
  - 6.4.6 Adjusting Brightness — 43

# 1 Overview

## 1.1 Introduction



**Thank you** for purchasing the PreSonus® ATOM production and performance pad controller. With 16 full-size, velocity- and pressure-sensitive RGB pads and 8 assignable pad banks, ATOM lets you produce beats, play virtual instruments, and trigger samples and loops with unsurpassed expressiveness and flexibility. More than a compact, dynamic performance controller, when combined with Studio One® and Ableton® Live, ATOM becomes a tightly integrated production environment. You'll love how ATOM's expressive pads, flexible controls, and tight integration with Studio One will open up your production environment and speed up your workflow.

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 ATOM!

**About this manual:** We suggest that you use this manual to familiarize yourself with the features, applications, and workflows for your ATOM before trying to connect it to your computer. This will help you to get better performances and faster results.




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

## 1.2 Product Registration

PreSonus is committed to delivering the best experience for our customers. My PreSonus is a one-stop portal for all our registered customers' needs. From your My PreSonus account, you can view all your PreSonus hardware and software registrations; download drivers, installers, and content; contact support; track orders and more.

### To register your ATOM

Don't have a My.PreSonus account yet?  
Here's why you should sign up.

-  One account gets you everything you need, from support to forums to product info and upgrades. Get the inside track on training videos, tutorials, special offers, and advance notifications.
-  Register a product on My.PreSonus and you're eligible for technical support, timely updates, expedited warranty service and quick tracking should you ever need repair. You also get special promotions that are 'members only'!
-  Join the ever-growing community of PreSonus users and share ideas, projects, and yes, gripes on our forum and blogs. It's a lively, Cajun-tinged vibe and it's waiting for you.

[Create My.PreSonus Account](#)

Go to [My.PreSonus.com](http://My.PreSonus.com) and follow the onscreen instructions.

OR



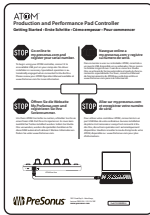
Download the MyPreSonus app from the Apple App Store or Google Play.

### 1.3 What's in the Box

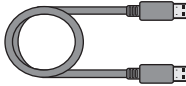
Your ATOM package contains the following:  
ATOM production and performance pad controller



PreSonus ATOM Quick Start Guide



6' (1.8m) USB cable



### 1.4 What's in your My PreSonus Account

Once you register your ATOM, you will be able to download the following:



Studio One Artist recording software and content



Universal Control (necessary for firmware updates)

## 1.5 Companion PreSonus Products

Thanks for choosing PreSonus! As a solutions company, we believe the best way to take care of our customers (that's you) is to ensure that you have the best possible experience from the beginning of your signal chain to the end. To achieve this goal, we've prioritized seamless integration throughout every design phase of these products from day one. The result is systems that communicate with each other as intended—straight out of the box—without excessive configuration hassles.

We're here for you. Find out more at [www.presonus.com](http://www.presonus.com).

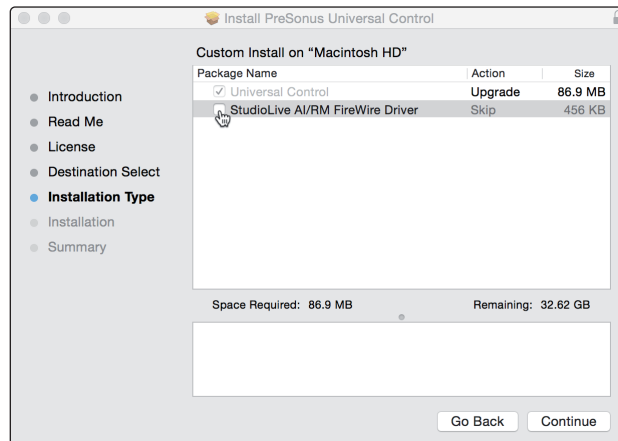


## 1.6 Firmware Updates

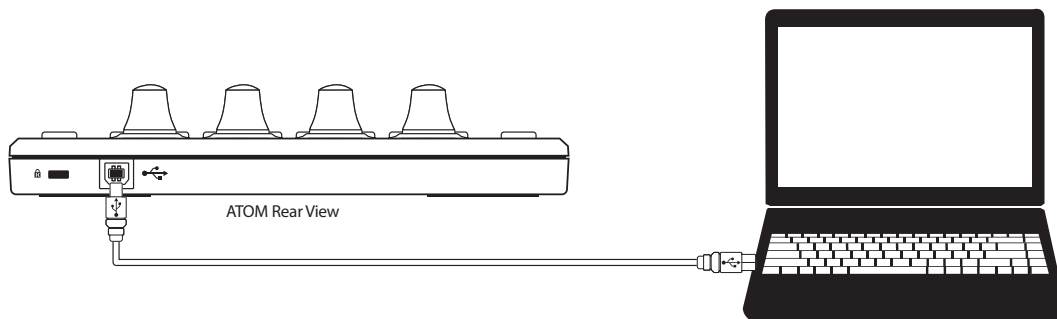
PreSonus is committed to constant product improvement. As part of this commitment, we offer periodic firmware updates that add features, improve functionality, and resolve issues that are discovered in the field. Because of this, it is highly recommended that you download Universal Control from your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

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

During installation, you will be given the option to install various PreSonus audio drivers. No driver installation is required to use the ATOM.



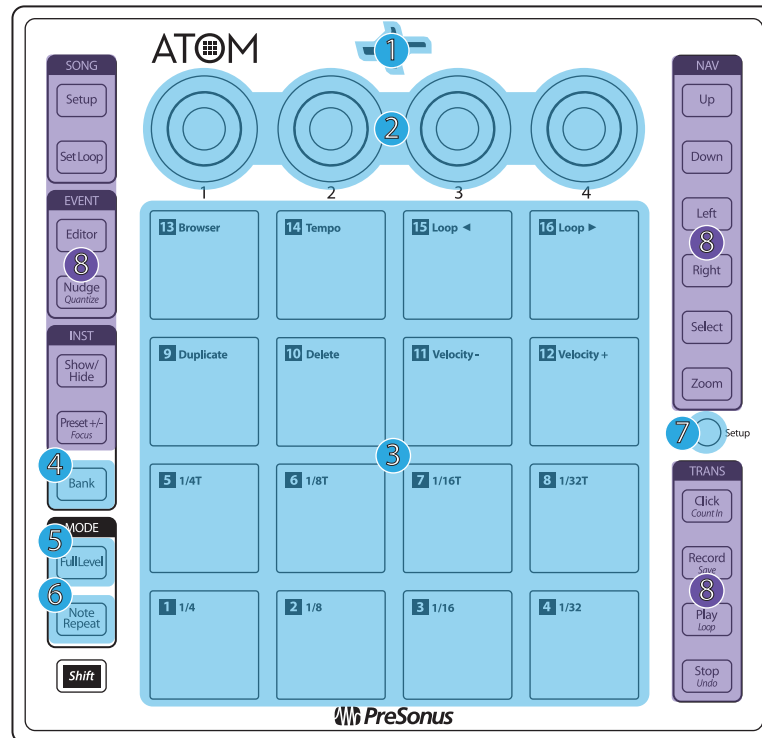
Once installed, connect your ATOM to your computer. Your ATOM is entirely bus powered. If you are using a USB hub, make sure you are connecting your ATOM to a powered port.



Universal Control will alert you if there is new firmware available for your ATOM. Clicking on the Update Firmware button will begin the update process. When the firmware update is complete, your ATOM will reboot automatically.

## 2 Controls

### 2.1 Top Panel Overview



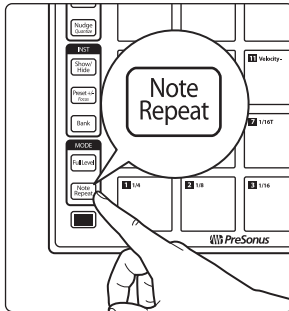
1. **Status Indicator.** This LED will change color to indicate whether Studio One Native control is active or not. When Studio One or Ableton Live is connected, the LED will illuminate blue. For other applications, it will illuminate green.
2. **Knobs 1-4.** These knobs transmit MIDI CC14-17 respectively. *See Section 6.2.*
3. **Pressure- and Velocity-sensitive controller pads.** These 16 pads can be used to trigger samples and sounds within your software. Two different control modes, as well as several advanced customization options, are available. *Please review Section 2.3 for details. MIDI Mapping can be found in Section 6.1.*
4. **Bank.** Use this button to switch between pad banks 1-8. Each bank can control a unique group of 16 individual sounds for a total of 128.
5. **Full Level.** When engaged, every pad will trigger its assigned sound at full strike velocity (127) no matter how soft or hard you hit (application dependent).
6. **Note Repeat.** Also known as “roll,” note repeat allows you to trigger a sound at a specified rate as long as the pad is held (application dependent). *See Section 2.2 for details.*
7. **Setup.** This button provides access to advanced configuration features. *See Section 2.3 for details.*
8. **Assignable Controls.** The remaining buttons have specialized functions in Studio One or Ableton Live (*see Sections 3 and 4 for details*). These buttons send unique MIDI CC messages and can be used for many purposes in other applications. *For a table of assigned MIDI CC messages, please see Section 6.3.*

## 2.2 Note Repeat

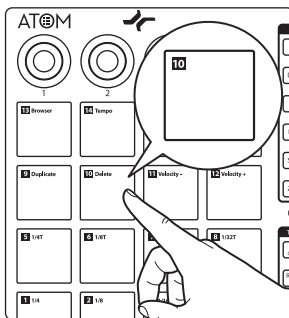
As previously mentioned, Note Repeat allows you to repeatedly trigger a sound at a specified rate for as long as you hold down the assigned pad. In this way, you can, for example, trigger a series of ¼ notes simply by pressing and holding a pad.

The MIDI clock determines the tempo at which Note Repeat triggers a sound. While on Internal Clock, this is set from the Quick Setup Mode. *See Section 2.3.5 for details.* When connected to a DAW or other application that provides a master MIDI clock, the tempo is set from within that application.

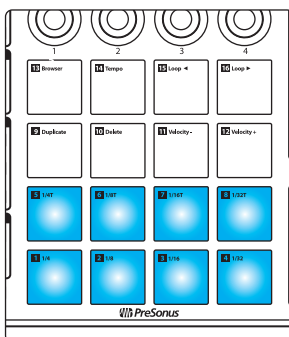
To engage Note Repeat, press the Note Repeat button while the desired bank is active. All the pads will flash.



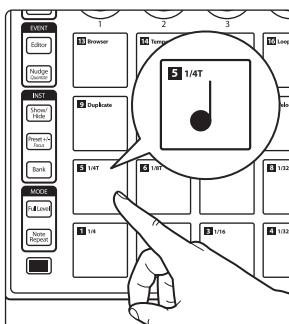
Press the pad assigned to the sound on which you'd like to enable Note Repeat.



Pads 1-8 will illuminate solid.



Press and hold the Note Value you would like to use. The Note Values displayed to the right of each pad's number.



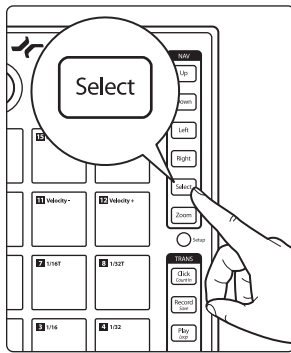
The sound assigned to the selected pad will repeat at the selected value until you release the pad.

**Note:** In Studio One, note repeat behaves slightly differently. The last pressed pad will be the pad selected for note repeat.

To select a different pad while still in note repeat, press and hold the Select button and select the desired pad. Upon release of the Select button, the new pad will be used for note repeat.

**Note:** At the time of publication, Ableton Live does not support Note Repeat with ATOM.

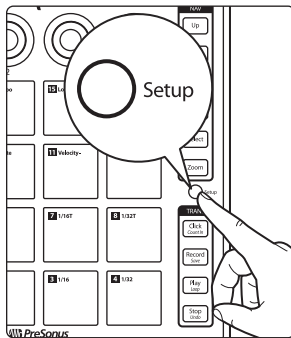




To change the sound that is being triggered, press the Select button and then press the desired pad.

To exit Note Repeat, press the Note Repeat button again. The button will remain illuminated as long as Note Repeat is active.

## 2.3 Quick Setup Mode



Your ATOM controller provides customization options via Quick Setup Mode.

To launch Quick Setup Mode, press and hold the Setup button on the right side of your ATOM controller.

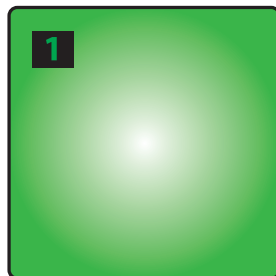
While Quick Setup Mode is active, the 16 pads on your ATOM controller will not send MIDI messages, rather they will act as toggle buttons for Quick Setup functions.

Releasing the Setup button exits Quick Setup Mode.

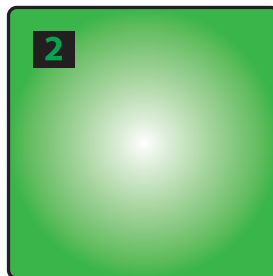
*For advanced customization features, please see Section 6.4*

### 2.3.1 Pad Modes

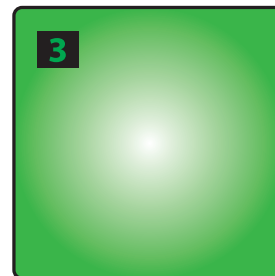
MIDI Drum mode (Default)



MIDI Keyboard mode



Mardi Gras mode

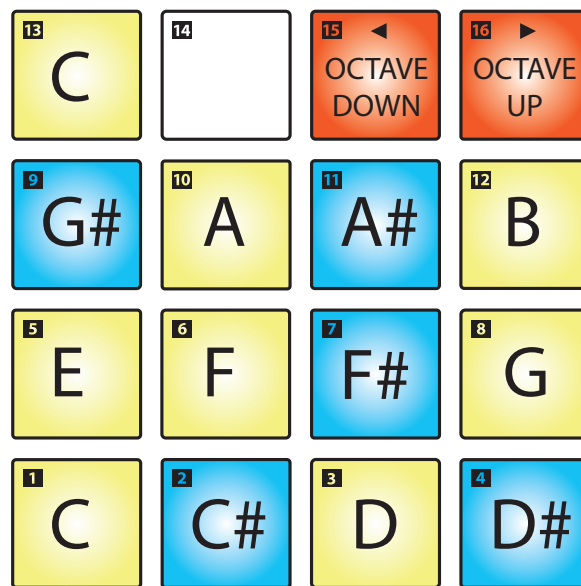


While Setup is enabled, Pads 1-3 allow you to select the behavior of the pads on your ATOM.

- **MIDI Drum Mode.** This is the default setting for your ATOM. While in this mode, the pads of your controller will illuminate with the same color for each bank. Pressing a pad will switch the color to white, indicating that the MIDI message has been sent.
- **MIDI Keyboard Mode.** While in this mode, the pads on your ATOM will illuminate following the pattern of a piano keyboard, where white keys are indicated by yellow and black keys are indicated by blue. *See Section 2.3.1.1 for more information.*
- **Mardi Gras Mode.** This is a test mode for your ATOM. While active, the RGB LEDs will cycle through the available colors.

**Note:** At the time of publication, Pad Modes are not available while Studio One or Live native control is active.

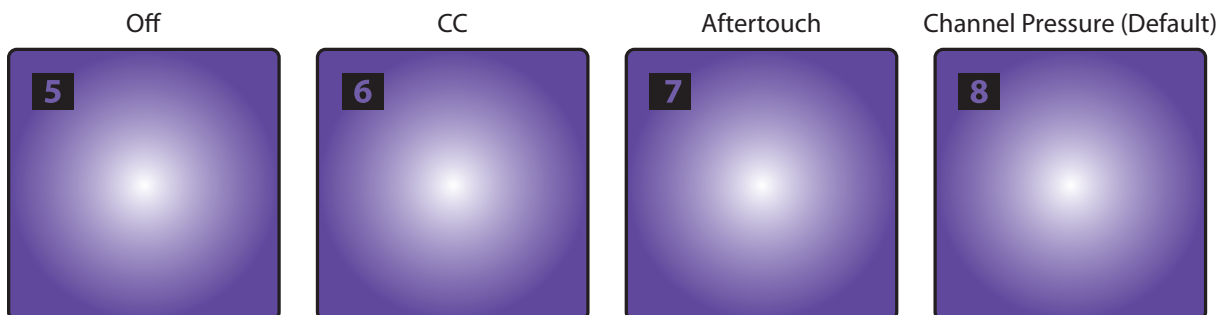
### 2.3.1.1 MIDI Keyboard Mode



While MIDI Keyboard Mode is active, your ATOM pads will function as a single octave keyboard from C to C in each octave. Pads 15 and 16 adjust the octave down or up respectively.

*Note: Banking is disabled in this mode. Pad layout may vary depending on application.*

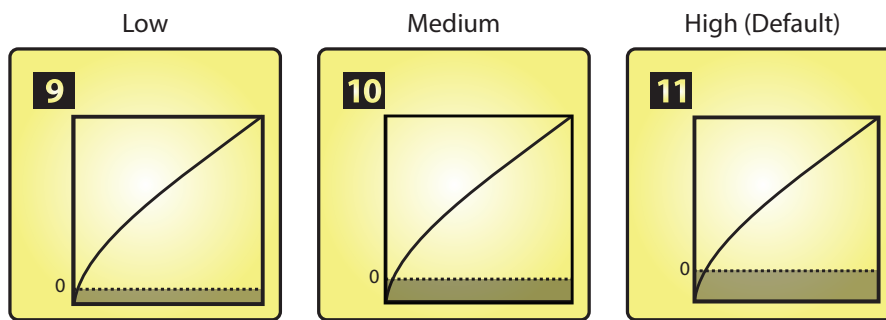
### 2.3.2 Pressure Type



You can select the type of message that is sent by pressure as follows:

- **Off.** This turns off pressure messages.
- **CC.** Post-strike pressure sends CC22.
- **Aftertouch.** Post-strike pressure sends Aftertouch (also known as polyphonic aftertouch).
- **Channel Pressure.** This is the default setting for your ATOM. Post-strike pressure sends Channel Pressure messages (also known as monophonic aftertouch).

### 2.3.3 Pressure Threshold



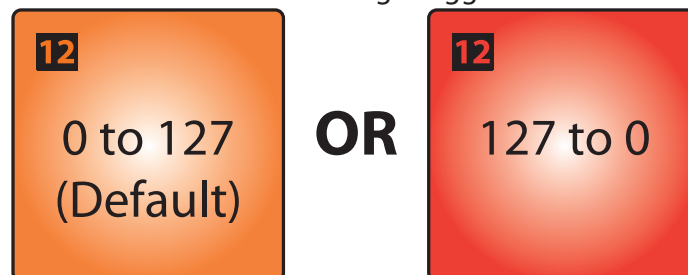
The Pressure Threshold for your ATOM controller pads has three settings:

- **Low.** This setting requires the least amount of pressure after the initial strike before sending a MIDI pressure message.
- **Medium.** While this setting is enabled, the pressure message is delayed slightly after the initial strike.
- **High.** This is the default setting for the ATOM and requires the greatest amount of pressure after the strike for the MIDI pressure message to send.

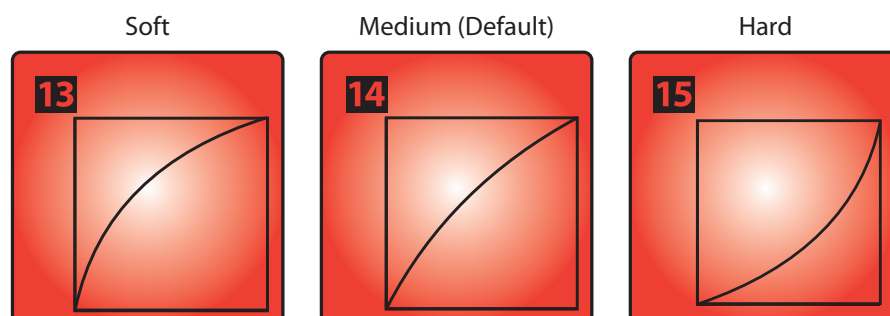
*Power User Tip: Regardless of the Pressure Threshold setting, the pressure value always starts from 0 or 127 (depending on the Global Pressure setting).*

The Global Pressure range can be toggled to transmit values from 0 to 127 or from 127 to 0. By default, the range is from 0 to 127.

#### Pressure Range Toggle



### 2.3.4 Strike Velocity

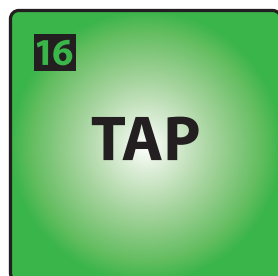


The Strike Velocity for your ATOM controller pads has three settings. Use Pads 13-15 to adjust how responsive your pads will be as you press them:

- **Soft.** This setting is optimized for players who prefer to play softly. Soft pad strikes will result in higher MIDI values.
- **Medium.** This is the default setting for the ATOM and has been optimized for a wide range of players and performance styles.
- **Hard.** This setting is optimized for players who prefer to play with a lot of force. Harder pad strikes will result in lower MIDI values.

### 2.3.5 Internal MIDI Clock Tempo

MIDI Clock Tempo



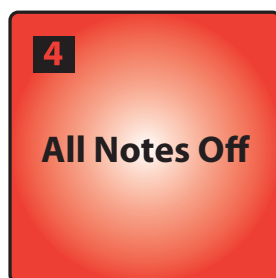
While in Quick Setup Mode, Pad 16 will flash in sync with the Internal MIDI Clock tempo. By default, this is set to 120 BPM. To adjust the Tempo, use this pad to tap the desired BPM.

This pad is disabled if External MIDI Clock is available and the DAW transport playback is active. External MIDI Clock is enabled automatically when Studio One Native control is active.

**Power User Tip:** Your MIDI Clock Tempo can also be adjusted by turning Knob 4 while in Quick Setup Mode.

### 2.3.6 Panic

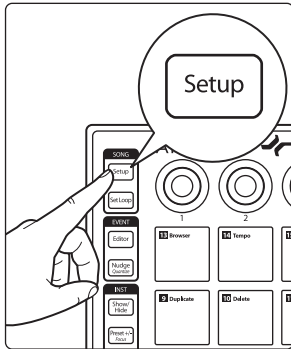
Panic



To disable all MIDI signals, press Pad 4 while holding the Setup button.

## 3 Advanced Studio One Integration

### 3.1 Song Setup Mode



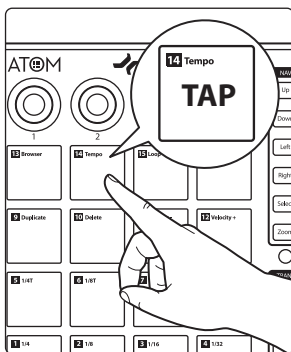
Pressing the Song Setup button allows you quickly open up the Instrument browser in Studio One, select your Instrument plug-in, choose your desired preset, and create a track, all from your ATOM controller as well as provide quick navigation functions.

While in Song Setup mode, the 16 pads on your ATOM will not function as controllers for instruments.

*Note: If a plug-in is currently in focus and the Browser is already open when you press the Song Setup button, the knobs will control the plug-in and not function as described in this section. To use the controls as described below, simply close the currently focused plug-in window.*

#### 3.1.1 Controlling Tempo

##### Tap Tempo

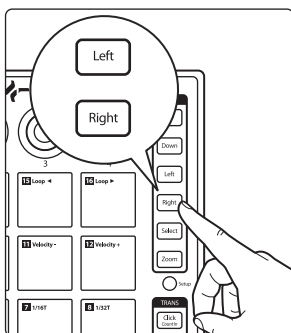


While Song Setup mode is active, Pad 14 functions as the tap tempo control for your Studio One session.

**Power User Tip:** You can also use Knob 2 to adjust the tempo. Turning the knob clockwise will increase the tempo. Turning the knob counterclockwise will decrease it.

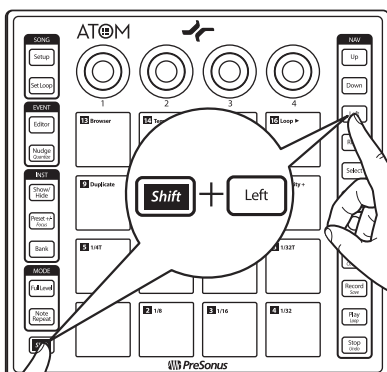
#### 3.1.2 Event Controls

##### Selecting Events



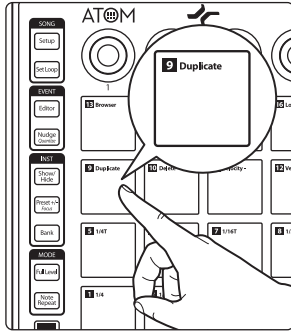
While Song Setup is active, press the Left and Right buttons to select the previous and next events on the currently selected track's timeline.

**Note:** These buttons navigate the Browser when it is in focus.



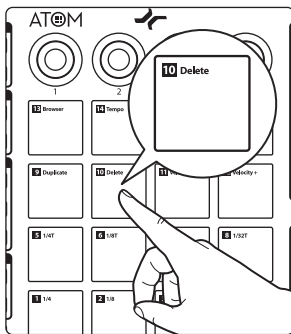
Holding the Shift button while pressing the Left or Right buttons will select multiple events.

### Duplicate Event



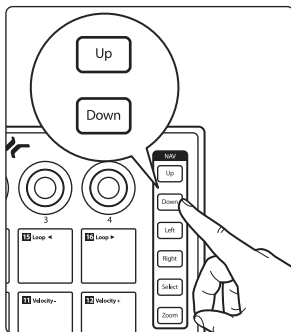
Press Pad 9 to duplicate the currently selected event.

### Delete Event



Press Pad 10 to delete the currently selected event.

## 3.1.3 Navigating Tracks

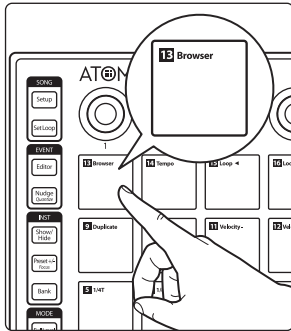


Press the Up and Down buttons to navigate through the track list.

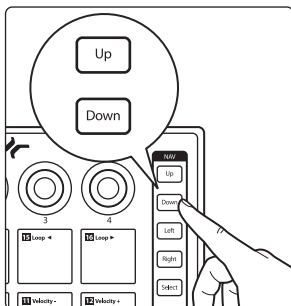
**Note:** These buttons navigate the Browser when it is in focus.

### 3.1.4 Adding an Instrument

#### Opening the Instrument Browser

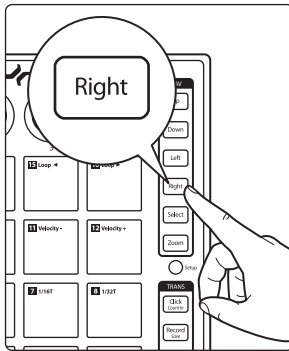


Press Pad 13 to open and close your Instrument browser.

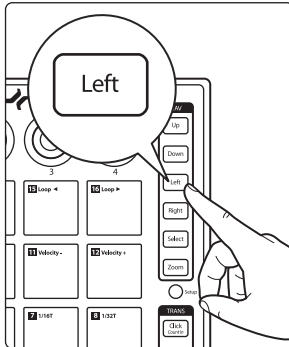


While the Browser is active, you can use the Up and Down buttons to navigate through the list of available Instrument plug-ins.

### Selecting a Preset



Pressing the Right button will expand the preset list.



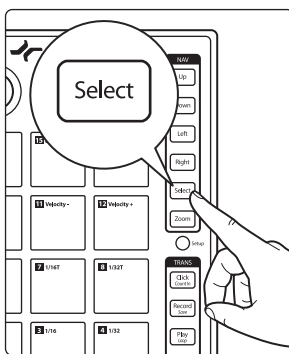
Pressing the Left button will collapse the preset list.

**Power User Tip:** Press the Left button while navigating through the preset list to quickly return to the top of the folder.

While in Song Setup mode, you can also use the Right and Left Navigation buttons to open and close folders in the Browser,

- Navigation Right = Open folder (next)
- Navigation Left = Close folder (back)

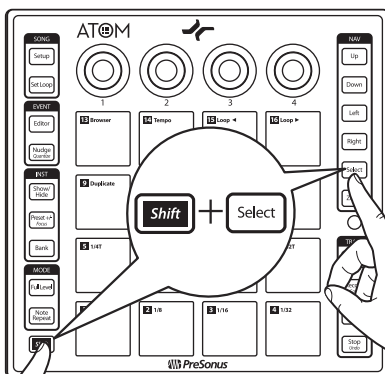
### Creating a Track



Pressing Select button will create a track and instantiate the currently selected preset, or plug-in if no preset is selected, and bring it into focus for instantaneous control.

**Power User Tip:** Selecting a preset from the Instrument Browser, rather than just selecting the instrument plug-in itself, will allow you to work more quickly.

### Replace Current Instrument on an Existing Track



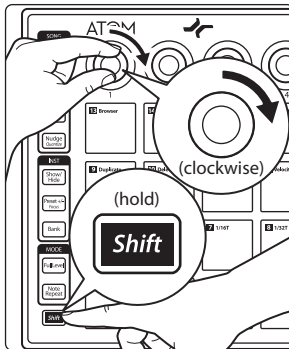
To replace an existing Instrument:

1. Enter Song Setup mode
2. Open the Browser from ATOM
3. Find the Instrument or Preset you want.
4. Press and hold ATOM's Shift button, then press the Select button on ATOM



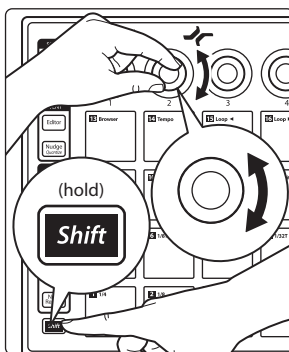
### Scales and Root Transposition while in Keyboard Mode

When using ATOM to control a plug-in synth in keyboard mode (e.g. not using Impact XT), you can choose to constrain MIDI notes to a fixed scale as well as to change the root note of the scale.



To change the Scale type, press and hold ATOM's Shift button, then turn Knob 1. Turning clockwise will move to the next scale type. Turning counterclockwise will move to the previous scale type. Engaging Scale mode omits all out of key "wrong" notes.

Fully counterclockwise is the default "Chromatic" scale type. Scale types are shown in the External Devices Editor and update in real-time.



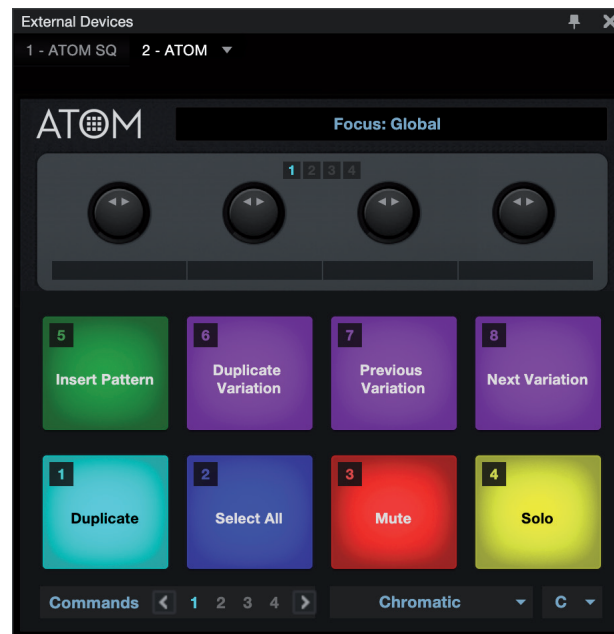
To change the Scales Root note, press and hold ATOM's Shift button, then turn Knob 2. Turn clockwise for the next Root note, counterclockwise for the previous Root note. Fully counterclockwise is the default "C" Root note. Root notes are shown in the External Devices Editor and update in real-time.

**Power User Tip:** You can also change the Scale type or Root note in the External Devices Editor with your mouse (click, then select) or with your mouse's scroll wheel (hover over, then move the scroll wheel).

While in Keyboard mode, the pad controlling the Root note will match the current Track Color. All other pads will be white.

### 3.1.5 User Pads

While in Song Setup Mode, Pads 1-8 are assignable User functions. The default assignments are below:



To reassign any User pad function, open the External Device editor in Studio One by pressing Shift+Song Setup on your ATOM, and right-click on the desired pad. Select "Assign Command..." from the drop-down menu to view a searchable list of commands.

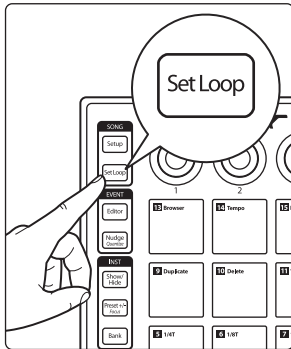
To change User pad color assignments, left-click on the desired pad in the External Device editor and select the desired color from the color selector.

There are 4 banks of User buttons available.

To change banks, enter Song Setup mode by pressing the Setup button on the top-left side of ATOM, press and hold ATOM's Shift button, then:

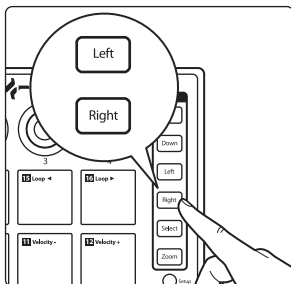
- Navigation Up = Bank 1
- Navigation Down = Bank 2
- Navigation Left = Bank 3
- Navigation Right = Bank 4

### 3.2 Set Loop

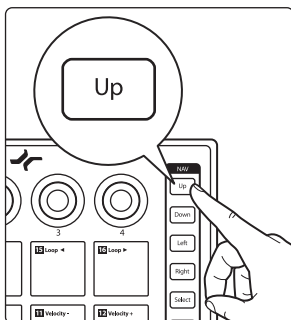


Pressing the Set Loop button allows you to set the start and end points of a timeline loop as well as position it within your session and focus on the loop area to quickly zoom in to make edits.

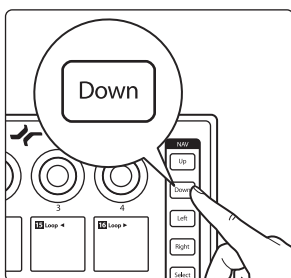
#### Setting Timeline Loop



While Set Loop is active, use the right and left buttons to move forward and backward on the timeline.

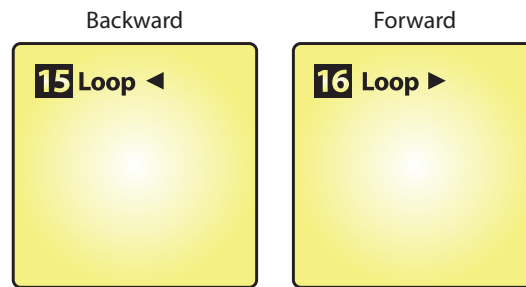


Press the Up button to set the loop start point.



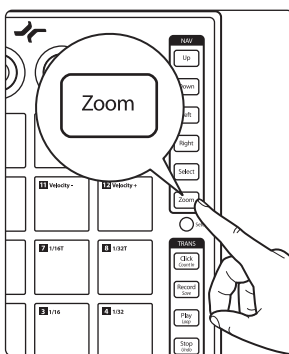
Press the Down button to set the loop end point.

To adjust the loop's position in the timeline without changing its length, press Pads 15 and 16.



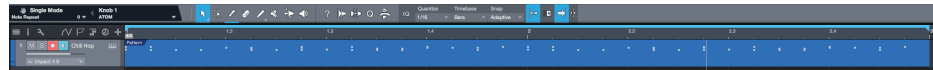
**Power User Tip:** To set the loop to the length of an object in the Arrange window, select the object with your mouse and press **SHIFT + Set Loop**. This will set the loop length to match the selection automatically.

### 3.2.1 Zooming

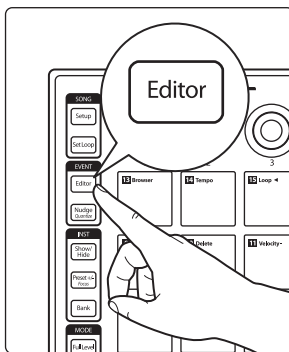


ATOM lets you quickly focus on your loop to make fast, detailed edits. While Set Loop is active, press the Zoom button to focus your session on the loop area.

**Note:** Loop must be active.



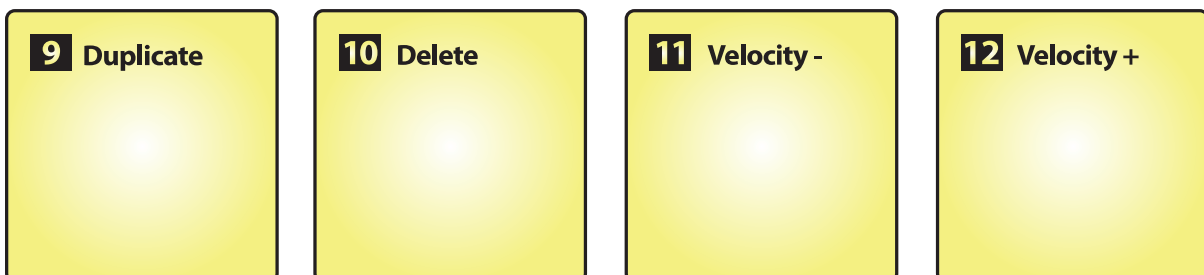
### 3.3 Event Editor



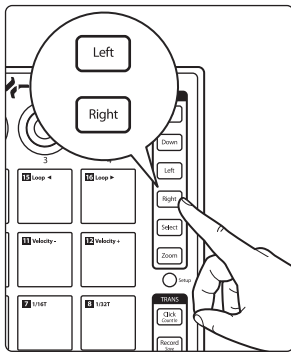
Pressing the Editor button when an instrument part is selected will open the Music Editor view in Studio One. For the best experience, PreSonus recommends closing the Instrument Browser first.

**Note:** When a pattern event is selected, the Pattern Editor will launch, see Section 3.5 for more information.

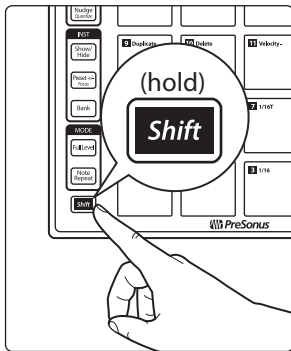
While Editor control is active, Pads 9-12 will control the following functions:



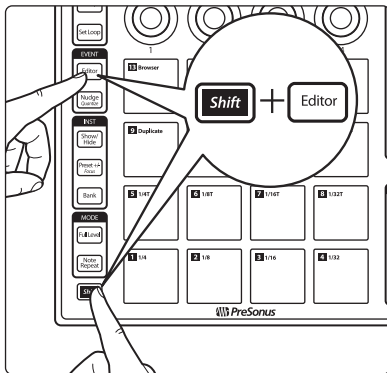
- **Duplicate.** Press Pad 9 to duplicate a note or event according to the set grid.
- **Delete.** Press Pad 10 to delete a note or event.
- **Velocity -.** Press to lower the note velocity by 10.
- **Velocity +.** Press to increase the note velocity by 10.



Use the Left and Right buttons to select the previous or next note in the timeline.

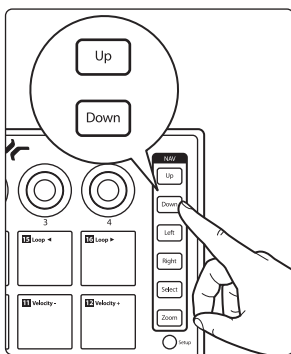


**Power User Tip:** To select multiple notes, press and hold the Shift button with the Left or Right buttons to navigate through the timeline.

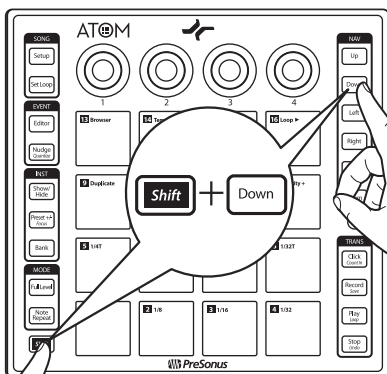


To close the Music Editor, press Shift and Editor simultaneously.

### 3.3.1 Adjusting Pitch

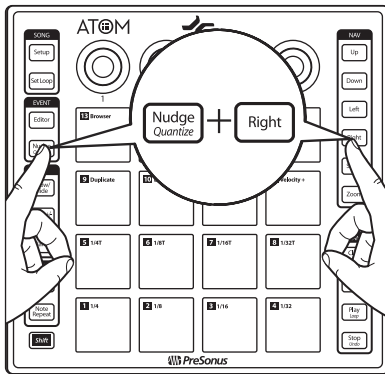


Use the Up and Down buttons to raise or lower the pitch by one half-step.

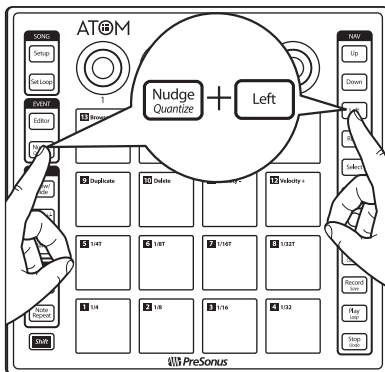


Press the Shift button with the Up or Down buttons to change the pitch by an octave.

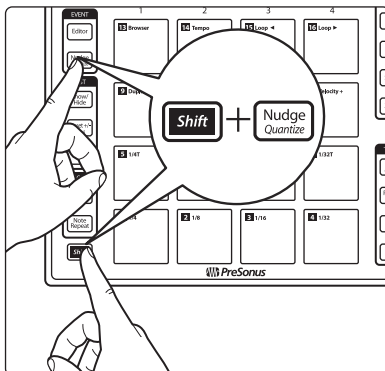
### 3.3.2 Nudging



Holding the Nudge button while pressing the Right button, moves the selected event or note forward in the timeline according to the current grid settings.



Holding the Nudge button while pressing the Left button, moves the selected event or note backward in the timeline according to the current grid settings.

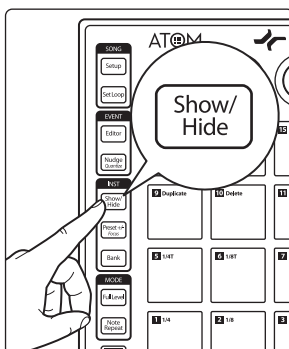


Press Shift and Nudge simultaneously to quantize the current note or event according to the quantization settings.

**Note:** Because the pads are always active for sound control when the Pattern Editor is active, Music Editor controls are disabled when viewing the Pattern Editor in Studio One.

## 3.4 Instrument Quick Controls

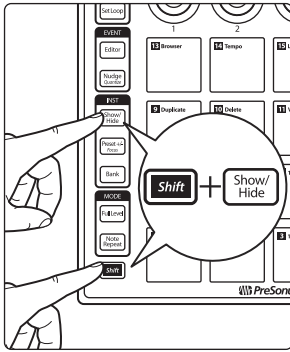
While in normal operation, ATOM provides quick access to the Instrument plug-in Editor and presets.



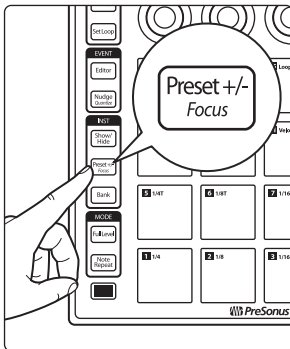
Press the Show/Hide button to open or close the currently selected track's Instrument Editor window.

In addition to being able to Show / Hide the Instrument Editor, you can also Show / Hide the Note FX Editor.

To Show / Hide the Note FX Editor, hold down ATOM's Shift button, then press the Show / Hide button.



### Changing Presets



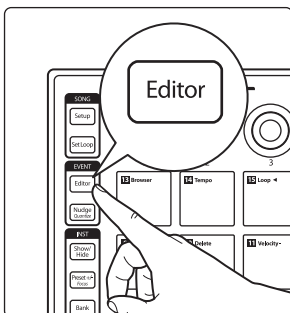
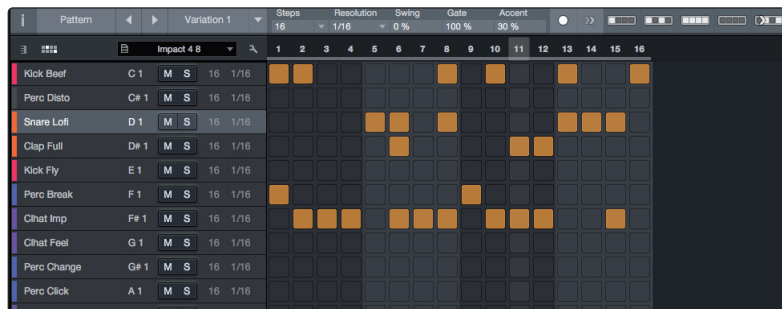
When the Instrument plug-in window is open, you can quickly change presets by pressing Preset +/- button.

While holding the Preset +/- button, use the Up and Down buttons to audition presets. To select the current preset, simply disengage the Preset +/- button.

## 3.5 Pattern Editor

Your ATOM controller can be used to edit the Pattern Editor in Studio One.

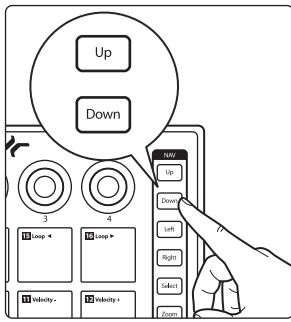
*Note: Pattern Editor control is only available for Impact XT.*



With the Pattern part selected, press the Editor button on ATOM. This will enable Pattern Editor control.

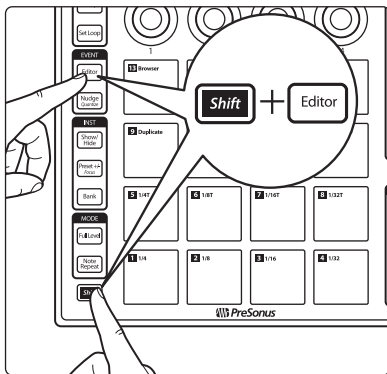
**Power User Tip:** Pressing and holding the Shift button while tapping a pad will add an "Accent" on that step.

Use the left or right buttons to navigate to additional steps for patterns with more than 16 steps.

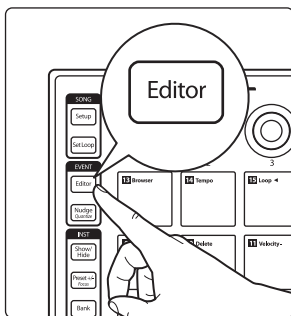


To select a new sound, use the Up and Down arrows to navigate through the list.

**Power User Tip:** Pattern-based sequencing treats musical phrases as individual elements, to be switched and swapped at will, looped and finessed. To create a Pattern in Studio One, select an Instrument Track, enable Song Setup on your ATOM and press Pad 5. An empty Pattern will be created on the selected track. This is the default functionality.

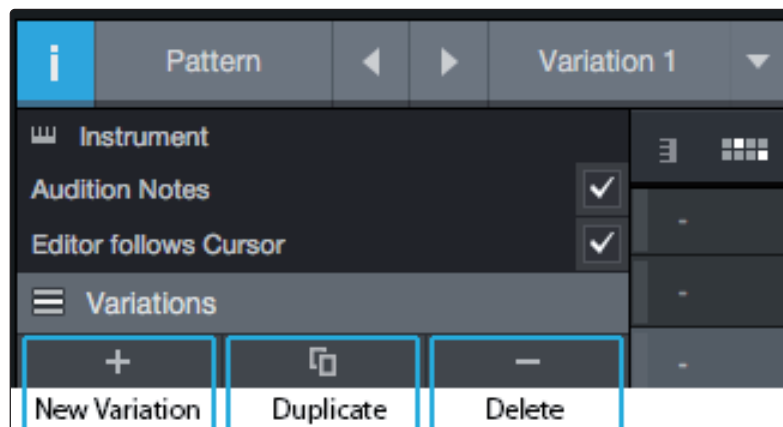


Press Shift and Editor simultaneously to completely close the Pattern Editor.

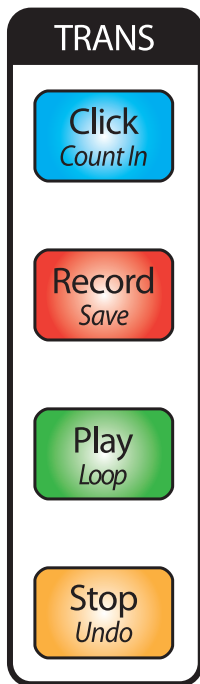


Press Nudge to use the Left and Right buttons to shift all the notes in the active lane by one step.

**Power User Tip:** To Duplicate, Create, or Delete a new variation, open the Inspector by click on the "i" in Studio One's Pattern Editor and select the desired command. By default, these commands are controlled by the user functions Pads 6-8. See Section 3.1.5 for more information.



### 3.6 Transport Controls



#### Click

- Press the Click button to enable/disable the metronome.
- Press Shift + Click to turn the preroll on and off.

#### Record

- Press the Record button to engage recording at the current playback position.
- Pressing Record again will disable recording but continue playback

#### Play

- Press the Play button to begin playback at the current position.

#### Loop

- Press Shift + Play to toggle loop mode on and off.

#### Stop

- Press Stop once to stop playback at the current position.
- Press the Stop button twice to return playback to the loop start.

#### Return to Zero

- Press Stop three times to return playback to the start position.

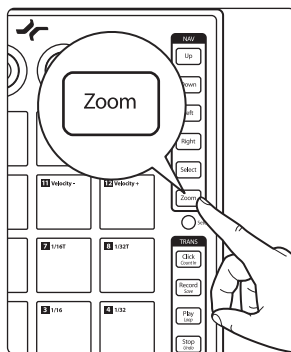
#### Save Session

- Press Shift + Record to Save your session.

#### Undo

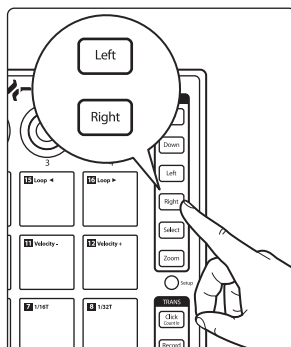
- Press Shift + Stop to undo the last action.

### 3.7 Zooming



While holding the Zoom button, the Navigation buttons allow you to adjust the current view.

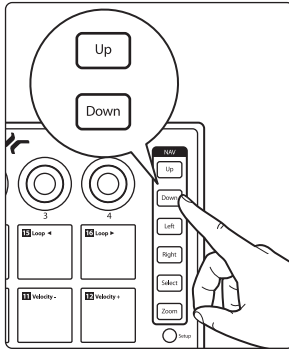
#### Horizontal Zoom



Pressing Zoom with either the Left or Right buttons simultaneously will zoom in or out respectively.



### Vertical Zoom

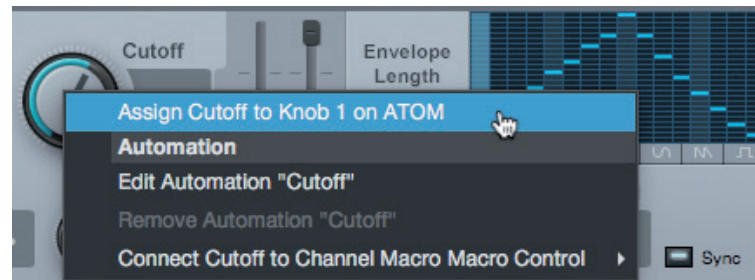
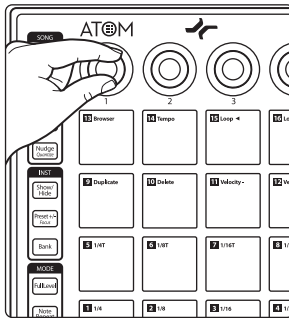


Pressing Zoom with either the Up or Down buttons simultaneously will zoom in or out respectively.

## 3.8 Customizing Knobs

Any parameter for any plug-in or function in Studio One can be mapped to any of the four knobs. By default, Studio One native plug-ins have functions mapped to these controls already. For example, in Impact XT, Knob 1 controls sample volume, Knob 2 controls sample pan, Knob 3 controls sample pitch, and Knob 4 controls sample decay.

To change these functions, move the knob you'd like to use, right-click on the desired parameter, and select "Assign to Knob."



There are 4 banks for the 4 encoders (16 total plugin assignments). To view assignments, open the External Devices Editor. Above the 4 encoders in the External Devices Editor, you will see 1-4.

To change banks, press and hold ATOM's Bank button, then:

- Navigation Up = Bank 1
- Navigation Down = Bank 2
- Navigation Left = Bank 3
- Navigation Right = Bank 4

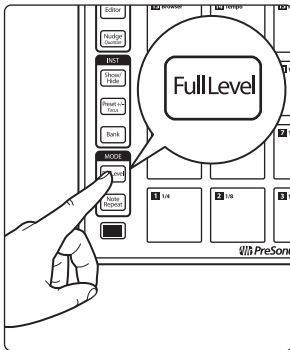
The currently selected bank will illuminate on ATOM as indicated above.

## 4 Advanced Ableton® Live Integration

Ableton Live v.10.1.5 or later offers advanced integration with ATOM (v3.4 Firmware or later). When connected to Live, your ATOM pad controll will control four tracks and four Scenes at a time. The tracks and scenes currently controlled by ATOM are surrounded by a colored border in Live. The function of the pads on ATOM themselves is determined by which Pad Mode is selected.

**Power User Tip:** Pressing and holding a mode button will change to another mode temporarily. Once you release the button, ATOM will jump back instantly to the last mode selected.

### 4.1 Pad Mode: Session



Pressing the Full Level button engages the Session Mode. While in this mode, each pad will launch Clips.

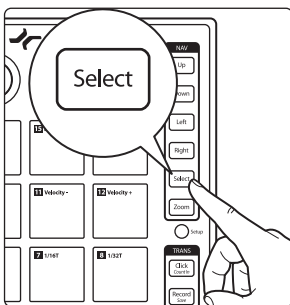
Hold the Shift button to use the last column of pads to launch Scenes.

Hold the Zoom button to use the pads to jump to 4x4 quadrants of Clips to launch.

Use the Up/Down/Left/Right buttons to navigate in increments of one by default.

Press Bank to navigate in groups of 4.

### 4.2 Pad Mode: Channel

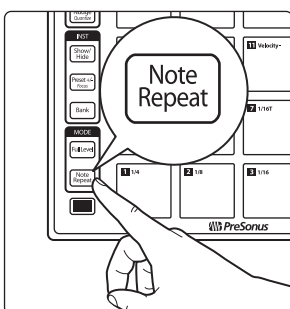


Pressing the Select button engages Channel Mode. While in this mode, each pad can be used to control essential channel functions for four tracks at a time as follows:

- **Arm Tracks.** Use the top row of pads to arm each track for recording.
- **Solo.** Use the second row of pads to solo tracks.
- **Select.** Use the third row of pads to select tracks.
- **Stop.** Use the fourth row of pads to stop tracks.

Use the Up/Down/Left/Right buttons to navigate in increments of one by default. Hold Bank to navigate in groups of 4.

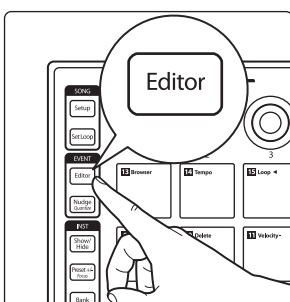
### 4.3 Pad Mode: Note



Pressing the Note Repeat button engages Note Mode. Note Mode offers two different pad layouts, depending on the content of the last armed track or the currently selected track, if no track is armed:

- If a Drum Rack is loaded on the Track, the pads on the ATOM will control the visible pads on the Drum Rack. Use the Up/Down buttons on your ATOM to move the Drum Rack selector up/down in increments of 4 rows.
- If no Drum Rack is loaded, the pads on the ATOM will play chromatic notes. Use the Up/Down buttons on your ATOM to transpose the notes up/down in octave increments.

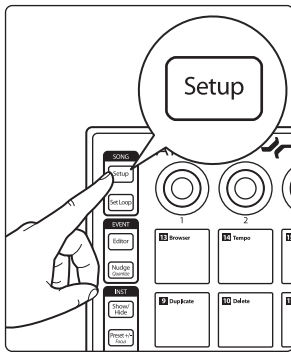
### 4.4 User Mode



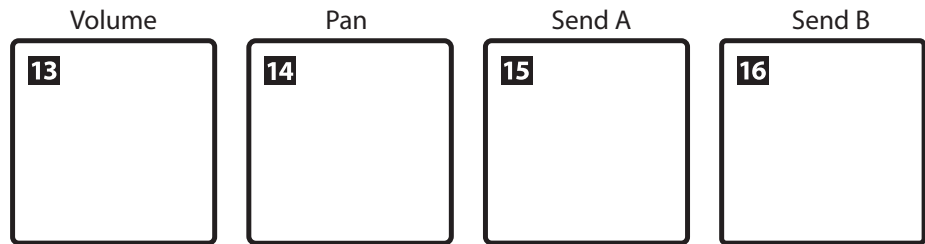
User Mode also allows you to create custom mappings for every control on your ATOM except for the Shift, Zoom, and Editor buttons. To engage User Mode, press the Editor button. These assignments will only be available when User mode is active.

**Note:** While it is possible to reassign the Shift, Zoom, and Editor buttons in User mode, PreSonus recommends that the function of these buttons should not be reassigned as their primary function will be temporarily overwritten. Should one of these buttons get reassigned, select the parameter to which it was reassigned and press Delete on your computer keyboard. This will remove the user assignment and revert the function of the button to its default state.

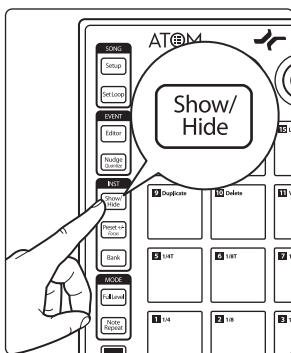
## 4.5 Encoder Assignments



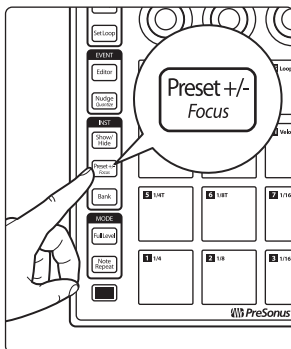
Press the Setup button to change the function of the four encoders on your ATOM to control Volume, Pan, Send A, or Send B using the top row of pads:



## 4.6 View Selection

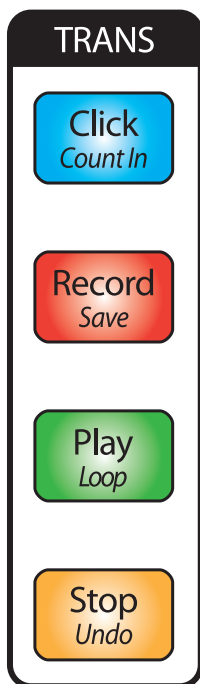


Press the Show/Hide button to toggle the Detail View.



Press the Preset button to toggle between the Session and Arrangement views.

## 4.7 Transport Controls



### Click

- Press the Click button to enable/disable the metronome.

### Record

- Press the Record button to toggle Session Record in Session View.
- In Arrangement View, press the Record button to toggle Arrangement Record.

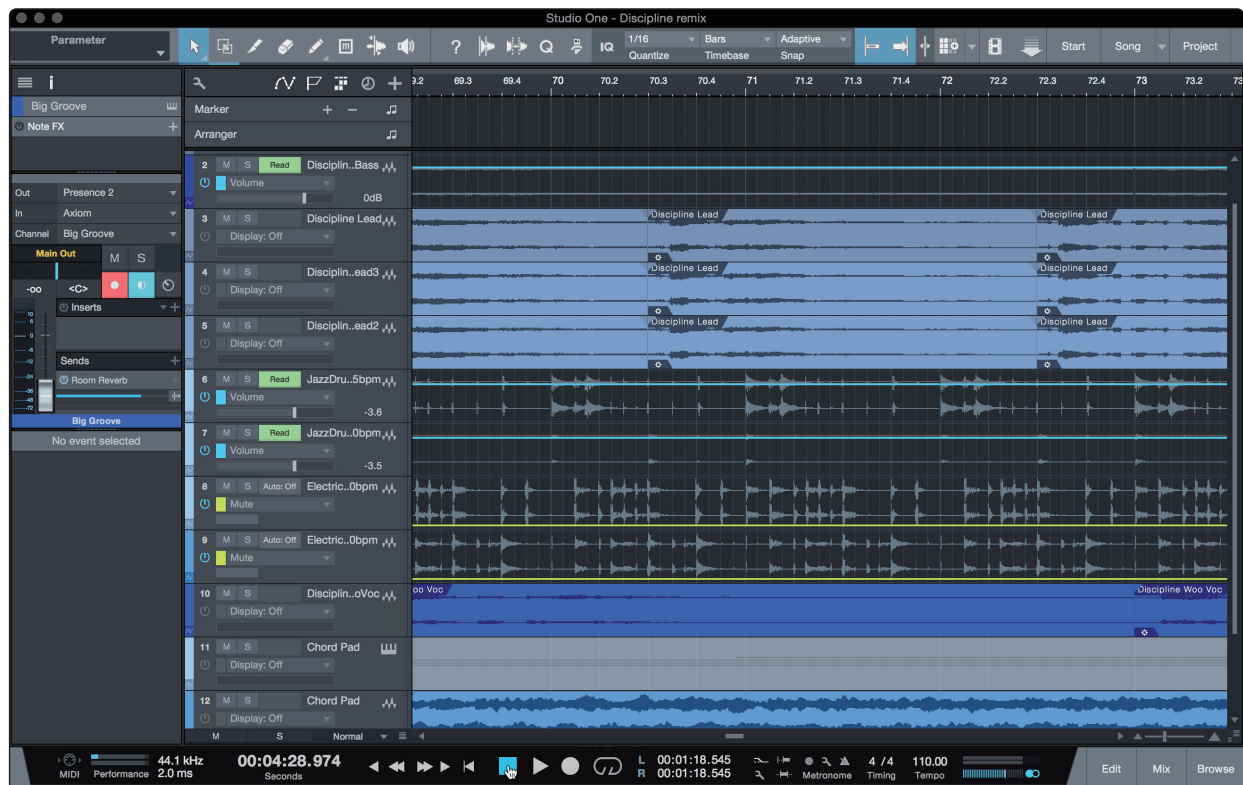
### Play

- Press the Play button to begin playback at the current position.
- Press Shift + Play to toggle Loop.

### Stop

- Press Stop once to stop playback at the current position.
- Press Shift + Stop to undo the last action.

## 5 Studio One Artist Quick Start



All registered ATOM 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.

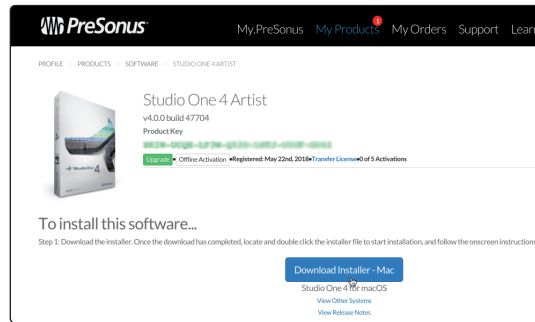
**Power User Tip:** As a valued PreSonus customer, you are eligible for a discount upgrade to Studio One Professional. For more details on the Studio One upgrade program for PreSonus customers, please visit <https://shop.presonus.com/products/software/studio-one-prods>.

### 5.1 Installation and Authorization

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 ATOM. Your product key for Studio One Artist will automatically be registered to your My PreSonus account, along with your hardware registration.

#### Downloading and Running the Studio One Installer

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



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

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

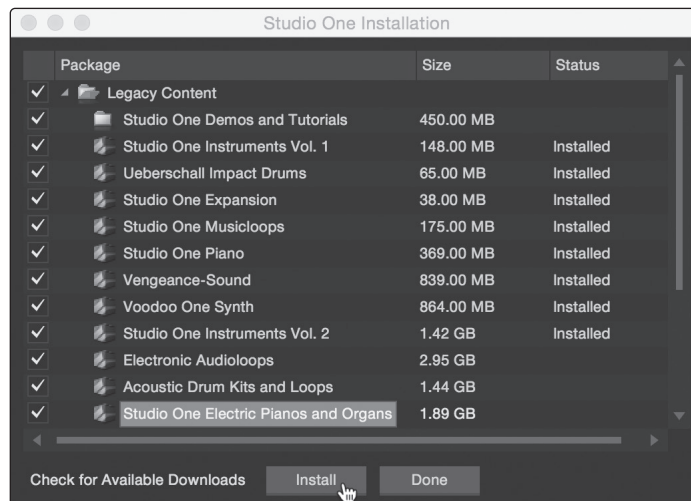
### Authorizing Studio One

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

### Installing Bundled Content for Studio One Artist

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

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



**Power User Tip:** 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.

## 5.2 Setting Up Studio One

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

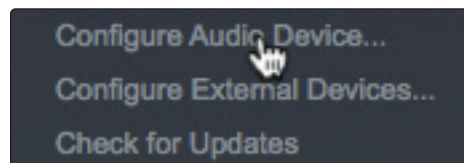
Complete information on all aspects of Studio One Artist is available in the Reference Manual PDF located within Studio One. The information in this tutorial covers only the basic aspects of Studio One Artist and is intended to get you set up and recording as quickly as possible.

### 5.2.1 Configuring Audio Devices

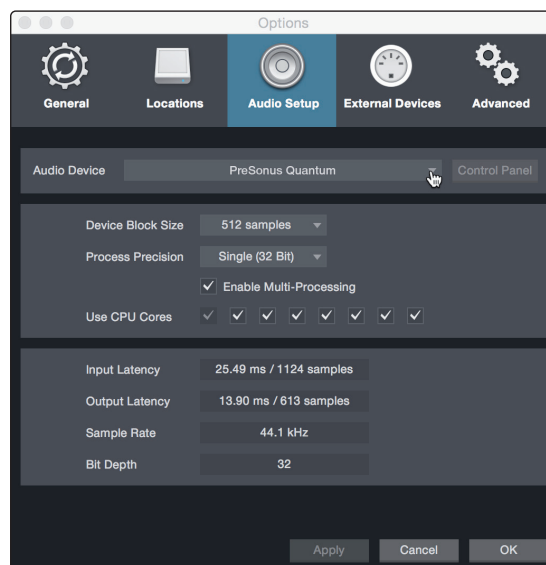
In the middle of the Start page, you will see the Setup area. Studio One Artist automatically scans your system for all available drivers and selects a driver. By default, it will choose a PreSonus driver if one is available.



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



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.



## 5.2.2 Configuring MIDI Devices

From the External Devices window in Studio One Artist, you can configure your MIDI keyboard controller, sound modules, and control surfaces. This section will guide you through setting up other 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.

*Note: Studio One will automatically configure your ATOM for control. No setup is required.*

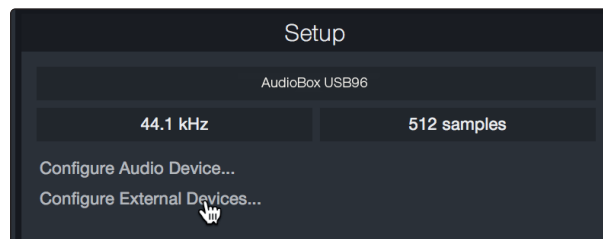
### Setting up a MIDI Keyboard controller

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.

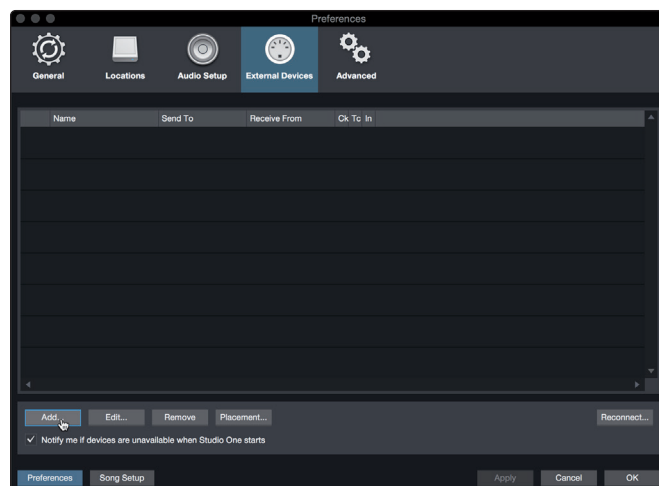
You can set up your external MIDI devices from the Setup area in the Start page. Before setting up a new Song for recording, take a moment to configure external devices.

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.

1. Press Shift+Song Setup on your ATOM or click on the Configure External Devices link in the Setup area on the Start page to launch the External Devices window.

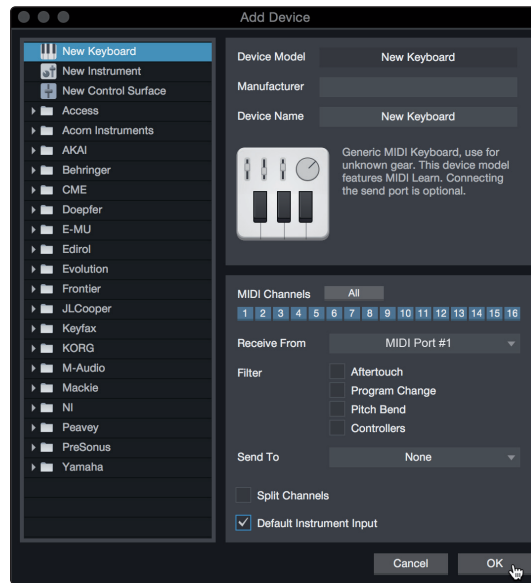


2. Click the Add button. This will launch the Add Device window.





- 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.



- 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.
- Studio One allows you to filter out specific control functions. If you would like Studio One to ignore Aftertouch, Pitch Bend, Program Change, or all CC messages, enable filtering for any or all of these messages.
- In the Receive From drop-down menu, select the MIDI interface input from which Studio One Artist will receive MIDI data (that is, the MIDI port to which your keyboard is connected).

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

- If this is the only keyboard that you will use to control your external synthesizers and virtual instruments, you should check the box next to Default Instrument Input. This will automatically assign your keyboard to control all MIDI devices in Studio One Artist.
- Click "OK."

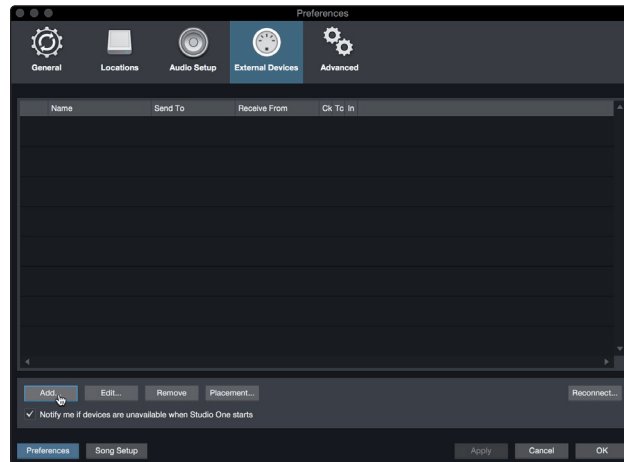
If you have a sound module that you'd like to connect, leave the External Devices window open and proceed to the next part of this section. If not, you can close the window and skip to the next section.

### Setting up an External MIDI Sound Module

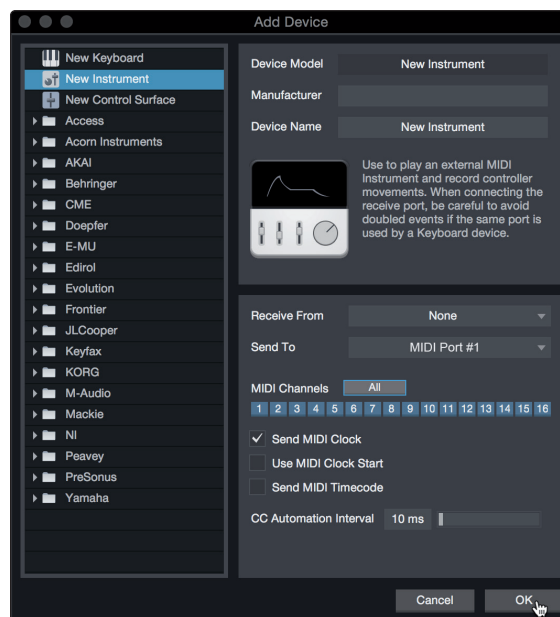
MIDI instrument controllers (keyboards, MIDI guitars, etc.) send musical information, in the form of MIDI data, to tone modules and virtual instruments, which respond by generating sound as instructed. Tone modules can be standalone sound devices or can be integrated into a MIDI instrument, such as a 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.

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



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.



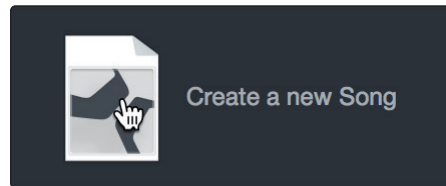
3. Specify which MIDI channels will be used to communicate with this sound module. For most purposes, you should select all MIDI channels. If you are unsure of which MIDI channels to select, we suggest you select all 16.
4. In the Send To menu, select the MIDI interface output from which Studio One Artist 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.

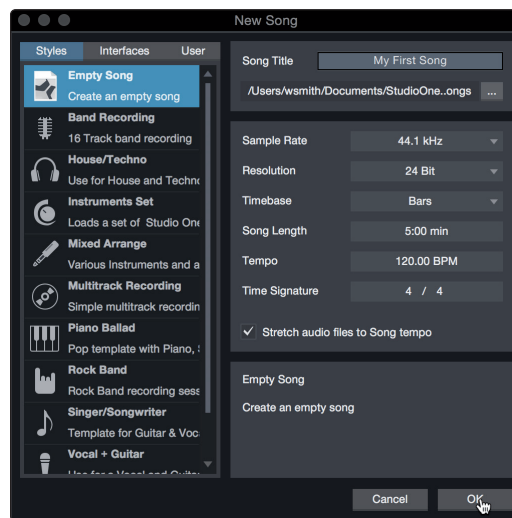
### 5.3 Creating a New Song

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.

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



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.

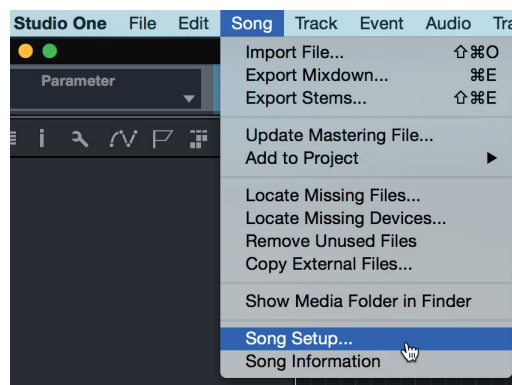


3. Select "Empty Song" from the Templates list. At this point, you should give your Song a name and select your preferred sample rate and bit depth for recording and playback. You can also set the length of your Song and the type of time format you would like the timeline to follow (notation bars, seconds, 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.

#### 5.3.1 Configuring Your Audio I/O

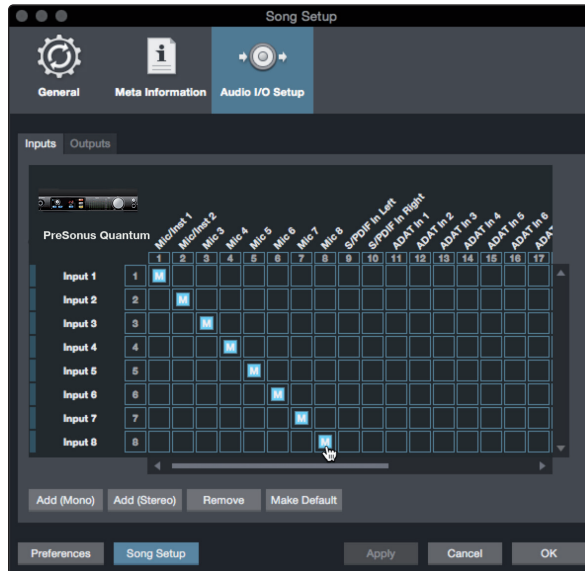
1. Click on Song | Song Setup to set your sample rate and resolution and configure your audio I/O.



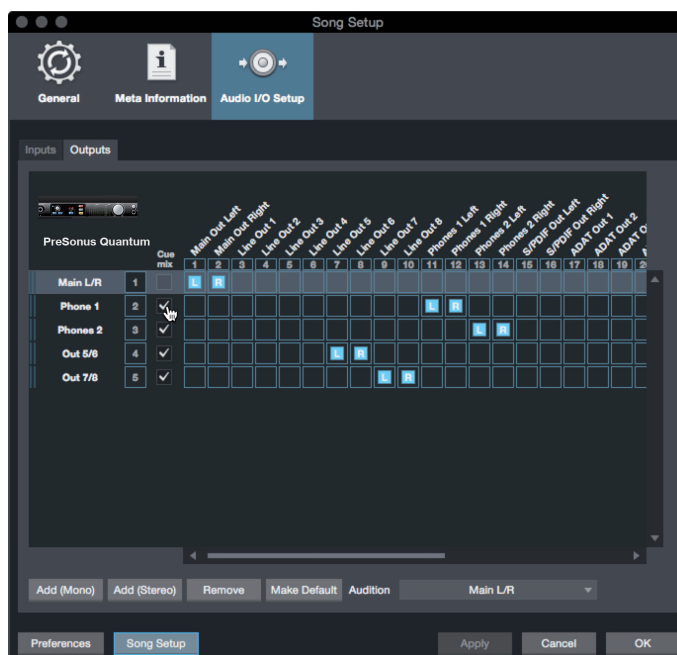
- Click on the Audio I/O Setup tab.



- 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 should also create a few stereo inputs.



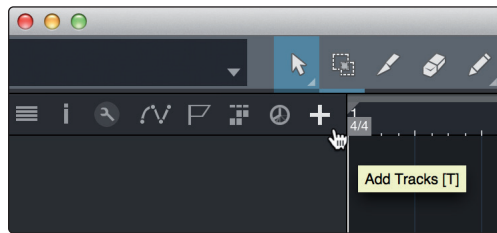
- Click on the Outputs tabs to enable any or all of the outputs on your audio interface. In the lower right corner, you will see the Audition Select menu. This allows you to choose the output from which you will audition audio files prior to importing them into Studio One Artist. In general, you will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



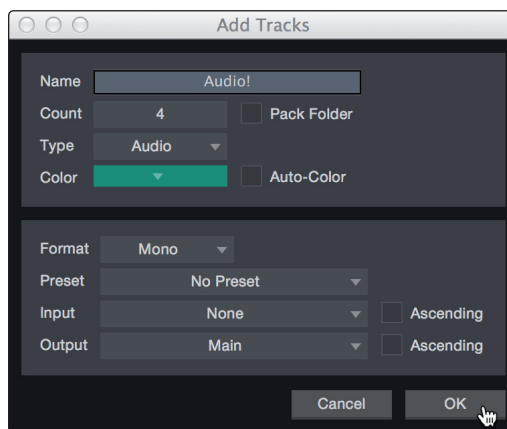
**Power User Tip:** If you would like this I/O configuration to be the same every time you open Studio One, click the Make Default button.

### 5.3.2 Creating Audio and Instrument Tracks

1. 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.



2. In the Add Tracks window, you can customize the track name and color, add a preset rack 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.



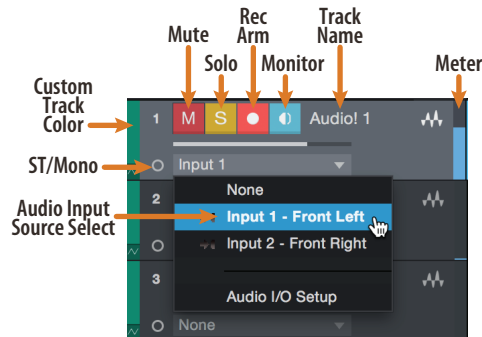
**Audio.** Use this track type to record and playback audio files.

**Instrument.** Use this track to record and playback MIDI data to control external MIDI devices or virtual instrument plug-ins.

**Automation.** This track type lets you create automated parameter controls for your session.

**Folder.** This track helps you to manage your session as well as to quickly edit multiple tracks at once.

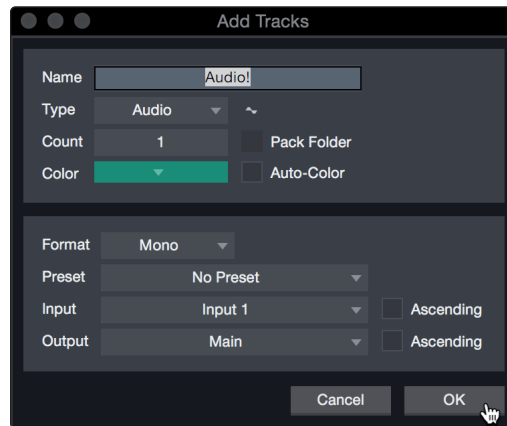
*Power User Tip:* If you would like to add an audio track for each of the available inputs, go to Track | Add Tracks for All Inputs.



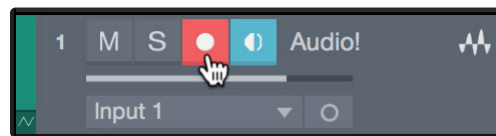
**Note:** Instrument tracks are nearly identical to audio tracks. The Input Source list for Instrument tracks lists available external MIDI devices as well as any virtual instruments that have been added to the Song.

### 5.3.3 Recording an Audio Track

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.



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).



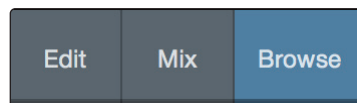
You are now ready to start recording. For complete instructions, please consult the Studio One Reference manual located in Help | Studio One Reference Manual.

### 5.3.4 Adding Virtual Instruments and Effects

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.

#### Opening the Browser

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



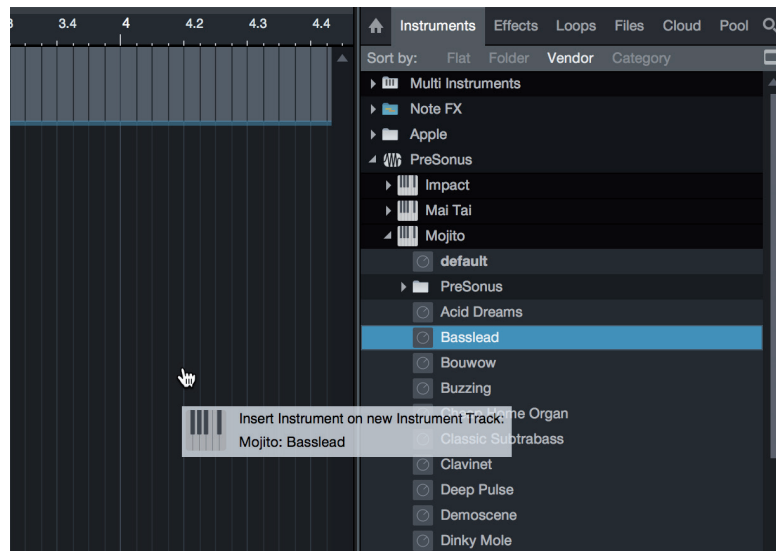
**Edit.** The Edit button opens and closes the audio and MIDI editors.

**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.

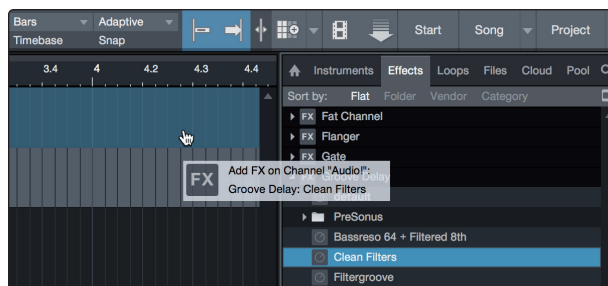
#### Drag-and-Drop Virtual Instruments

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.



### Drag-and-Drop Effects

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.



### 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 of the track.









## 6 MIDI Mapping

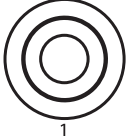
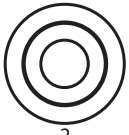


### 6.1 Pads and Banks

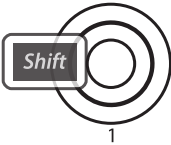
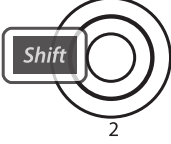
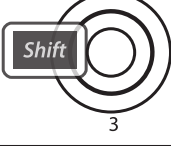
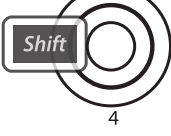
Pad Number	Bank 1 MIDI Note Value	Bank 2 MIDI Note Value	Bank 3 MIDI Note Value	Bank 4 MIDI Note Value	Bank 5 MIDI Note Value	Bank 6 MIDI Note Value	Bank 7 MIDI Note Value	Bank 8 MIDI Note Value
<b>1</b> 1/4	C1	E2	G#3	C5	E6	G#7	E-2	G#-1
<b>2</b> 1/8	C#1	F2	A3	C#5	F6	A7	F-2	A-1
<b>3</b> 1/16	D1	F#2	A#3	D5	F#6	A#7	F#-2	A#-1
<b>4</b> 1/32	D#1	G2	B3	D#5	G6	B7	G-2	B-1
<b>5</b> 1/4T	E1	G#2	C4	E5	G#6	C8	G#-2	C0
<b>6</b> 1/8T	F1	A2	C#4	F5	A6	C#8	A-2	C#0
<b>7</b> 1/16T	F#1	A#2	D4	F#5	A#6	D8	A#-2	D0
<b>8</b> 1/32T	G1	B2	D#4	G5	B6	D#8	B-2	D#0
<b>9</b> Duplicate	G#1	C3	E4	G#5	C7	E8	C-1	E0
<b>10</b> Delete	A1	C#3	F4	A5	C#7	F8	C#-1	F0














Pad Numbers Continued	Bank 1 MIDI Note Value	Bank 2 MIDI Note Value	Bank 3 MIDI Note Value	Bank 4 MIDI Note Value	Bank 5 MIDI Note Value	Bank 6 MIDI Note Value	Bank 7 MIDI Note Value	Bank 8 MIDI Note Value
 11 Velocity -	A#1	D3	F#4	A#5	D7	F#8	D-1	F#0
 12 Velocity +	B1	D#3	G4	B5	D#7	G8	D#-1	G0
 13 Browser	C2	E3	G#4	C6	E7	C-2	E-1	G#0
 14 Tempo	C#2	F3	A4	C#6	F7	C#-2	F-1	A0
 15 Loop ◀	D2	F#3	A#4	D6	F#7	D-2	F#-1	A#0
 16 Loop ▶	D#2	G3	B4	D#6	G7	D#-2	G-1	B0









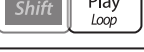


6.2 Knobs

Knob	MIDI CC	HEX Value	Range
 1	14	B0 0Eh	0-127
 2	15	B0 0Fh	0-127
 3	16	B0 10h	0-127
 4	17	B0 11h	0-127

Knob	MIDI CC	HEX Value	Range
	18	B0 12h	0-127
	19	B0 13h	0-127
	20	B0 14h	0-127
	21	B0 15h	0-127

### 6.3 Buttons

Button	MIDI CC	HEX Value
	27	B0 1Bh
	28	B0 1Ch
	29	B0 1Dh
	30	B0 1Eh
	23	B0 17h
	31	B0 1Fh
	85	B0 55h
	86	B0 56h
	87	B0 57h
	89	B0 59h
	90	B0 5Ah

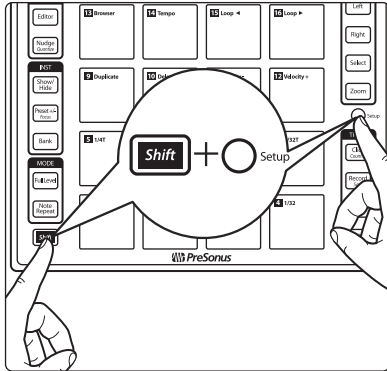
Button	MIDI CC	HEX Value
	102	B0 66h
	103	B0 67h
	104	B0 68h
	105	B0 69h
	106	B0 6Ah
	107	B0 6Bh
	108	B0 6Ch
	109	B0 6Dh
	110	B0 6Eh
	111	B0 6Fh
	112	B0 70h

## 6.4 Advanced Setup Mode

Your ATOM controller allows you to customize the MIDI channels for several functions using Advanced Setup Mode.

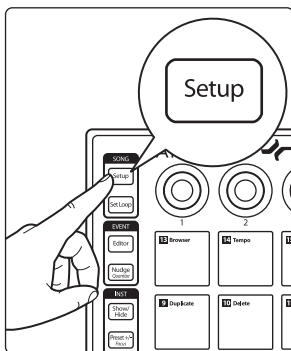
To launch Advanced Setup Mode, press and hold the *Shift* and *Setup* buttons simultaneously.

While Advanced Setup Mode is active, the 16 pads on your ATOM controller will not send MIDI messages, rather they will act as channel select buttons.



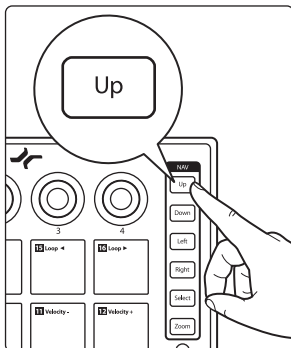
**Note:** Changes made in Advanced Setup Mode will not be reflected while Studio One Native control is active. This mode is designed to customize ATOM for use with 3rd party applications.

### 6.4.1 Select Pad MIDI Channel



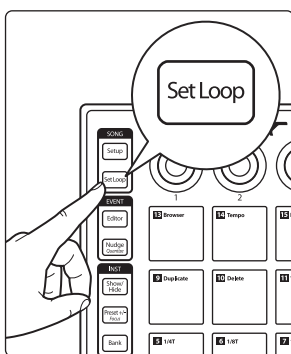
By default, the 16 pads send their MIDI messages on MIDI Channel 10. Pressing the Song Setup button while Advanced Setup Mode is active will allow you to change the MIDI channel for the 16 pads on your ATOM.

Press the number of the pad for the desired MIDI channel. For example, to change the MIDI channel to Channel 3, press Pad 3.



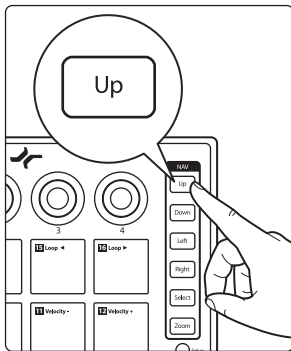
To reset the MIDI Channel to default (MIDI Channel 10), press the Up button.

### 6.4.2 Select Knob MIDI Channel



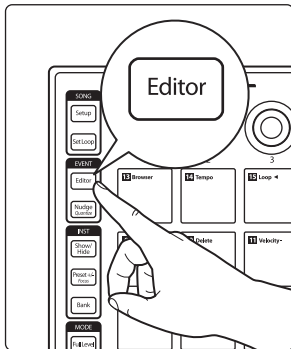
By default, the 4 knobs send their MIDI messages on MIDI Channel 1. Pressing the Set Loop button while Advanced Setup Mode is active will allow you to change the MIDI channel for the 4 knobs on your ATOM.

Press the number of the pad for the desired MIDI channel. For example, to change the MIDI channel to Channel 3, press Pad 3.



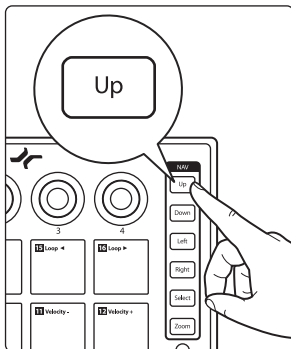
To reset the MIDI Channel to default (MIDI Channel 1), press the Up button.

### 6.4.3 Select Button MIDI Channel



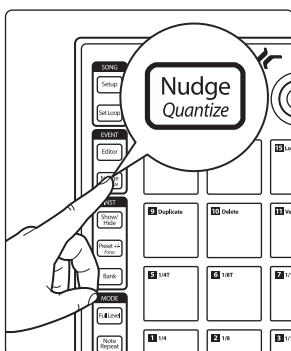
By default, the 22 button functions listed in **Section 6.3** send their MIDI messages on MIDI Channel 1. Pressing the Editor button while Advanced Setup Mode is active will allow you to change the MIDI channel for the buttons on your ATOM.

Press the number of the pad for the desired MIDI channel. For example, to changed the MIDI channel to Channel 3, press Pad 3.



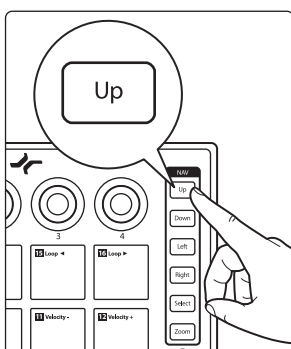
To reset the MIDI Channel to default (MIDI Channel 1), press the Up button.

### 6.4.4 Select Pressure MIDI Channel



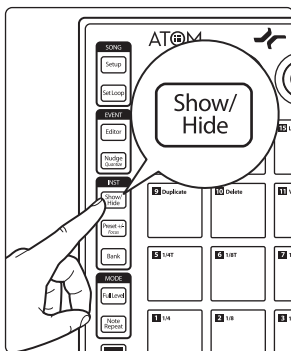
By default, the 16 pads send their MIDI Pressure messages on MIDI Channel 10. Pressing the Nudge button while Advanced Setup Mode is active will allow you to change the MIDI channel on which the 16 pads will send Pressure messages.

Press the number of the pad for the desired MIDI channel. For example, to changed the MIDI channel to Channel 3, press Pad 3.



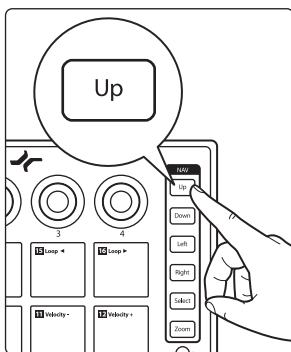
To reset the MIDI Channel to default (MIDI Channel 10), press the Up button.

### 6.4.5 Turn Pad Note On/Off



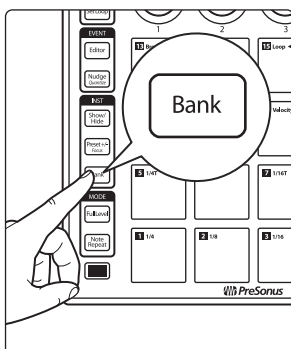
By default, the 16 pads on your ATOM send Note On/Off messages on every bank. Using Advanced Setup mode, you can configure any of the pads on Bank 1 to only send CC messages. To disable Note On/Off for any pad, press the Show/Hide button while Advanced Setup Mode is active. Pads that are illuminated have Note On/Off enabled. Pads that are not illuminated will send CC messages only.

*Note: You must be on Bank 1 when you enter Advanced Setup mode for this option to be available.*



To reset to default, press the Up button.

### 6.4.6 Adjusting Brightness



To adjust the brightness of the LEDs on your ATOM, press the Bank button while Advanced Setup mode is active. This will allow you to advance through the three brightness options available.

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

## Andouille & German Red Cabbage Po-Boys

### Ingredients:

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

### Cooking Instructions:

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

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

# ATOM

## Production and Performance Pad Controller

### Owner's Manual

