

# PATCH APP

APRIL 22, 2022

## USER MANUAL



Cover.....	1
Table Of Contents.....	2
Thank you from Flock Audio.....	3
Introduction to the PATCH APP.....	4
The PATCH APP Overview.....	5
Hardware Index & Rack Space Legend.....	6
Stored Routings Menu (Part 1).....	7
Stored Routings Menu (Part 2).....	8
Active Routings Section.....	9
Understanding Signal PATHs.....	10
Understanding PATH Multing.....	11
User Operation Instructions.....	12
Toggle & Control Center (Part 1).....	13
Toggle & Control Center (Part 2).....	14
Hardware Setup Menu.....	15
Settings Menu.....	16
User Preferences.....	17
User Customize.....	18
Multiple Unit Setup Menu (Part 1).....	19
Multiple Unit Setup Menu (Part 2).....	20
Multiple Unit Setup Menu (Part 3).....	21
Routing Examples (Part 1).....	22
Routing Examples (Part 2).....	23
Routing Examples (Part 3).....	24
Stereo Pairing.....	25
Default Launch Routing.....	26
User Tips & Tricks.....	27

Troubleshooting.....	28
Software & System Requirements.....	29
End.....	30



## Thank you...

Where do I begin to start by saying Thank you for your support...

I started working on a conceptual design known as "PATCH" in early 2016 when I decided to leave my stable career and chose to pursue the path less travelled of designing and developing a better & more efficient process for professional audio recording engineers in the depths of my basement home recording studio.

In need of a better solution other than the available 1870's technology known as a traditional patch bay, the concept was born to create a fully digitally controlled but 100% analog circuit routing system that wouldn't color or alter the audio signals passing through it.

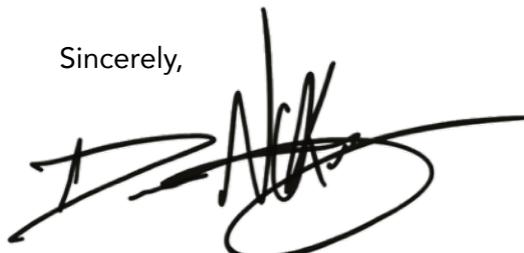
After 2 years of strenuous work and constant focus, Flock Audio the company I started, created the worlds first and most advanced digitally controlled analog audio routing system with features never before possible in conventional analog audio routing.

I'm honoured to have so many customers believe in what Flock Audio stands for...Innovations above Expectations. We have an incredible team of professionals from engineers, software developers & everyone in-house who helped create this one of kind piece of professional audio history.

We look forward to providing the pro audio world with more innovations and excellent service to help assist aspiring and seasoned professionals to create masterpieces for years to come.

Thank you again for choosing to make Flock Audio a part of your professional audio identity.

Sincerely,



Darren Nakonechny  
(CEO/Director/Founder)



## PATCHAPP



## INTRODUCTION TO THE PATCH APP

The PATCH APP software application (OSX & Windows compatible) is designed with familiarity in mind. PATH's in the application represent audio signal flows from top to bottom. Signal flows are divided up into single vertical columns allowing users to drag + drop available analog audio equipment connected to the PATCH Series hardware component. This analog audio equipment is cataloged in the Hardware Index located on the left side of the PATCH APP.

This manual will go more in-depth into the functions, features and recommended usage of the Flock Audio PATCH APP.

## SOFTWARE CONTROLLER OVERVIEW

### Hardware Index

All external audio equipment connected to the PATCH Series hardware will be cataloged in this Index.

### PATH

All signal flows in the PATCH APP are referred to as PATH's. PATH's represent an active signal flow chosen by the user. All PATH's are shown vertically in the Active Routings section of the PATCH APP. PATH signal flows go from top to bottom in each PATH Routing column.

### "M" Mute Paths

Users can easily Mute entire PATH's by Clicking the "M" at the bottom of each PATH.

### "S" Solo Paths

Users can Solo entire PATH's by Clicking the "S" at the bottom of each PATH. Note: If you have Multiple PATH's Soloed, Un-Solo All PATH's by Holding Command + Clicking "S".

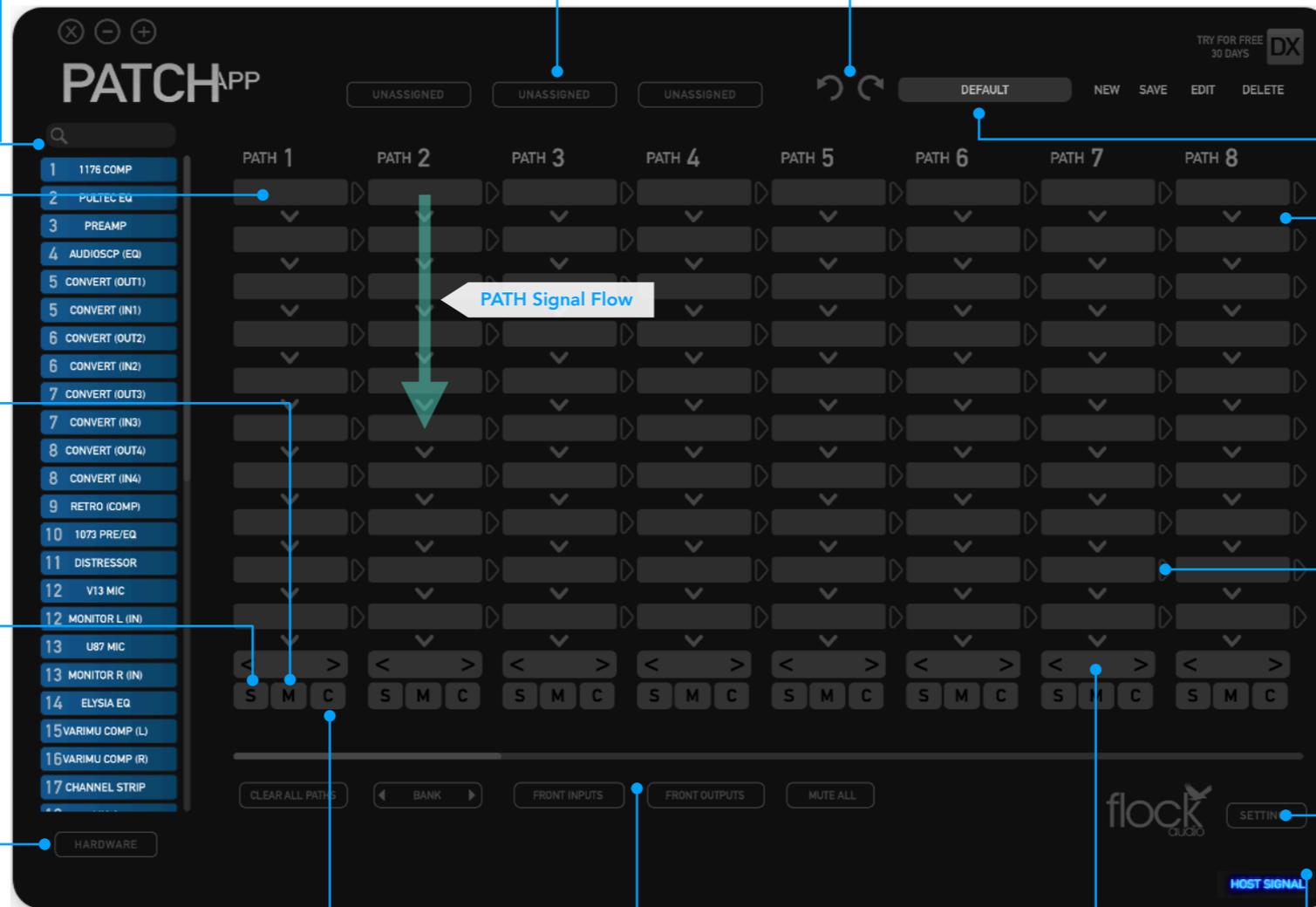
### Hardware Setup Menu

This menu is where all external audio equipment connected to the PATCH Series System's hardware is managed and named accordingly to the users preference. This Hardware Setup Menu also includes various other setting controls Including: 48V Safeguard Toggles, Master 48V Bypass Toggles, Digital Rack Number Controls and Link/Unlinking controls.

### Quick Strip

Users can choose up to 3 Stored Routings to keep in this menu, making their most frequently used Routings easier to access.

# PATCH APP 3.0



### "C" Clear Single PATH

Clicking the "C" at the bottom of each PATH can clear individual Routings on each PATH.

### Toggle & Control Center

The Toggle & Control Center allows users to quickly control viewing options and manage active analog audio Routing signals. The Toggle section allows users to redirect Inputs & Outputs 1-2 (Patch XT), 31-32 (PATCH) and/or 16 (PATCH LT) from the rear side of the PATCH Series Hardware to the Front Panel Inputs & Outputs.

### Movable PATH Arrows

These arrows allow the user to move entire populated PATH's (Signal Chains) left or right throughout the Active Routing Grid.

### Undo/Redo

Users can quickly undo/redo a Routing choice or use the Undo/Redo buttons as a quick A/B reference.

### Routings Menu

Create, store, recall & manage all existing analog Routings from the Routings Menu. This menu allows the user to store & recall desired analog audio Routings.

### 48V Phantom Power

Individually controlled 48V phantom power will appear on the first slot of each Digital Rack Space when a "48V allowed" Input Item is placed in the first slot.

### Multing

By clicking "" located to the right-side of each Digital Space it will enable Multing capability, effectively allowing you to split a signal processing chain into multiple PATH's.

### Settings Menu

User preference settings, support, updates & multiple unit setup parameters are located in the Settings Menu.

### Host Signal

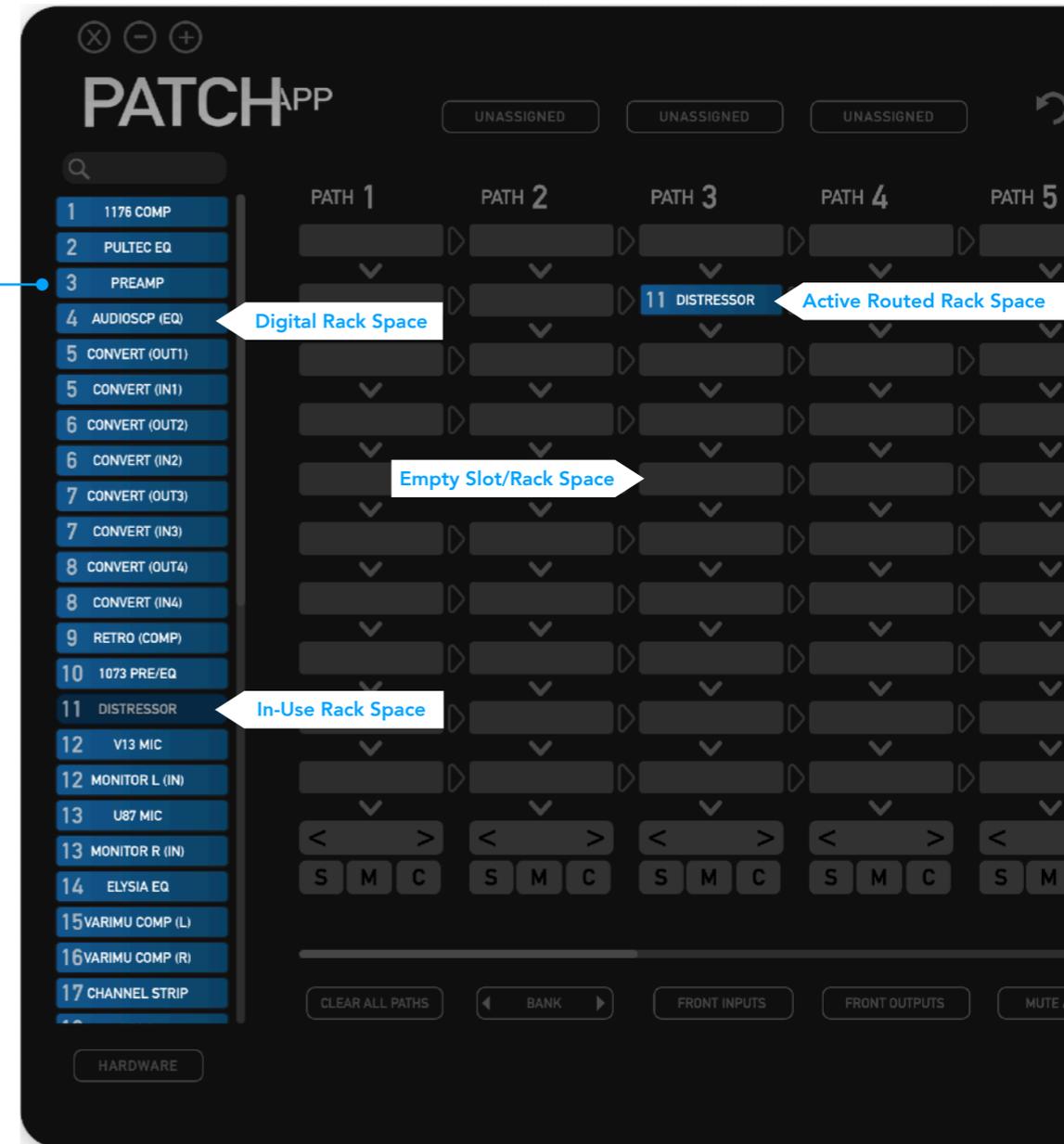
This indicator will illuminate in blue when the PATCH APP is properly communicating with the PATCH Series Hardware. If Host Signal is red, the connection between the Software & Hardware needs to be reconnected.

## Digital Rack Space Legend

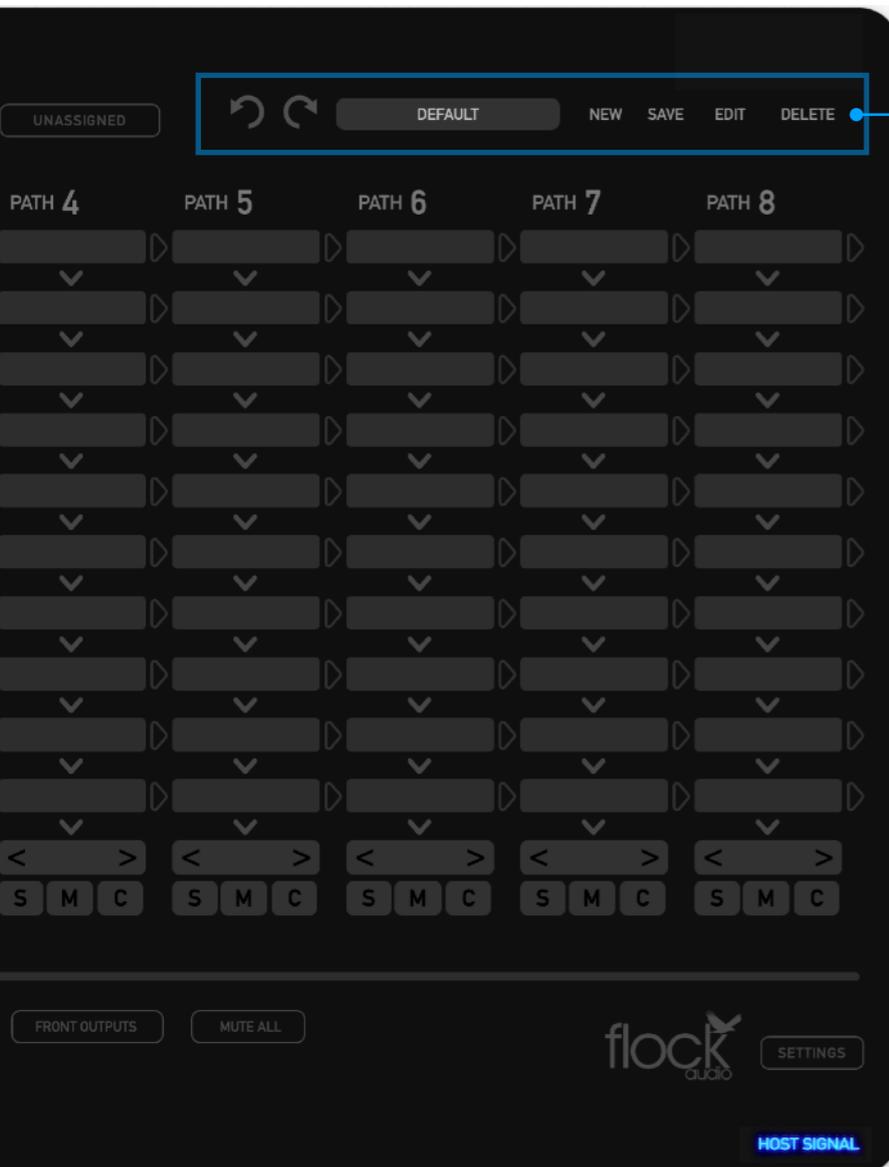
### HARDWARE INDEX

Users will catalog all of their external audio equipment physically connected to the PATCH Series Hardware system within one easily organized index list. The Hardware Index allows the user to scroll through and Drag + Drop “Digital Rack Spaces” into desired signal flow PATH’s in the Active Routings section of the app. The Hardware Index is equipped with a search field located at the top of the Hardware Index, allowing users to search for desired analog audio equipment.

Preferred user preferences for the Hardware Index are located in the Hardware Setup Menu below the Index, which will be covered later on in this user manual.



## Routings Menu Overview



### STORED ROUTINGS MENU

Create, store & recall Routings from the PATCH APP's Routing Menu. Users can create active Routings and store them for later recall with this simple and easy to use user menu. The menu is a dropdown-accessible menu.

**New** - Clicking "New" will open a Save-As window allowing the user to save a desired active Routings in the the Routings Menu Folder.

**Save** - When a previously stored Routing is active and changes are made to the Routing by the user, clicking "Save" will update the previously stored Routing in the Routings Folder with the modified changes.

**Edit** - If a user chooses to change the name of their previously stored Routing, clicking "Edit" will open a Save-As window allowing the user to rename and store the existing or modified Routing.

**Delete** - When an active stored Routing is present, a user will be able to delete this stored Routing from the Routings Menu by clicking "Delete".



# STORED ROUTINGS MENU



## ROUTING MENU

Click this Icon to access your Stored Routings Menu.

### Routings Menu Options

#### SEARCH FIELD

Searchable Field for "Saved" Routing Configurations.

#### EDIT ROUTINGS

When toggled, this function allows users to change their Default Launch Routing and rearrange their list of Stored Routings.

#### IMPORT & EXPORT ROUTINGS

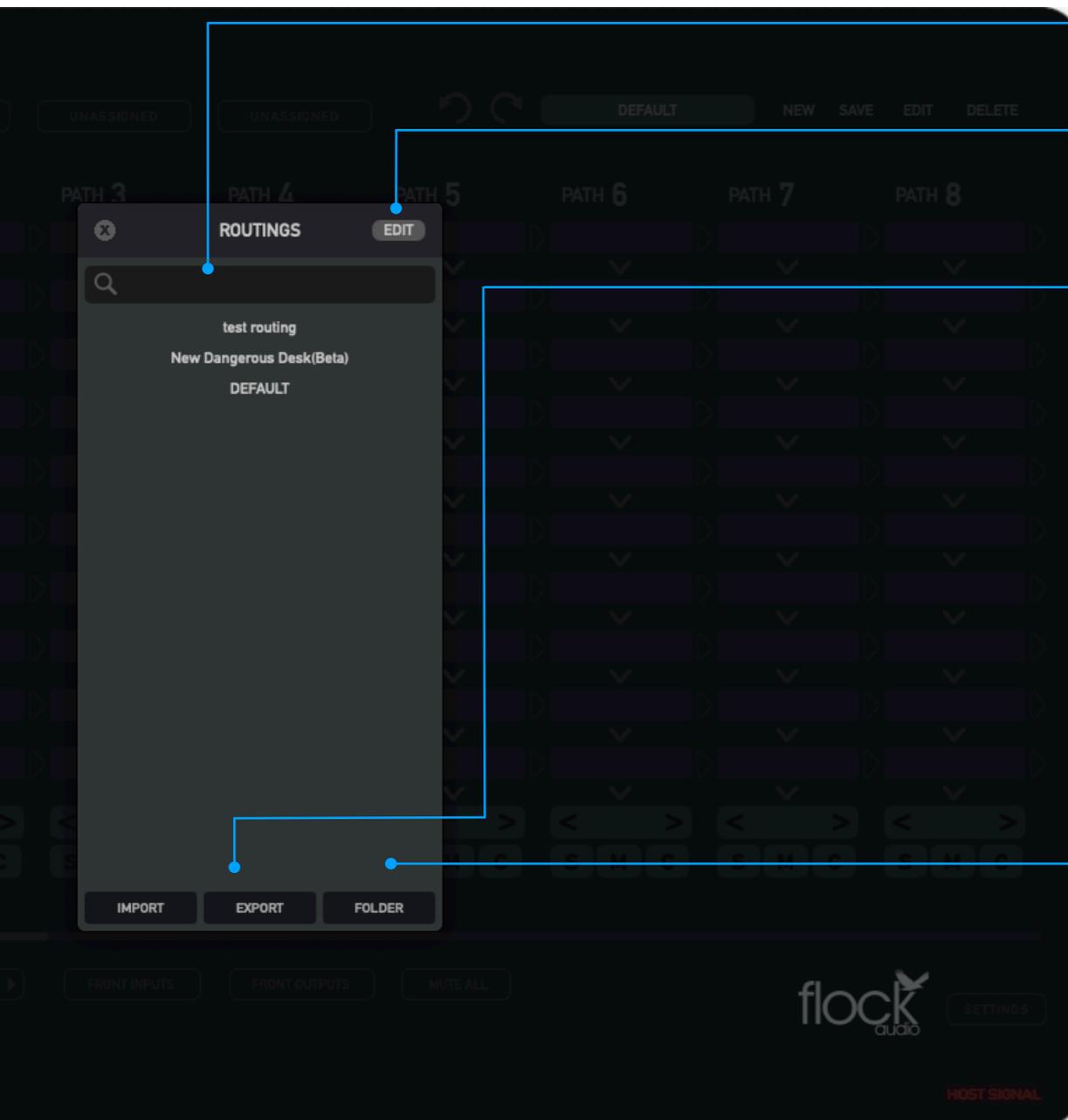
Users can easily Import or Export selected routings by opening the Routings Dropdown Menu. Once a Routing is "Saved" or "Stored", users can select to "Export" this Routing into a client's session or desired folder of choice for further archiving.

Once the Routing is exported into another folder, users can choose "Delete" in the Dropdown Menu to avoid taking up space in the Routings Dropdown Menu. Deleting this Routing in the Dropdown Menu after exporting to a separate folder will not delete the new copy in the new desired folder location.

Users can also Import saved Routings from other folder locations by selecting "Import" to add it into the Routings Dropdown Menu.

#### OPEN ROUTINGS FOLDER

By Default, all saved Routings are stored in a community Routings folder that is easily accessible with-in the PATCH APP Routings Dropdown Menu. By selecting "Open Routings Menu" it will open a dialog window, allowing the user to remove or modify any saved Routings. Note: all PATCH APP Routings are saved in a ".flock" format.



## Active Routings Section Details

### ACTIVE ROUTINGS SECTION

The Active Routings Section of the PATCH APP is where users will drag + drop preferred analog audio equipment cataloged in the Hardware Index in the form of digital racks into desired PATH signal flows. All PATH signal flows go from top (start) to bottom (end).

Each active Digital Rack Space inserted into a PATH will illuminate a teal "V" below it, showing that the connection of that desired signal flow is active.



### MOVABLE PATH ARROWS

Movable PATH Arrows allows users to move entire populated PATH's throughout other various available PATH columns in the Active Routing Section of the PATCH APP Software.



### ADD OR SUBTRACT DIGITAL RACK SPACES

Add Digital Rack Spaces by dragging a hardware unit into the bottom slot of the Routing Grid.

### CUSTOMIZABLE PATH NAMES

Users can customize their PATH names by right-clicking on the top of the PATH and selecting "Edit".



### CLEAR SINGLE PATH

You can clear single PATH signal flows by clicking the "Clear" button at the bottom of each PATH signal flow. When clicking the "Clear" button the system will prompt a user to notify them that they are deleting a single active PATH signal flow.

### 48V PHANTOM POWER

The top Digital Rack Space/Slot of each PATH is equipped with a Hidden 48V Icon that appears when a 48V enabled device is inserted into the first slot. Users can enable 48V by clicking the 48V icon. **Note:** 48V can only be enabled if permission is granted in the Hardware Setup Menu

### S SOLO SINGLE PATH'S

Soloing entire PATH's by clicking the "S" Button positioned at the bottom of each Individual PATH. **Note:** When Multiple PATH's are Soloed, you can Un-Solo all PATH's by Holding:

- "Command + Click S" - To Un-Solo All Racks
- "Cntrl + Click S" - To Un-Solo All Racks

### M MUTE SINGLE PATH'S

Users can easily Mute entire PATH's by clicking the "M" button positioned at the bottom of each individual PATH.

## PATH Details

### PATH'S

PATH'S are signal flows that go from Top to Bottom. As shown in the right hand side example, a teal arrow illustrates the analog audio signal flow as follows:



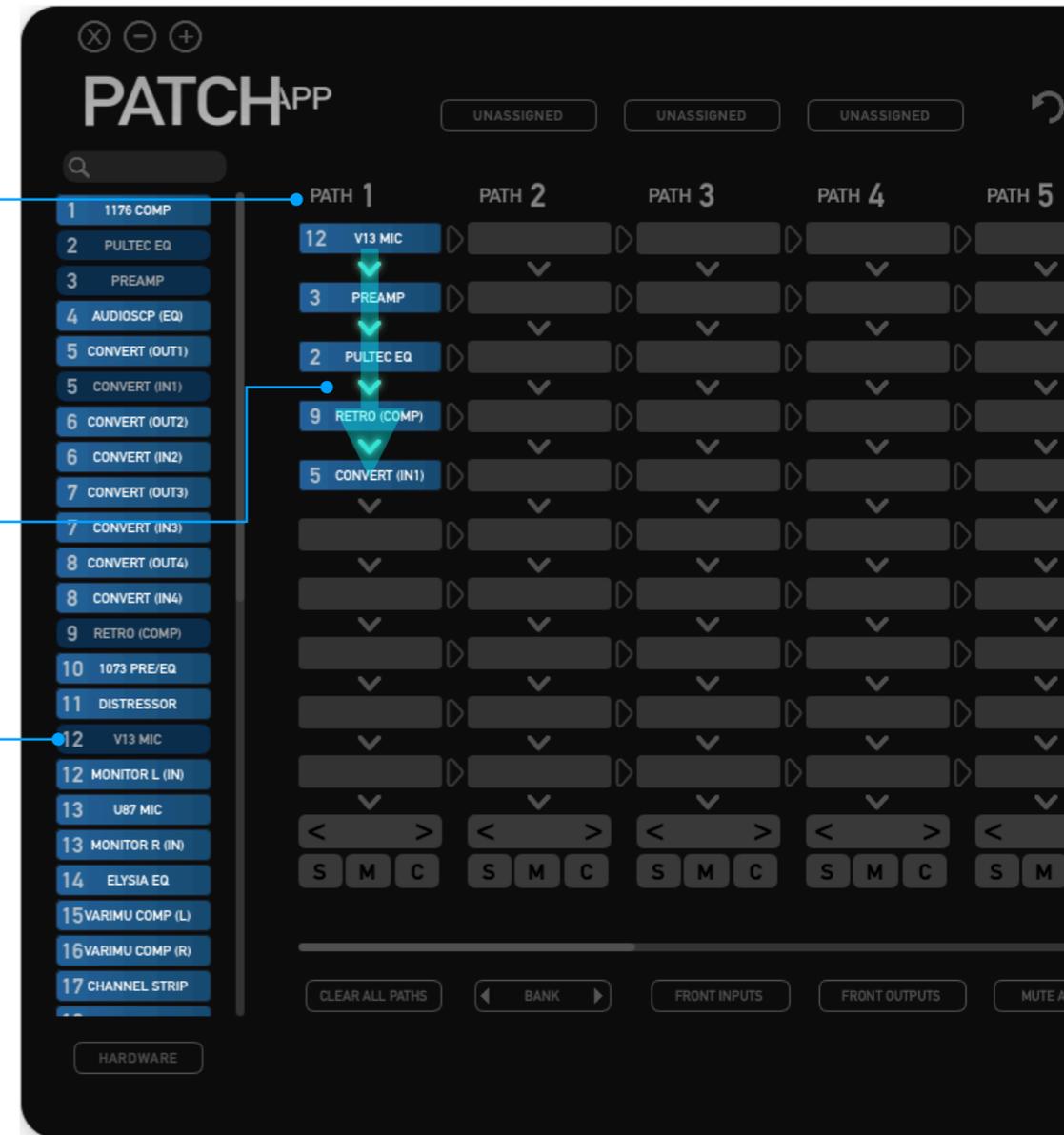
Active PATH Icon Indicator

### USED DIGITAL RACKS

Digital Rack Spaces that are already designated or in-use will show up "darker" or "greyed out" in the Hardware Index. This means this specific Digital Rack Space is already in use (i.e. Routed) in the Active Routings section of the PATCH APP.

#### WHEN CONNECTING MICROPHONES TO PATCH

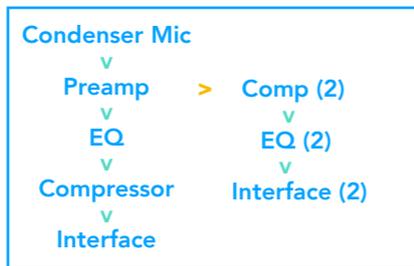
The PATCH Series models are all a +4 Professional line level design. When connecting microphones directly to the PATCH Series hardware, standard audio engineering practices should be exercised such as the understanding that mixing signal levels may or may not exhibit audio level &/or electronic noise floor artifacts. If undesired results are experienced when connecting microphones directly to the PATCH Series, it is recommend to have a dB booster or transparent preamp between the microphone and PATCH model connection (I.E. Mic -> Pre/dB Booster -> PATCH) to achieve the best possible audio signal levels for routing.



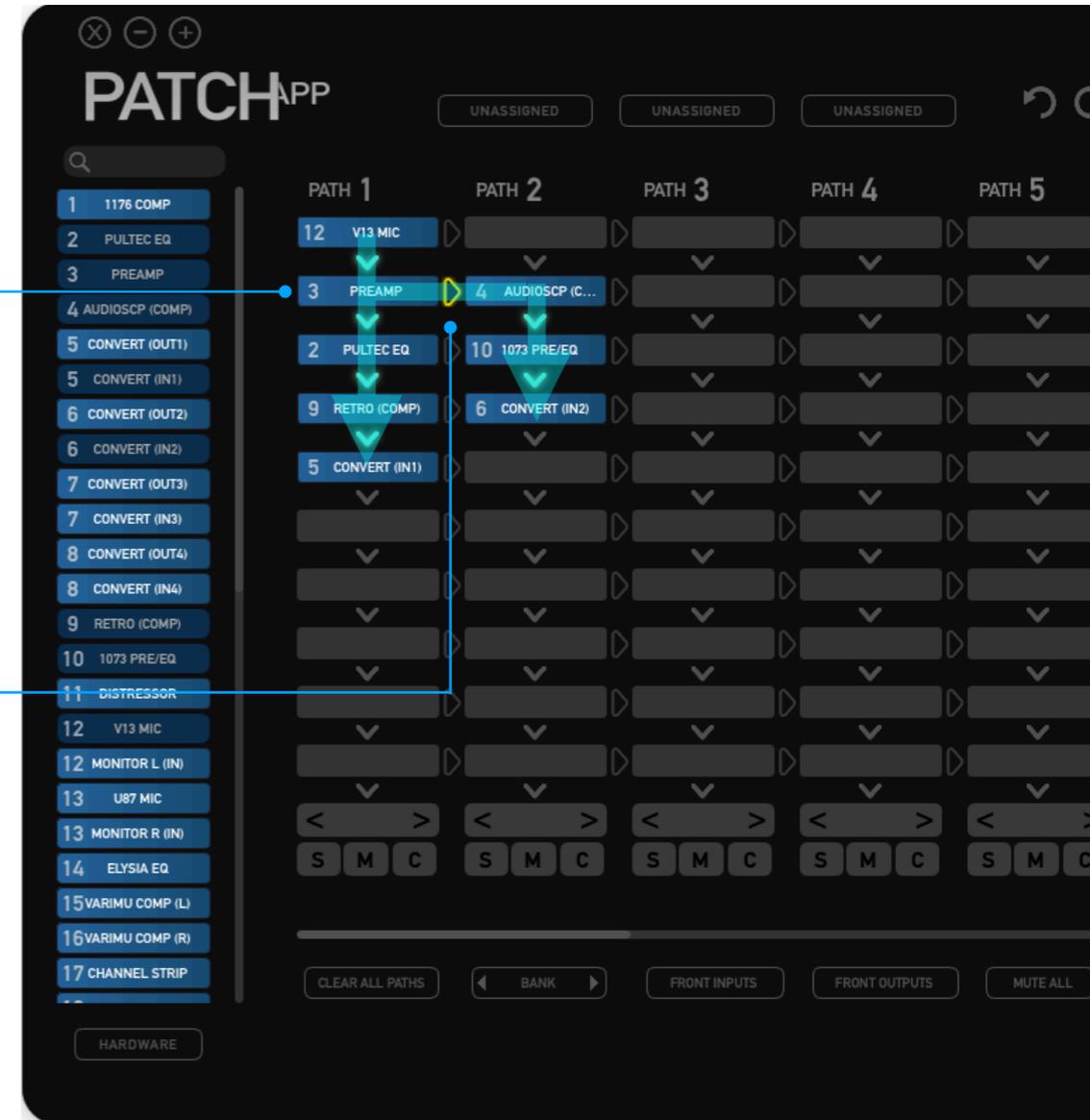
## PATH Multing Details

### MULTING

Multing capability allows a user to split an Active Routing signal flow from a desired Digital Rack Space and process the analog signal through other available analog audio equipment listed in the Hardware Index. The PATCH Series System does not introduce any impedance load issues to the Mult'd signal flows no matter the chosen amount of Mults. Simply click the "▶" icon to enable a Mult (Split Signal).



Multing Toggle Switch



**WHEN CONNECTING MICROPHONES TO PATCH**

The PATCH Series models are all a +4 Professional line level design. When connecting microphones directly to the PATCH Series hardware, standard audio engineering practices should be exercised such as the understanding that mixing signal levels may or may not exhibit audio level &/or electronic noise floor artifacts. If undesired results are experienced when connecting microphones directly to the PATCH Series, it is recommend to have a dB booster or transparent preamp between the microphone and PATCH model connection (I.E. Mic -> Pre/dB Booster -> PATCH) to achieve the best possible audio signal levels for routing.

## User Operation Instructions

### DRAG & DROP OPERATION

In order to create an analog Routing configuration, the user will Click + Drag a preferred Digital Rack Space into the desired PATH space of their choice. Once hovering over the chosen empty rack space, the user will release the mouse button allowing the Digital Rack Space to snap into place, activating the desired Routing connection.

As previously mentioned earlier in the manual, all signal flow PATH's go from top to bottom as shown in the example to the right side of this description. If the Active Digital Rack Space is inserted into an incorrect empty rack space, the user can simply just Click + Drag it into the preferred empty rack space, following the same instructions as previously mentioned.

### RIGHT + CLICK OPTIONS



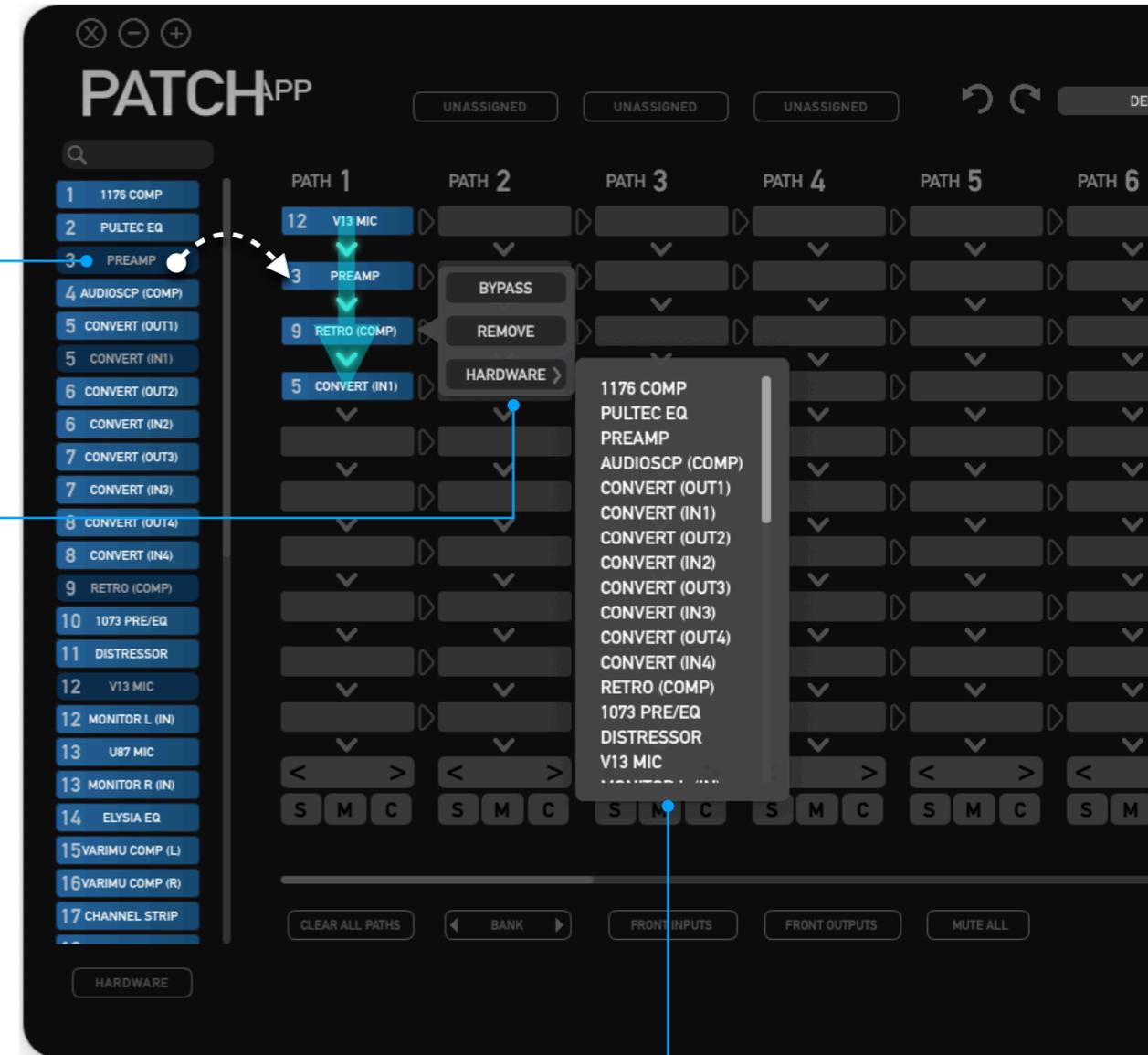
Once a Digital Rack Space is in its desired PATH, the user can Right + Click on the activate Digital Rack Space and choose between the options of "Remove" or "Bypass".

**Remove** - Choosing Remove will disconnect the the selected Digital Rack Space Routing configuration and return the Digital Rack Space to the Hardware Index for future Routing possibilities. Users can also Click + Drag the Active Digital Rack Space back to the Hardware Index to remove it.

**Key Commands:** "Option + Click" - To Remove a Rack Space  
 "Alt + Click" - To Remove a Rack Space

**Bypass** - Choosing Bypass will disable the selected Active Digital Rack Space allowing the signal flow to bypass this specific Rack Space without being affected or processed. Once a Digital Rack Space is Bypassed, it will show in a darker color shade. The user will be able to UnBypass this Digital Rack by Right + Clicking again and choosing UnBypass.

**Key Commands:** "Command + Click" - To Bypass a Rack Space  
 "Ctrl + Click" - To Bypass a Rack Space



Visual Representation of a Bypass Signal Chain.



**Hardware** - Choosing Hardware on any empty or active Digital Rack Space/Slot will open a separate menu allowing the user to add or change a Hardware selection.

## Toggle & Control Center Features

### CLEAR ALL PATHS

The PATCH APP Toggle & Control Center will easily allow a user to Clear (I.E. Delete) all active Routing PATH's previously set by the user. Note: When choosing "Clear All Paths" the system will prompt the user notifying them all their active Routing data will be lost if they choose to proceed without storing the active Routings for a later date.

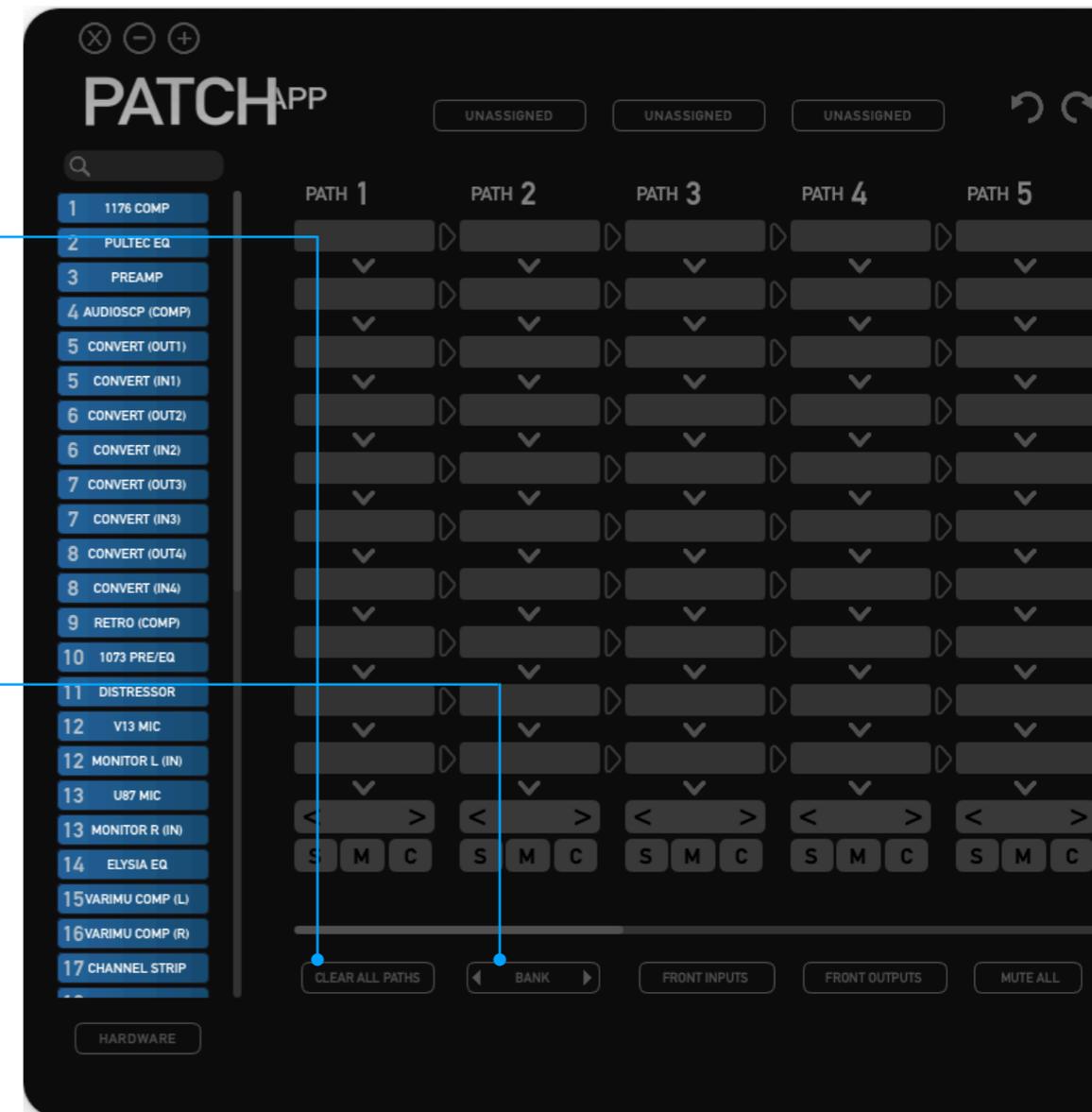
### BANK

Users can easily Bank between groups of "8 PATH's" for quick viewing with-in the Active Routings section of the PATCH Application. Alternatively, users are also able to use the bottom scroll bar &/or a touch sensitive mouse to move between various PATH's.

By clicking the "Bank" button when scrolling between various active PATH's, the PATCH APP will realign the user interface with the closest 8 PATH's available.

### BANK THROUGHOUT THE ROUTING GRID

  "Banking with the following Key Commands"



## Toggle & Control Center Features

### FRONT PANEL INPUTS & OUTPUTS

The PATCH Series Hardware will allow a user to redirect Inputs and/or Outputs 1-2 (PATCH XT), 31-32 (PATCH) or 16 (PATCH LT) from the rear side of the system to the front panel for easy access and integration of outside analog audio equipment.

This function can be engaged by clicking the "Front Inputs" or "Front Outputs" toggle buttons located in the bottom section of the software application. A prompt notification will alert the user that the corresponding inputs &/or outputs will no longer be actively functioning on the rear side of the PATCH Series Hardware unit when the front inputs or outputs are activated in the application.

Note: Inputs 1-2 (XT), 31-32 (PATCH) or 16 (LT), when redirected to the front panel input connectors, will have the ability to have 48V Phantom Power supplied to them when using the PATCH APP software controller.

### MUTE ALL PATHS

This function allows the user to easily mute all active Routings in the Routing Grid. (Red "Mute All" text indicates muted grid)

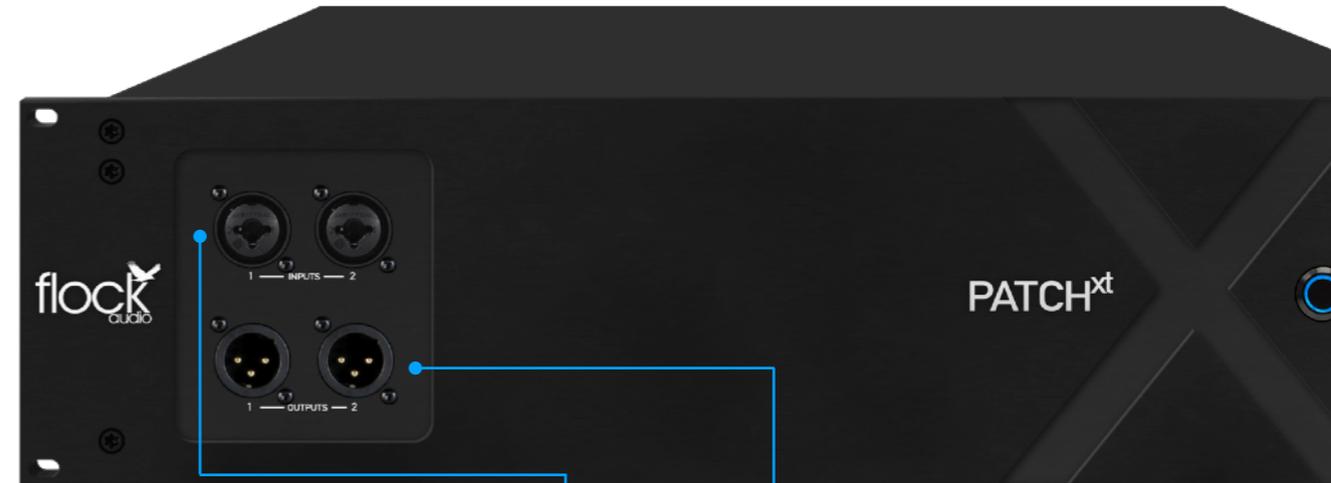


### PATCH XT OPTIONS

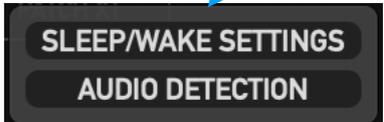
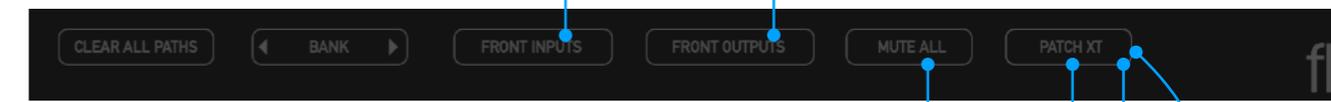
When a PATCH XT unit is connected to the user's computer, this button will appear. When right-clicked, it will show two XT-specific options: "Sleep/Wake Settings" and "Audio Detection".

### SLEEP/WAKE SETTINGS (PATCHXT ONLY)

This feature lets the user choose a time interval after which PATCH XT will automatically go to sleep if it doesn't receive any new Routing commands during that time. The default time interval is 8 hours.

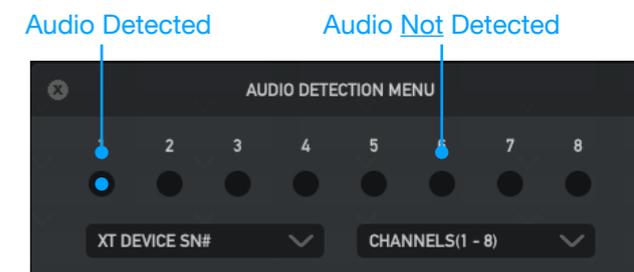


Front Input/Output Channels:  
-PATCH LT: Channel 16  
-PATCH: Channels 31 & 32  
-PATCH XT: Channels 1 & 2



### AUDIO DETECTION (PATCHXT ONLY)

This feature opens a menu where the user can choose a set of eight channels on any of their connected PATCH XT units to monitor for signal. The channel indicators will light up when an audio signal is present on the corresponding channels, making signal path troubleshooting easy.



## Hardware Setup Menu Overview

### HARDWARE SETUP MENU

The Hardware Setup Menu is where all of the physically connected analog audio equipment is organized by the user. The Hardware Setup Menu provides personal preferences for each input & output allowing the user to customize the specific Digital Rack Spaces according to their needs.

 **Deny / Allow** - Each Input on the PATCH Series Hardware is protected with a Safeguard switch that prevents accidental 48V Phantom Power engagements on incompatible external audio equipment. By default the PATCH APP denies all connected external audio equipment from receiving 48V phantom power. In order to use 48V you must select "Allow" which will grant permission for the user to engage 48V phantom power on this input connection. Note: This switch does not turn on 48V, it only allows the user to turn on 48V with-in the Active Routings Section of the application.

 **Unlink / Link** - The Lock icon allows the user to link both the Input & Output of a corresponding channel together to display only 1 Digital Rack Space in the Hardware Index or Unlink the channels to display 2 Digital Rack Spaces for separate Routing configurations. When Unlinked, the 2 Digital Rack Spaces will show in the Hardware Index, by default the top corresponding numbered rack will represent the input and the bottom corresponding numbered rack will represent the output.

 **Stereo Pairing** - This pairing icon, when activated, allows the user to connect/link the corresponding I/O together to control them simultaneously within the Active Routing grid. Selecting this Stereo Pairing option between Digital Rack Spaces allows for easy stereo bus processing control. More information on Page 25.

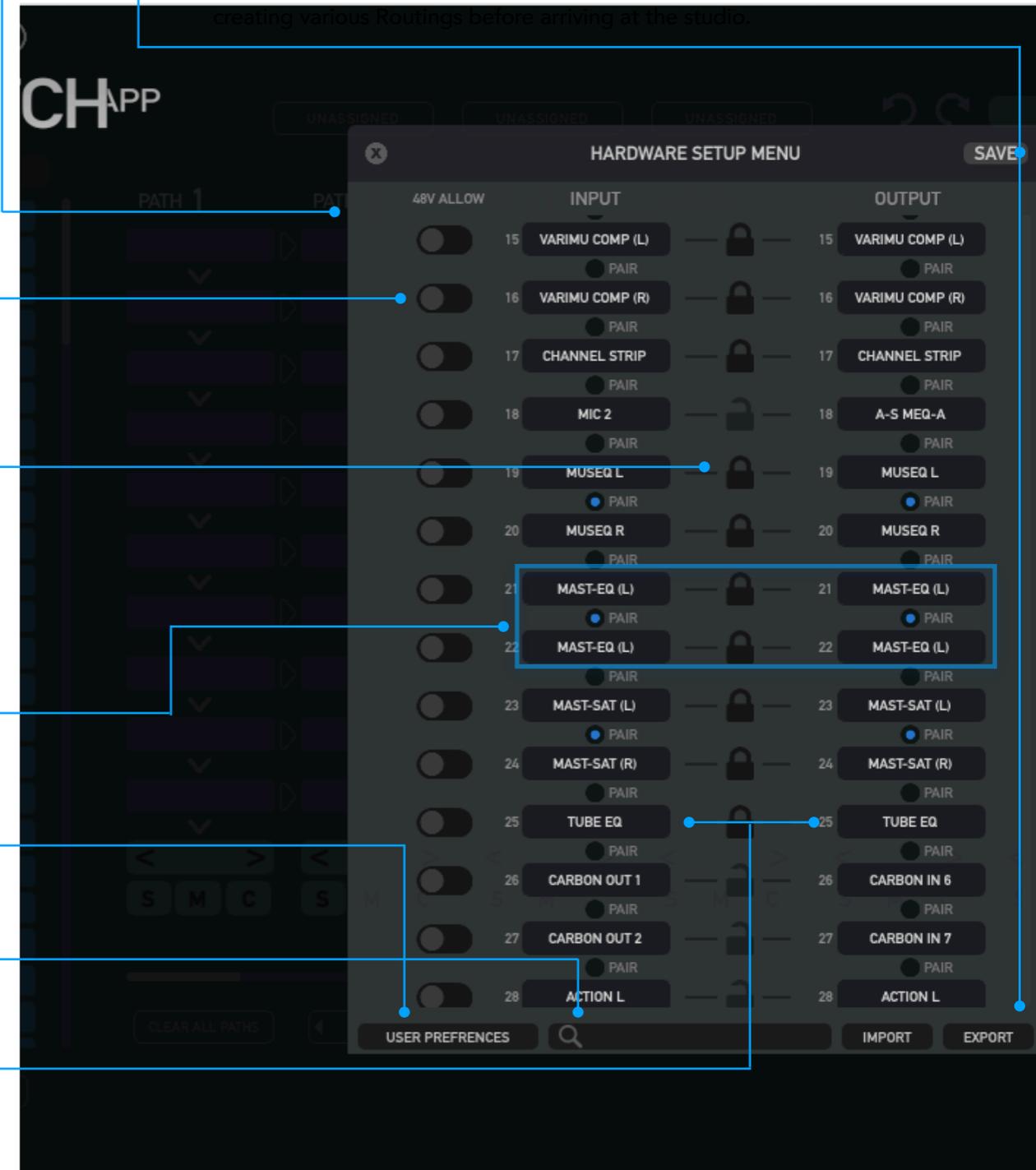
**User Preferences** - This button takes the user to the User Preferences Menu, which is also accessible via Settings.

 **Hardware search** - This function allows users to search their hardware list for specific hardware units.

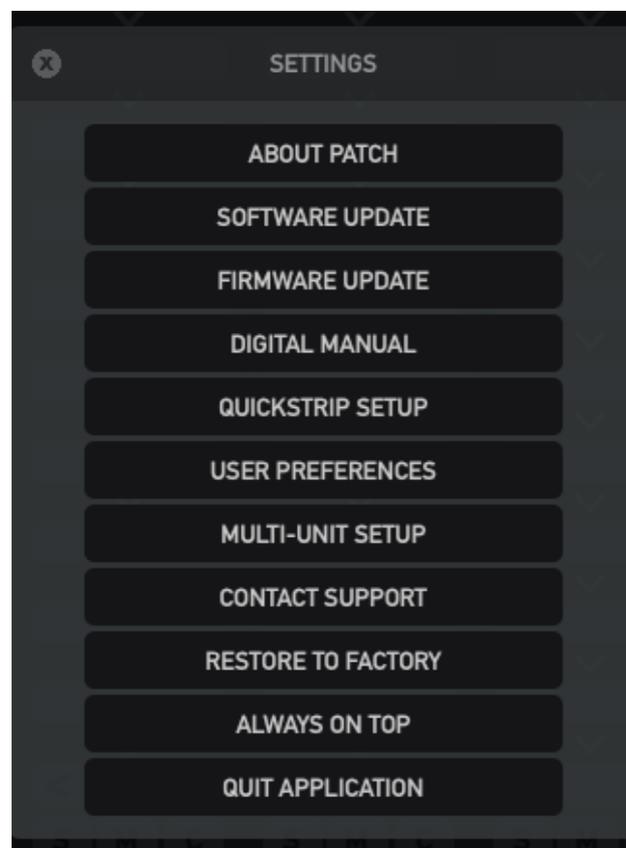
 **Input/Output Text Label** - Each input and output connection on the PATCH Series System Hardware is represented by a Text Label Field in the Hardware Setup Menu. Users can easily label and revise audio equipment names by simply opening the Hardware Setup Menu. Note: Always choose "Save Hardware" to store Labels.

IMPORT LIST  
EXPORT LIST  
SAVE HARDWARE

**Import/Export/Save Hardware** - The PATCH APP has the ability to import &/or export existing Hardware lists. When travelling to other recording studios that use a PATCH Series System, an engineer can export the existing hardware list from the chosen studio and send it to the travelling audio engineer allowing them to import the list and review available analog audio equipment while creating various Routings before arriving at the studio.



## Settings Menu Overview



## SETTINGS MENU

Manage all your Software User Preferences from the Settings menu, located at the bottom right side of the PATCH APP.

**About PATCH** - Selecting “About PATCH” will open an information window stating the active installed versions of both the PATCH APP Software and Firmware, and provide an option to view specific information about all connected PATCH Series units.

**Software Update** - This option will notify a user when an available update is present for the PATCH APP. Selecting this option from the menu will open a web browser and navigate to the PATCH Downloads webpage.

**Firmware Update** - This option will notify a user when an available update is present for the PATCH Series Hardware. Selecting this option from the menu will open a web browser and navigate to the PATCH Downloads webpage.

**Digital Manual** - To view this Manual directly from the PATCH APP, a user will be able to select this option and open the most recent version of the User Manual.

**Quick Strip Setup** - From this menu, a user can choose which Stored Routings they would like to be easily accessible from the Stored Routing Quick Strip at the top of the routing grid.

**User Preferences** - The User Preferences menu will allow a user to select a preferred language & Hardware Fan Controls to use with-in the PATCH APP. **Please Note:** *Some languages may not appear aesthetically formatted correctly due to various character lengths.*

**Multi-Unit Setup** - When using more than one PATCH System within the PATCH APP, a user must select and open the Multi-Unit Setup menu. Further details on the operation of this menu is located further in this manual.

**Contact Support** - The PATCH APP allows you contact Flock Audio Support right from the Settings Menu of the application. Selecting this menu option will open a web browser and navigate to the Flock Audio Support webpage.

**Restore to Factory** - If you ever require a complete Factory Reset on your PATCH Series System, selecting “Restore to Factory” will revert your PATCH APP to Factory Default Settings. **Please Note:** *This function cannot be undone and will delete all of the user inputted information and settings. It is recommended to export/save all Routings & Hardware Index Setups prior to Restoring to Factory.*

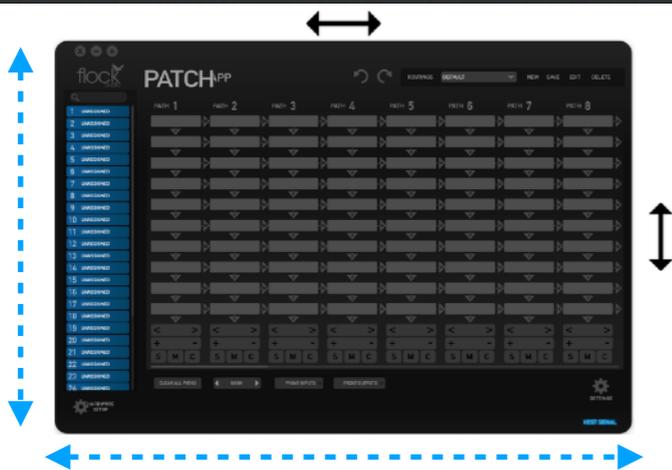
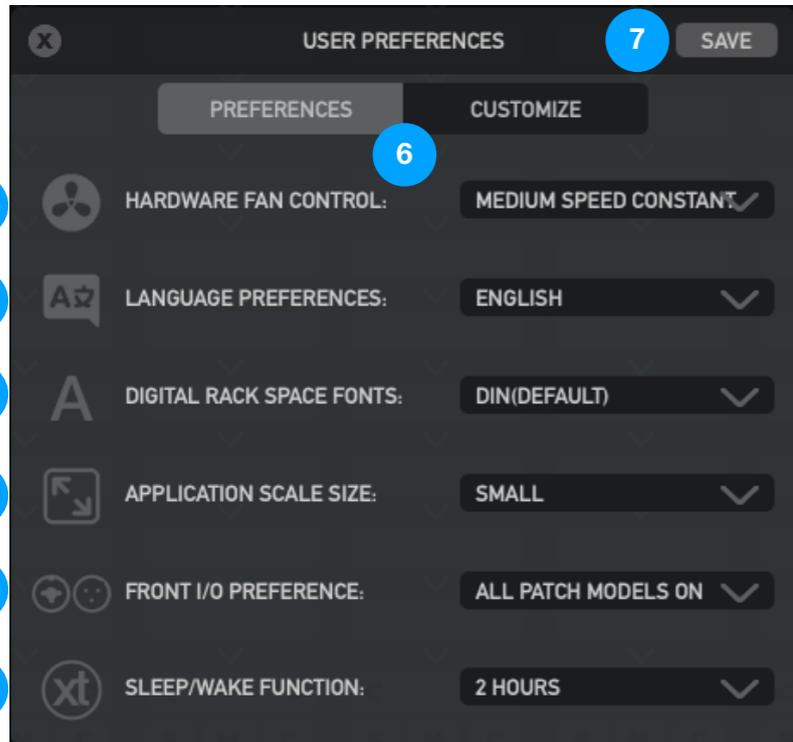
**Always On Top** - Selecting “Always On Top” will keep the PATCH APP above all other applications open within the present viewing display.

**Quit Application** - This will close the PATCH APP and stop any active Routings from being connected. **Please Note:** *If you have an active Routing present, the PATCH APP will prompt you to Save or Continue prior to closing the PATCH APP.*

# USER PREFERENCES

## User Preferences Menu

The User Preferences Menu is where you can customize your Flock Audio PATCH Series System and PATCH APP Software for a unique user experience.



Simply hover over any Edge of the PATCH APP to Click + Drag out the PATCH APP horizontally or vertically to resize it to the User's personal preference.

**1 Hardware Fan Control** - The PATCH and PATCH LT Systems are equipped with a fan on the right side of the unit, and PATCH XT has two fans placed deeper into the unit. The fans are designed to ensure the lifespan and quality of the unit's internal components. Users can choose the best Fan Option Parameters for their studio environment. By default, the PATCH APP will be set to **"Cycling Fan"**, which controls the PATCH Series Hardware to cycle the fan periodically ensuring appropriate cooling is performed. However, if you find the fans are cycling on/off too often, you can choose **"Emergency Fan Only"**, which will only activate the fans if the unit's thermostat is detecting its internal temperature has exceeded the allowable amount & requires a cool down. *Please Note: Any of the options will not void or affect your unit's warranty or performance.*

**2 Language Preferences** - The PATCH APP is now includes Language Preference options which will be periodically updated with new languages each update.

**3 Digital Rack Space Fonts** - Adding to the User Experience, the PATCH APP now allows users to choose between various font types for easier and personalized viewing experiences.

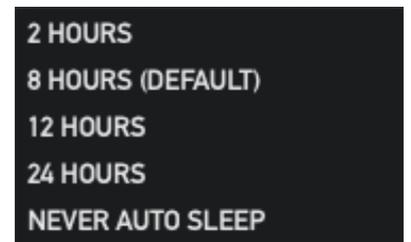
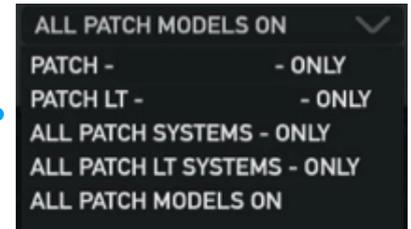
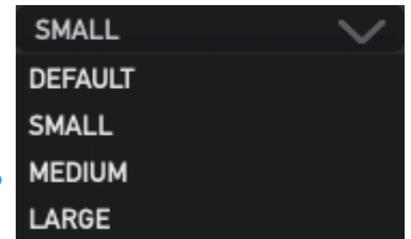
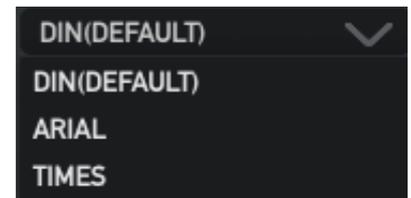
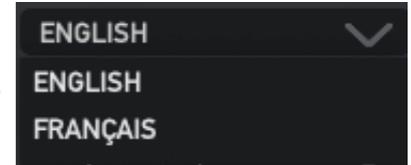
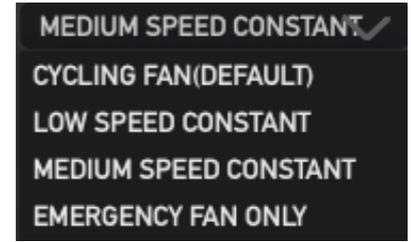
**4 Application Scale Size** - No matter the screen size or resolution, the PATCH APP allows users to customize their view for the optimal experience.

**5 Front I/O Preference** - When setting up Multiple Unit Systems, Users can control how the Front I/O operates on each or all connected PATCH Models.

**6 Preferences / Customize Options** - The User Preferences Menu has both **"Preferences"** and **"Customize"** Tabs where Users can setup their PATCH APP Software & Hardware for their personal preference.

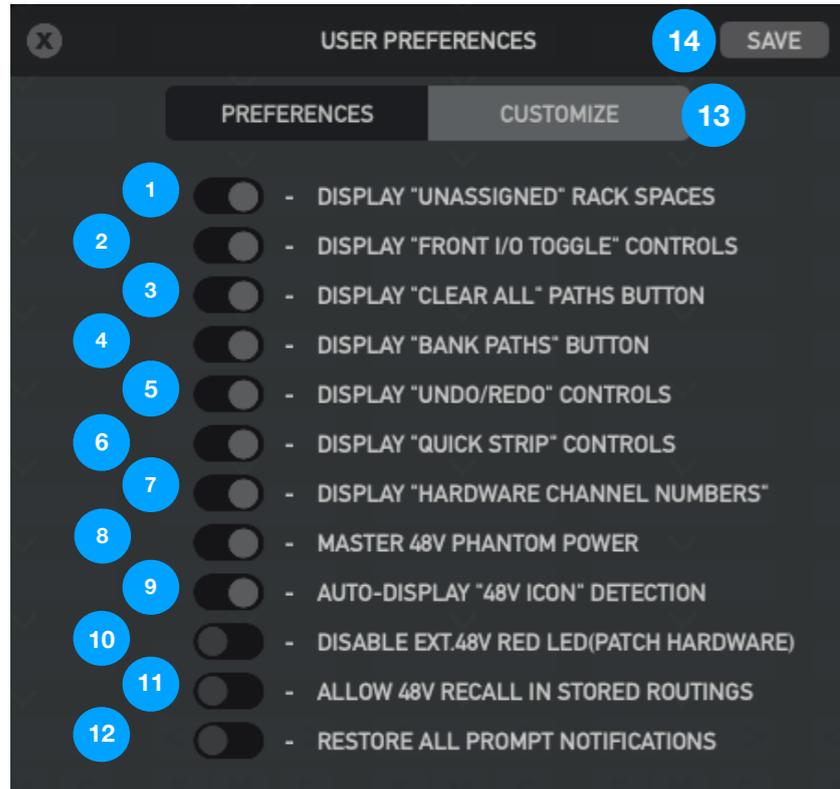
**7 Save** - Once the User has chosen their preferred User Preferences, ensure that the **"Save"** button is selected so that the preferences are stored for future Software launches.

**8 PATCH XT Sleep/Wake Function** - When a PATCH XT unit has been connected to a user's computer, this option will appear in the User Preferences menu. This function allows the user to choose the time interval after which PATCH XT will automatically turn off after not receiving any new Routing commands.

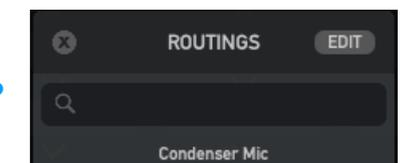
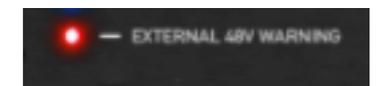
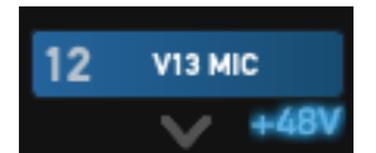
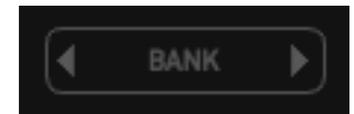
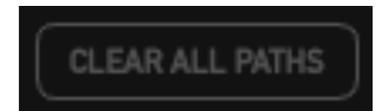


## User Customize Tab

The User Preferences Menu is where you can customize your Flock Audio PATCH Series System and PATCH APP Software for a unique user experience.



- 1 **Unassigned Rack Spaces** - Users can choose to display or hide "Unassigned" Undesignated Digital Rack Spaces in the Hardware Index by toggling their display on or off in the Customize tab.
- 2 **Front I/O Toggle Controls** - Users can choose to display or hide the **Front Input(s)** and **Front Output(s)** controls by toggling them on or off in the Customize tab.
- 3 **Clear All PATH's Button** - Users can choose to display or hide the "Clear All Paths" control by toggling it on or off in the Customize tab.
- 4 **Bank PATH's Button** - Users can choose to display or hide the "Bank" controls by toggling them on or off in the Customize tab.
- 5 **Undo/Redo Controls** - Users can choose to display or hide the "Undo / Redo" controls by toggling them on or off in the Customize tab.
- 6 **Quick Strip Controls** - Users can choose to display or hide the "Quick Strip" by toggling it on or off in the Customize tab.
- 7 **Hardware Channel Numbers** - Users can choose to display or hide the **Digital Rack Numbers** by toggling them on or off in the Customize tab.
- 8 **Master 48V Phantom Power** - Users can toggle their PATCH Series unit's **Master 48V Phantom Power** on or off in the Customize tab.
- 9 **Auto Display 48V Icon Detection** - Users can toggle the **48V Auto Display** upon Drag + Drop of 48V Enabled Devices or Permanent display of the "48V Icon" Controls by toggling it on or off in the Customize tab.
- 10 **Disable Ext. 48V Red LED** - Users can choose to enable or disable the **External 48V Warning LED** on their PATCH Hardware in the Customize Tab.
- 11 **Recall 48V When Stored In Routings** - By Default the PATCH APP Software will not permit the Stored Recall of Active 48V-enabled devices. Users can choose to allow the recall of 48V-Enabled devices upon User Recall. **[WARNING]** If a change has occurred with-in the physical connection setup to your PATCH Series System, authorizing a recallable stored routing with 48V Enabled may cause serious irreversible damage to devices that cannot accept 48V Phantom Power.



- 12 **Restore All Prompt Notifications** - If the user wants to restore all of the prompt notifications (i.e. Clear Paths warning), this toggle function will instantly restore all previously disabled prompts.
- 13 **Preferences / Customize Tabs** - The User Preferences Menu has both "Preferences" and "Customize" Tabs where users can set up their PATCH APP Software & Hardware to their personal preference.
- 14 **Save Preferences** - Once the user has chosen their preferred User Preferences, ensure that the "Save" button is selected so that the preferences are stored for future software launches.

### MULTIPLE UNIT IDENTIFICATIONS

When using a multiple PATCH unit setup, users must designate specific connection configurations between PATCH Series units in order to send analog signals from one system to the next. PATCH Series systems are identified in the PATCH APP according to their registered serial numbers. Rearranging the systems to a specific desired order is as simple as clicking + dragging on the serial numbers into a preferred order. I.E. Which PATCH Series hardware is the 1st, 2nd, 3rd etc.

### INPUT/OUTPUT PASSES

Input & Output Passes represent physical connections between PATCH Systems in the application. In order to send or receive audio signals between PATCH Units, a specific Send and/or Receive setting must be chosen within the Input/Output Passes section of the Multi-Unit Setup Menu.

This menu has multiple options for recommended suggestions such as Inputs & Outputs (1-8), (9-16), (17-24), (25-32) etc. and more which will generate 4 to 8 available sends & receives between PATCH units, a user can choose "Custom I/O" which will allow the user to designate their own sends and/or receives without any limitations of corresponding channels, or they can choose "Independent" which will allow any combination of multiple PATCH Series units to be used within the same instance of the PATCH APP without any connection between them.

### PATCH MODEL SELECTION

Users can select additional PATCH System models that are not physically connected to the CPU by clicking the drop-down arrow in order to explore larger I/O configuration possibilities.

Multiple PATCH System Setup Menu (Pt.1)

The screenshot shows the 'MULTI-UNIT SETUP' menu with a 'SAVE' button in the top right. The menu is organized into three columns: Unit Identification, Input/Output Passes, and Unit Color Assignment. Each unit (1-10) has a 'MODEL' dropdown, an 'INPUT/OUTPUT PASSES' dropdown, and a 'UNIT COLOR ASSIGNMENT' dropdown. Callouts point to specific features: 'Hover over the unit number and drag to Rearrange PATCH units in Multi-Unit Setup' points to the unit numbers; 'Input/Output Options' points to the 'UNASSIGNED' option in the 'INPUT/OUTPUT PASSES' dropdown; 'PATCH Model Options' points to the 'NO MODEL SELECTED' option in the 'MODEL' dropdown. An inset window on the left shows the 'INPUT/OUTPUT PASSES' dropdown menu with options: UNASSIGNED, INDEPENDENT, CUSTOM USER I/O, [4 - SEND/RETURN PASSES], INPUTS/OUTPUTS 1-4, INPUTS/OUTPUTS 5-8, INPUTS/OUTPUTS 9-12, and INPUTS/OUTPUTS 13-16. The 'INDEPENDENT' option is highlighted with a blue arrow.

## Multiple PATCH System Setup Menu (Pt.2)

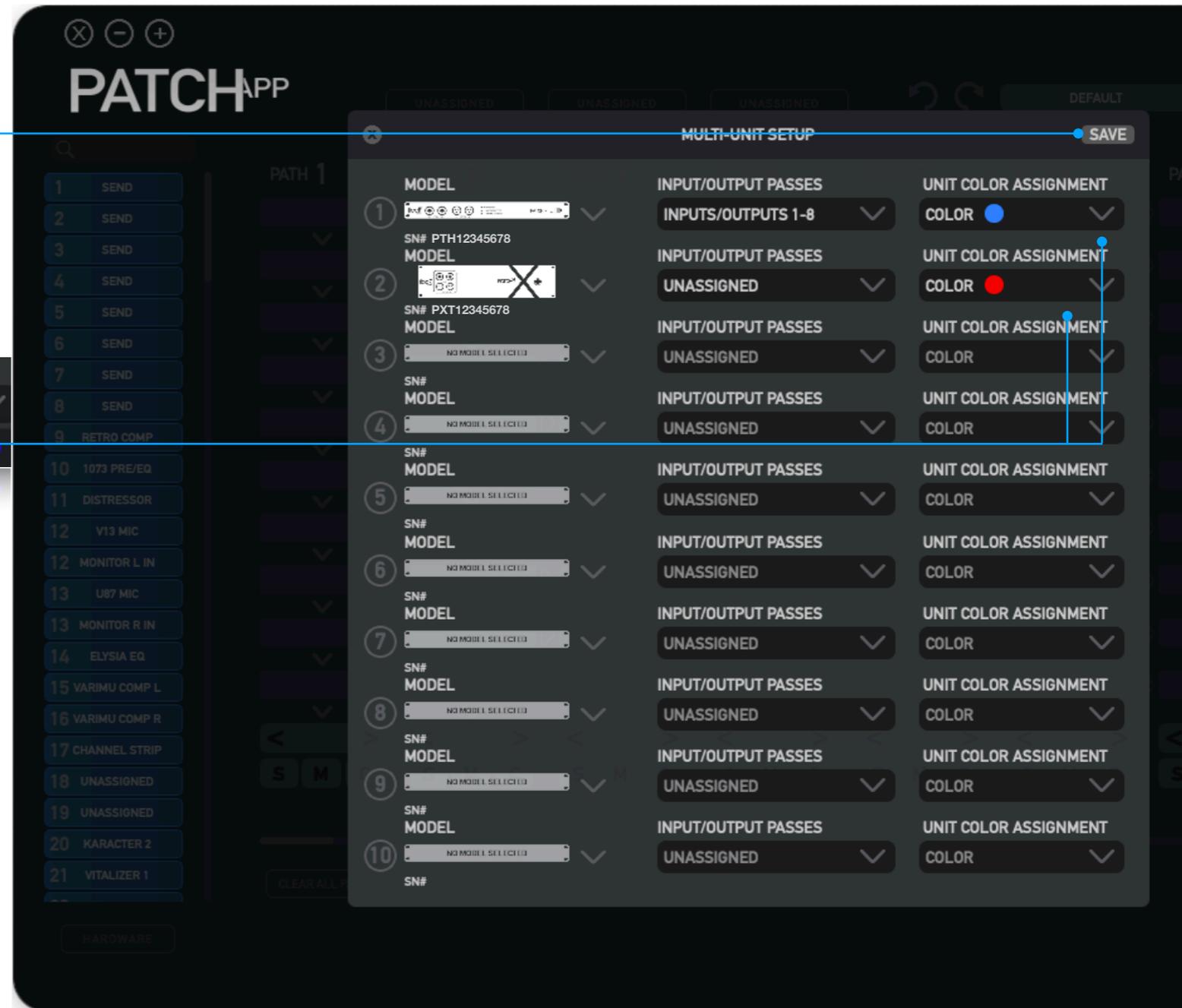
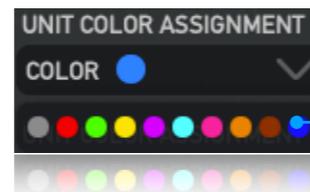
### SAVE SETUP

Once a desired Multiple Unit Setup configuration is established, a user must save their setup in order to properly operate their multiple system setup from the PATCH APP.

### UNIT COLOR ASSIGNMENT

When using Multiple PATCH Series units, each PATCH Series hardware unit is identified by a colored outline or border around all available Digital Rack Spaces in the Hardware Index.

By default, the specified colors are indicated from left to right. However, a user can change the color assignment of each PATCH Series unit based upon the user's preference by selecting the Unit Color Assignment drop down in the Multiple Setup Menu.



## MULTIPLE UNIT ANALOG CONNECTIONS

When connecting multiple hardware units together for Multi-Unit configurations, a user must choose which connections to configure in order to send and/or receive analog audio signals between multiple PATCH Series hardware units.

As shown in the example on the right, a PATCH unit and a PATCH XT unit are connected with 8 sends and 8 returns. This configuration example allows a user to send 8 analog audio signals from PATCH to PATCH XT and return 8 analog audio signals to PATCH (if required).

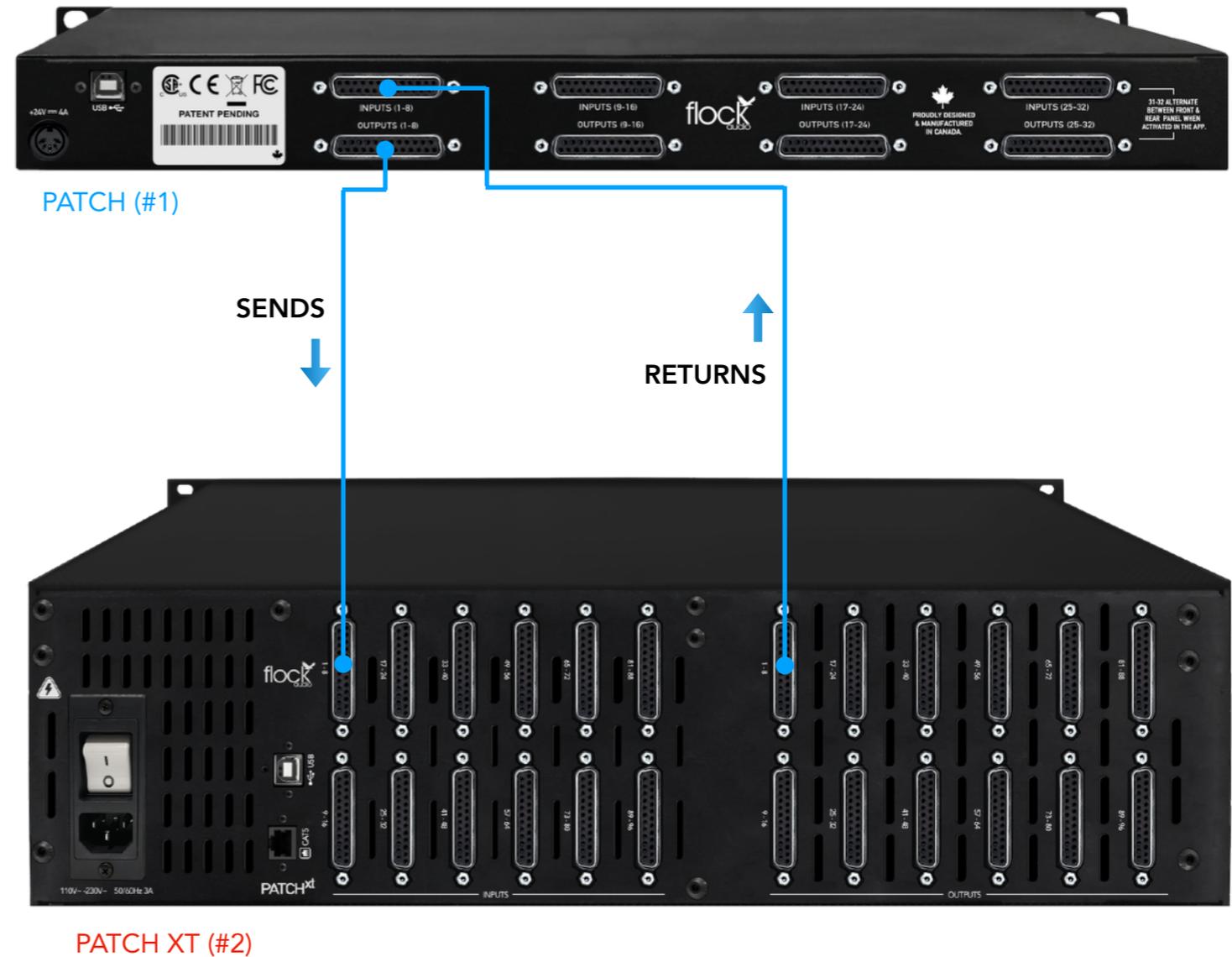
This is only one example of the possible Multi-Unit Routing configurations and is not restrictive of other user desired configurations. Users may choose to have more or all sends then equal returns.

The below example shows a simple PATCH APP Software view of what a Multi-Unit Hardware setup would appear like in the PATCH APP when routing from PATCH to PATCH XT.

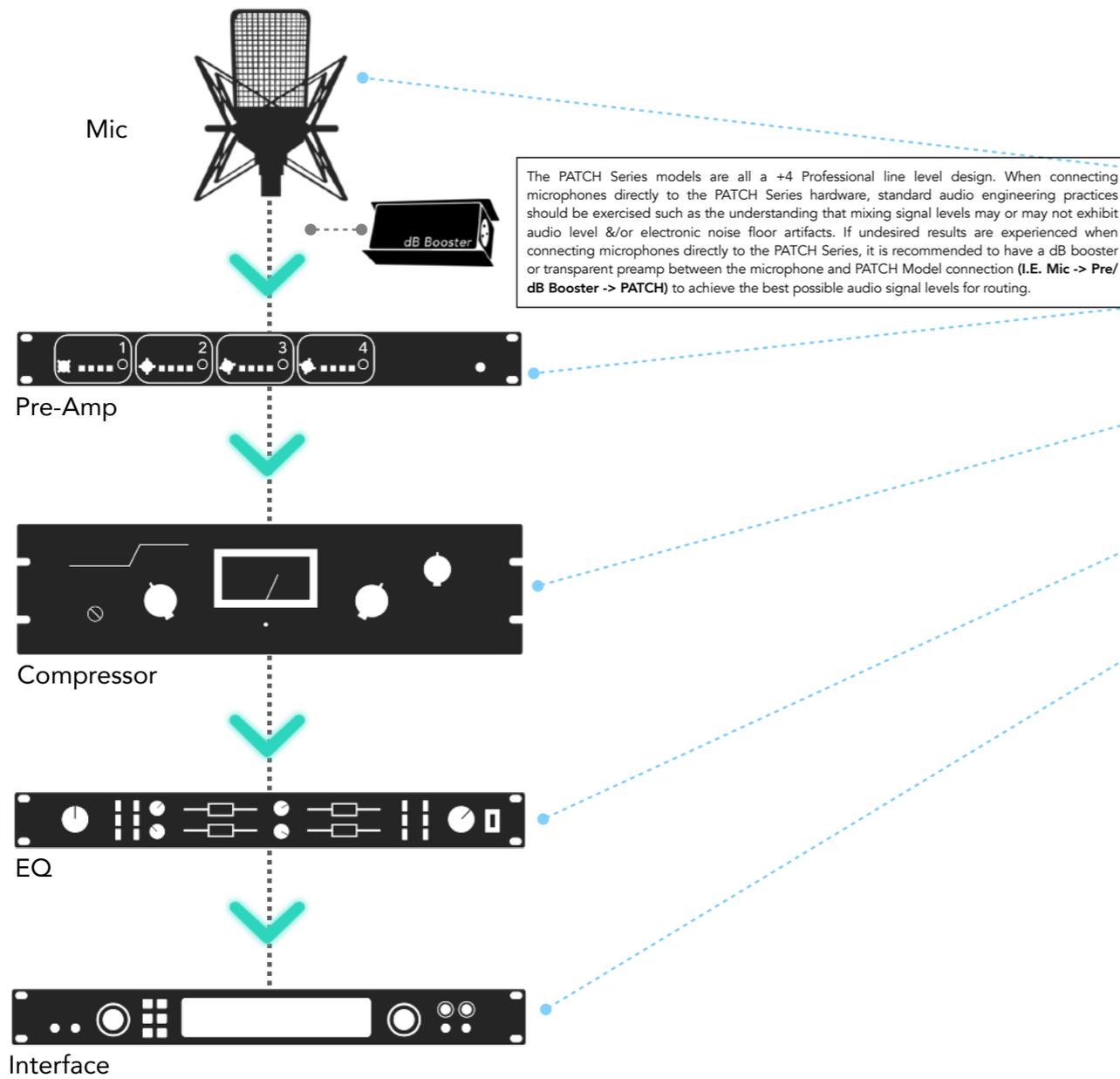


When Dragging + Dropping a SEND "Pass" into a signal flow Digital Rack Space that is empty, the PATCH APP will populate both SEND & RECEIVE Digital Rack Spaces with color-coded outlined racks to allow the user to easily distinguish which PATCH Series unit is which.

Multiple PATCH System Setup Menu (Pt. 3)



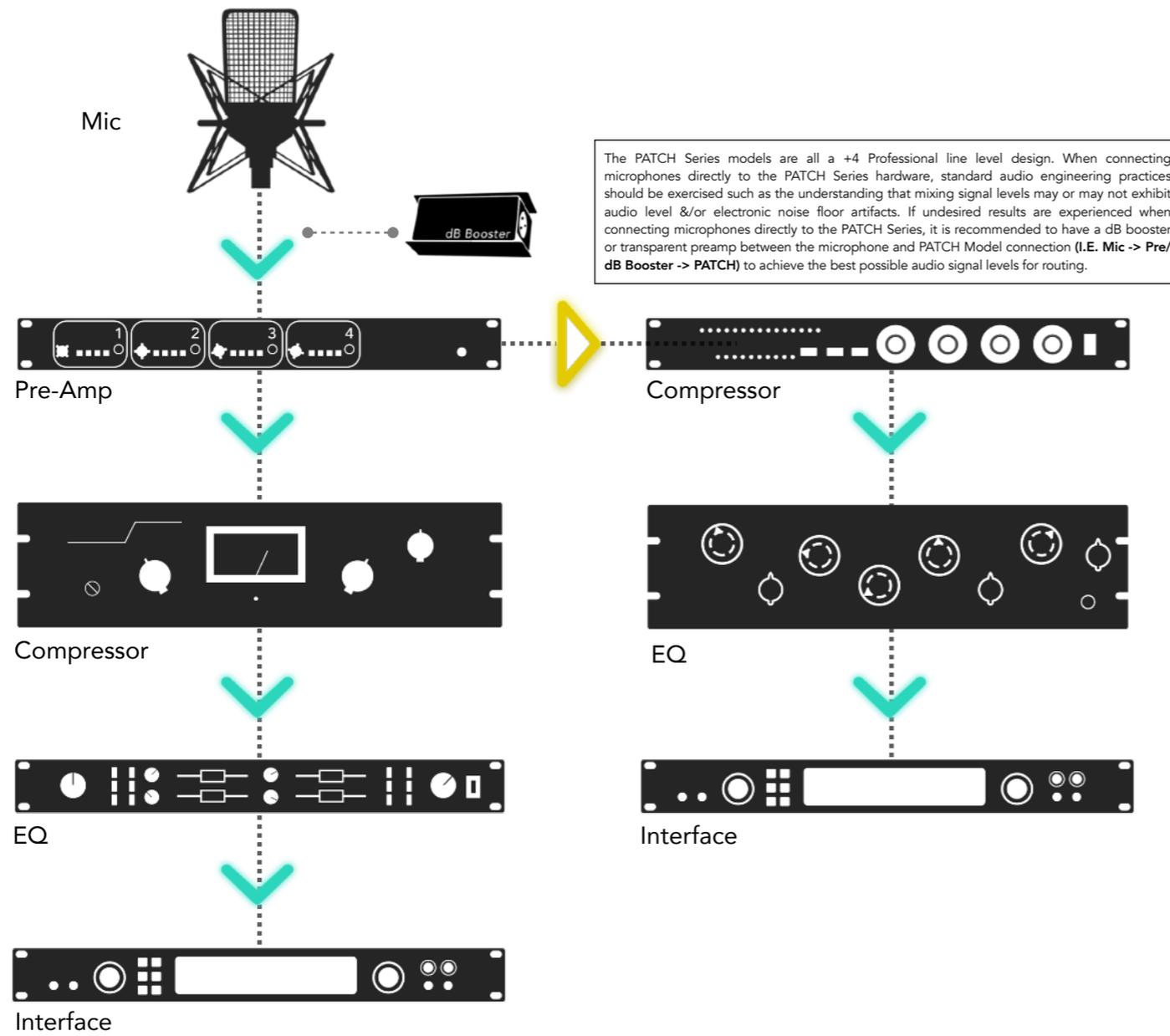
### Standard Microphone Routing Example



The PATCH Series models are all a +4 Professional line level design. When connecting microphones directly to the PATCH Series hardware, standard audio engineering practices should be exercised such as the understanding that mixing signal levels may or may not exhibit audio level &/or electronic noise floor artifacts. If undesired results are experienced when connecting microphones directly to the PATCH Series, it is recommended to have a dB booster or transparent preamp between the microphone and PATCH Model connection (I.E. Mic -> Pre/dB Booster -> PATCH) to achieve the best possible audio signal levels for routing.

The screenshot shows the PATCH APP interface with a routing matrix. The left sidebar lists modules 1 through 17. The main area shows five paths (PATH 1 to PATH 5) with various modules assigned to them. Path 1 is highlighted with a green arrow, showing a sequence of modules: 1176 COMP, V13 MIC, PREAMP, 1176 COMP, ELYSIA EQ, and CONVERT (IN1). The interface also includes buttons for 'CLEAR ALL PATHS', 'BANK', 'FRONT INPUTS', 'FRONT OUTPUTS', and 'MUTE'.

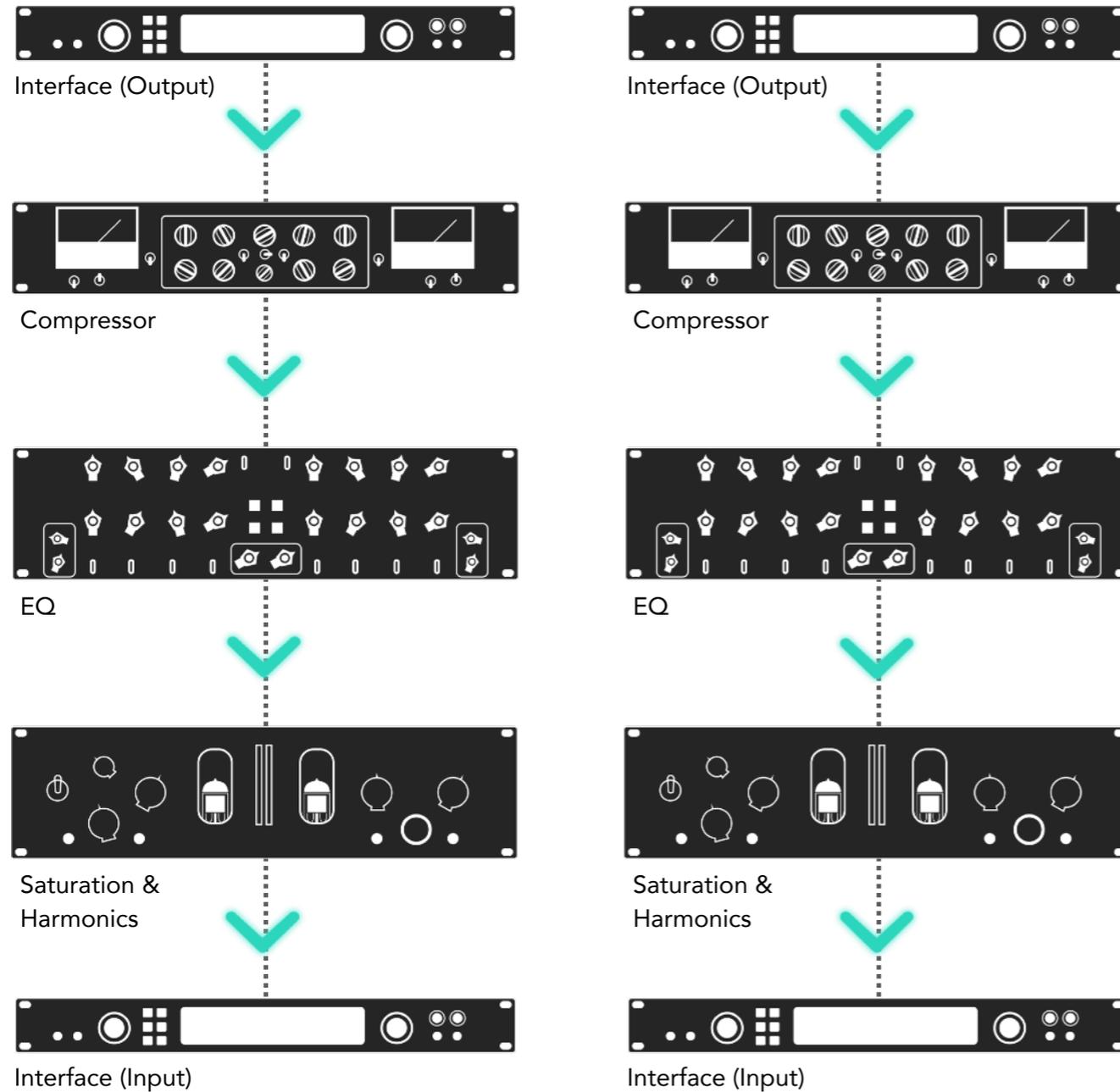
## Multing Routing Example



## Hardware & Software Routing Overview



## Mixing/Mastering Routing Example



## Hardware & Software Routing Overview

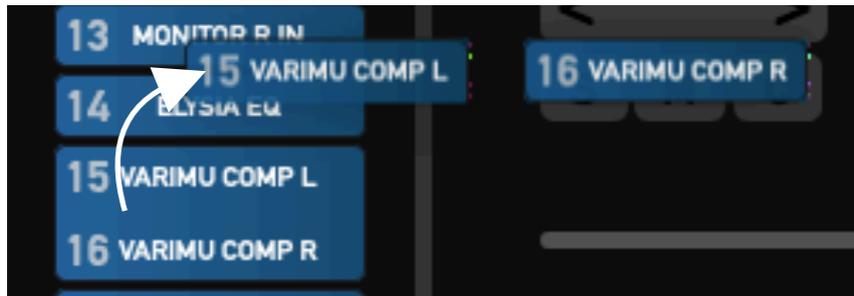


## Stereo Pairing

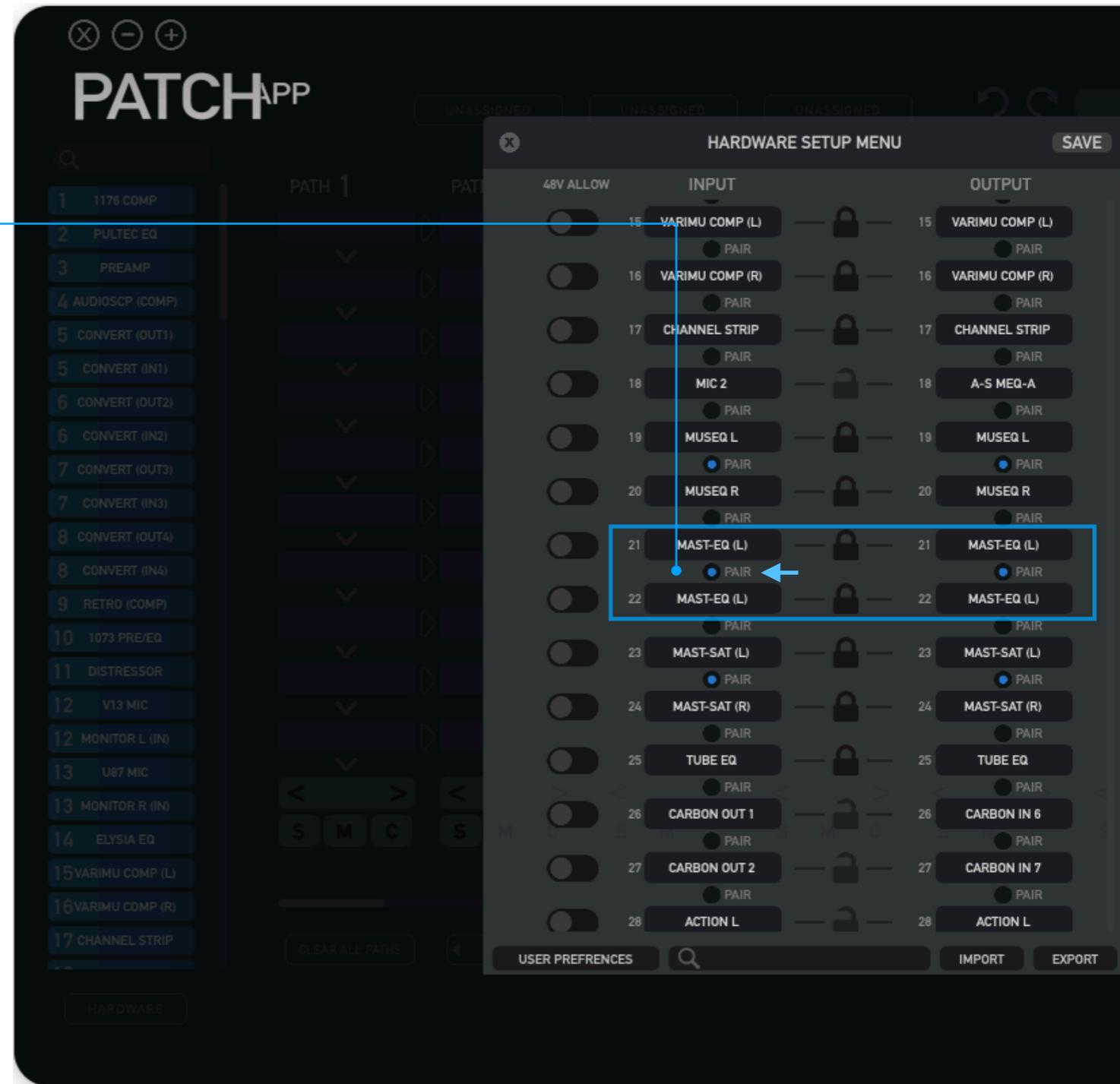
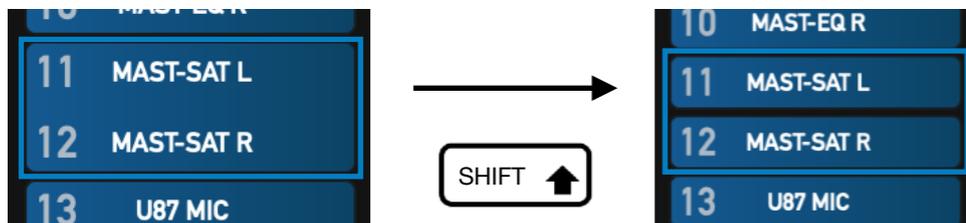
Stereo Pairing allows users to easily pair any two adjacent channels together to optimize their workflow.

Pairing two or more channels together will instruct the system to treat any Paired Digital Rack Spaces to behave as if they were one single Digital Rack Space. By Clicking the "Pair" Icon/Checkbox  PAIR →  PAIR between any corresponding channels in the PATCH APP will pair these and identify them as a Stereo Pair in the Hardware Index.

Stereo Paired channels will be identified in the Hardware Index by appearing taller than a single or mono channel rack space. When selecting and dragging these Stereo Paired channels into the Active Routing grid, they will separate and appear as they will when populating into the Active Routing grid.



You can quickly separate any Stereo Paired channels by holding the "Shift" key down so you can use any Stereo Paired channels as individual mono channels within the Active Routing grid. When depressing the "Shift" key you will see the Stereo Paired channels in the Hardware Index separate, identifying that they can now be used as individual mono channels. Once the mono channel is cleared from its active path, it will return to being a Stereo Paired item.



## SETUP A DEFAULT LAUNCH ROUTING

Setting up a **Default Launch Routing** can save time and increase efficiency when using your analog equipment with PATCH Series units. By creating a desired Routing and saving it, you can have your PATCH Series System launch this Routing by default with just a few easy steps every time you open the PATCH APP.

**#1.** Create & save a desired Routing in the Stored Routings Menu.

**#2.** Once this Routing is saved, Click the Stored Routings menu and click the "Edit" button in the top right hand corner.

**#3.** A list of buttons will appear next to your Stored Routings. Select the button next to the desired Default Launch Routing.

**#4.** The next time to launch your PATCH APP Software, the Software will instantly recall this Routing.

**Note:** To remove or change the desired Default Launch Routing, just simply deselect the button next to the current Default Launch Routing or select another Routing.

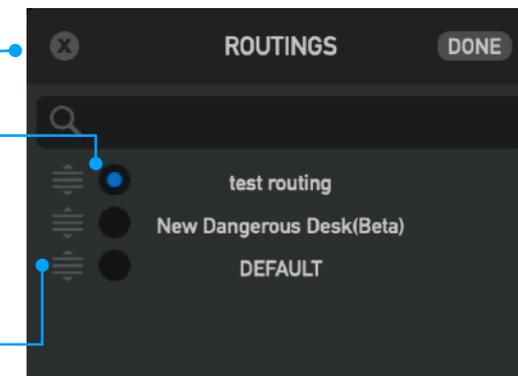


### DEFAULT LAUNCH ROUTING

By clicking the blue indicator next to a preferred Stored Routing, the user can enable that routing to become the Default Launch Routing, which will automatically populate when the PATCH APP is launched.

### REORDER STORED ROUTINGS

Users can reorder their Stored Routings list by clicking and dragging the reorder icons into their preferred order.



## Quick User Tips & Tricks

### AUDITIONING MICROPHONES

The PATCH System will allow you to quickly audition various microphones including 48V Phantom Power-capable microphones.

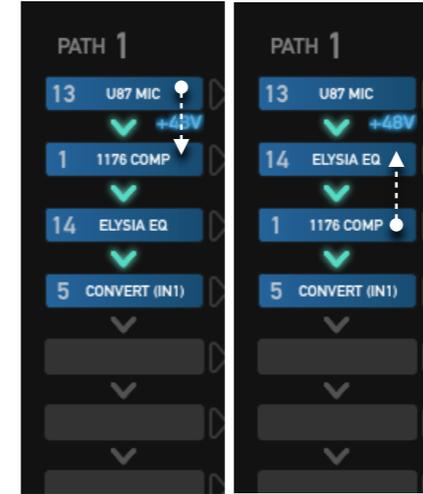
Example: Once a user has selected a desired signal chain with a microphone in the first Digital Rack Space, the user can quickly click and drag other microphones overtop into that first slot to replace and audition different connected microphones during a recording session.



### REARRANGE ACTIVE RACKS

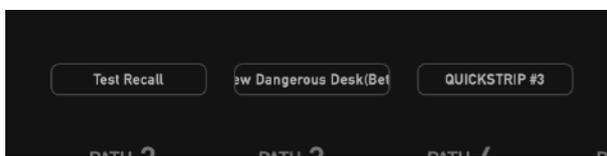
Clicking and Dragging an Active Digital Rack Space overtop of an already placed Digital Rack Space will initiate a flip or alternating signal flow between the 2 Active Digital Rack Spaces.

This allows for quick review and A/B comparisons when selecting your preferred signal flows.



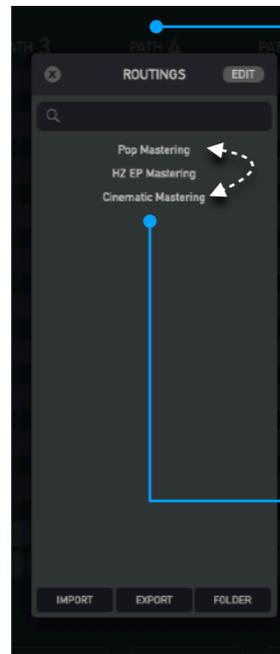
### QUICK STRIP A/B

Users can also easily set up A/B routing comparisons using the Stored Routings Quick Strip. Simply load the desired routings by right-clicking a Quick Strip icon and easily switch between the various routings with one click.



### A/B FULL SIGNAL CHAINS

Using the Stored Routings Menu, a user can easily flip between various Stored Routings for quick A/B or even C comparisons. These signal chain comparisons can be performed during playback of any audio signals passing through the system or while playback is stopped.



Users can also alternate between 2 different Routing signal chains by utilizing the Undo/Redo buttons located to the left side of the Routings Menu.

### QUICK KEYBOARD SHORTCUTS

#### MUTE ALL PATHS

- Apple "Command + M" - To Mute All Active Paths
- Windows "Ctrl + M" - To Mute All Active Paths

#### BYPASS DIGITAL RACK SPACES

- Apple "Command + Click" - To Bypass a Rack Space
- Windows "Ctrl + Click" - To Bypass a Rack Space

#### REMOVE DIGITAL RACK SPACES

- Apple "Option + Click" - To Remove a Rack Space
- Windows "Alt + Click" - To Remove a Rack Space

#### UNSOLO ALL SOLOED PATHS

- Apple "Command + Click S" - To Un-Solo All Racks
- Windows "Ctrl + Click S" - To Un-Solo All Racks

#### BANK THROUGHOUT THE ROUTING GRID

- Left Arrow & Right Arrow "Banking with the following Key Commands"

#### SCROLL PATH BY PATH IN THE ROUTING GRID

- Left Arrow & Right Arrow "Scroll Per PATH with the following Key Commands"

## Troubleshooting Tips

<p><b>PATCH Series Hardware &amp; Software not communicating.</b></p>	<ul style="list-style-type: none"> <li>- Confirm that supplied (USB-A to USB-B) cable is fully inserted into the rear side of the PATCH Series Hardware Unit and corresponding CPU controller.</li> <li>- Confirm whether the Multi-Purpose LED PATCH XT) or Host Signal LED (PATCH) is illuminated Solid Blue or Flashing.</li> <li>- Close the PATCH APP Software and turn off the PATCH Series Hardware Unit. Wait 30 seconds and turn on the PATCH Series Hardware Unit &amp; reopen PATCH APP Software.</li> <li>- Navigate to Settings &gt; Multiple Unit Setup and confirm that your PATCH Series unit's Serial Number is in the first slot, then click Save Setup.</li> <li>- Try different USB-A to USB-B Cable.</li> <li>- Navigate to Settings &gt; About PATCH &gt; Hardware Details and confirm that your PATCH Series unit is listed as "Online", and correctly displays the unit's serial number and firmware version.</li> <li>- If your PATCH Series unit is connected to your computer via a USB hub, connect it directly to a USB port on your computer</li> </ul>
<p><b>PATCH APP Download &amp; Install error.</b></p>	<ul style="list-style-type: none"> <li>- Confirm that your CPU Security/Privacy (&amp;/or) Firewall are not restricting the PATCH APP Software to properly install. Mac OSX users may experience an "Unrecognized developer error" that requires opening "User Preferences &gt; Security &amp; Privacy &gt; Open Application Anyways</li> </ul>
<p><b>The PATCH APP window has disappeared and it won't come back to my screen.</b></p>	<ul style="list-style-type: none"> <li>- (Windows) If you have the PATCH APP window selected, press Shift + F1. This will reset the size and position of your PATCH APP window.</li> <li>- (Mac) If you have the PATCH APP window selected, navigate to the top left of your screen and click File &gt; Reset Window Size. This will reset the size and position of your PATCH APP window.</li> </ul>
<p><b>Slight popping or clicking sometimes when rearranging Active Racks.</b></p>	<ul style="list-style-type: none"> <li>- It is completely normal to sometimes hear, slight popping or clicking when rearranging active Digital Rack Spaces during play back. This popping or clicking is a result based upon the type of audio signal currently being played through the PATCH Series system.</li> </ul>
<p><b>The PATCH Series System is not responding properly or behaving unexpectedly.</b></p>	<ul style="list-style-type: none"> <li>- Export all previously "Saved" Routings and "Hardware Setup Menu" settings. Ensure these are stored in a safe back-up folder. Open the Settings &gt; Restore to Factory and allow the System to completely restore back to Factory Default Settings. Once performed, turn off the PATCH XT Hardware System, Close and Delete the PATCH APP application. Reinstall the latest PATCH APP Software version and turn on the Hardware, followed by reimporting all Saved Routings &amp; Hardware Setups.</li> <li>- (If) problem persists, please contact Support (<a href="http://www.flockaudio.com/support">www.flockaudio.com/support</a>).</li> </ul>
<p><b>I'm not getting a signal through my hardware.</b></p>	<ul style="list-style-type: none"> <li>- Confirm that your PATCH Series unit is turned on</li> <li>- Confirm that the "Host Signal" indicator on the bottom right of your PATCH APP's main window is illuminated in blue</li> <li>- Confirm that the <b>inputs</b> of your analog hardware are connected to your PATCH Series unit's <b>outputs</b>, and that the <b>outputs</b> of your analog hardware are connected to your PATCH Series unit's <b>inputs</b>.</li> <li>- Confirm that the output signal of your connected piece of hardware is placed in the top slot of your Active Routing Grid.</li> <li>- If you still aren't getting a signal, please contact Support (<a href="http://www.flockaudio.com/support">www.flockaudio.com/support</a>).</li> </ul>
<p><b>My PATCH APP Host Signal indicator is repeatedly flashing red/blue.</b></p>	<ul style="list-style-type: none"> <li>- In your PATCH APP settings, navigate to Multi-Unit Setup and confirm that your unit is displayed in the top slot. If it's not, drag and drop your unit into the top slot of the Multi-Unit Setup window. and hit "Save". To drag and drop units, simply hover your cursor over the number indicator to the left of your serial number, and drag it to your preferred location. This should ensure that your unit is properly connected to your PATCH APP!</li> <li>- If this does not solve the issue, please contact Support (<a href="http://www.flockaudio.com/support">www.flockaudio.com/support</a>).</li> </ul>

## Software Compatibility & System Requirements



**OSX:** 10.12 Sierra or Newer

**Disk Space:** Minimum 512 MB available disk space

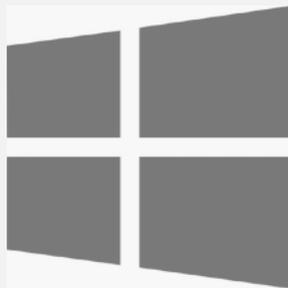
**USB:** 1x USB 2.0/3.0 Port (Per PATCH System)

**Required USB bandwidth:** 5%-10%

**Memory(RAM):** 4GB Minimum (8GB or more recommended)

**CPU:** Intel Core 2 Duo (Minimum) Intel Core i3™ or higher (Recommended)

**Internet Connection:** Internet Connection is required for download and updates.



**OS:** Windows 7 or Newer

**Disk Space:** Minimum 512 MB available disk space

**USB:** 1x USB 2.0/3.0 Port (Per PATCH System)

**Required USB bandwidth:** 5%-10%

**CPU:** Intel or AMD equivalent CPU with at least 2GHz operating frequency

**Memory (RAM):** 4GB Minimum (8GB or more Recommended)

**Internet Connection:** Internet Connection is required for download and updates.



[www.flockaudio.com](http://www.flockaudio.com)

**PATENT PENDING**