



USER MANUAL

VERSION 1.0 | DECEMBER 6, 2022

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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.

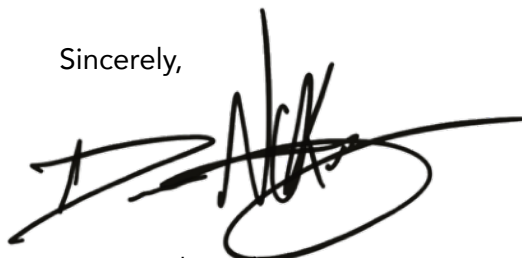
After 2 years of strenuous work and constant focus, Flock Audio the company I started, created the worlds first and most advanced digitally controlled analog audio routing system with features never before possible in conventional analog audio routing.

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.

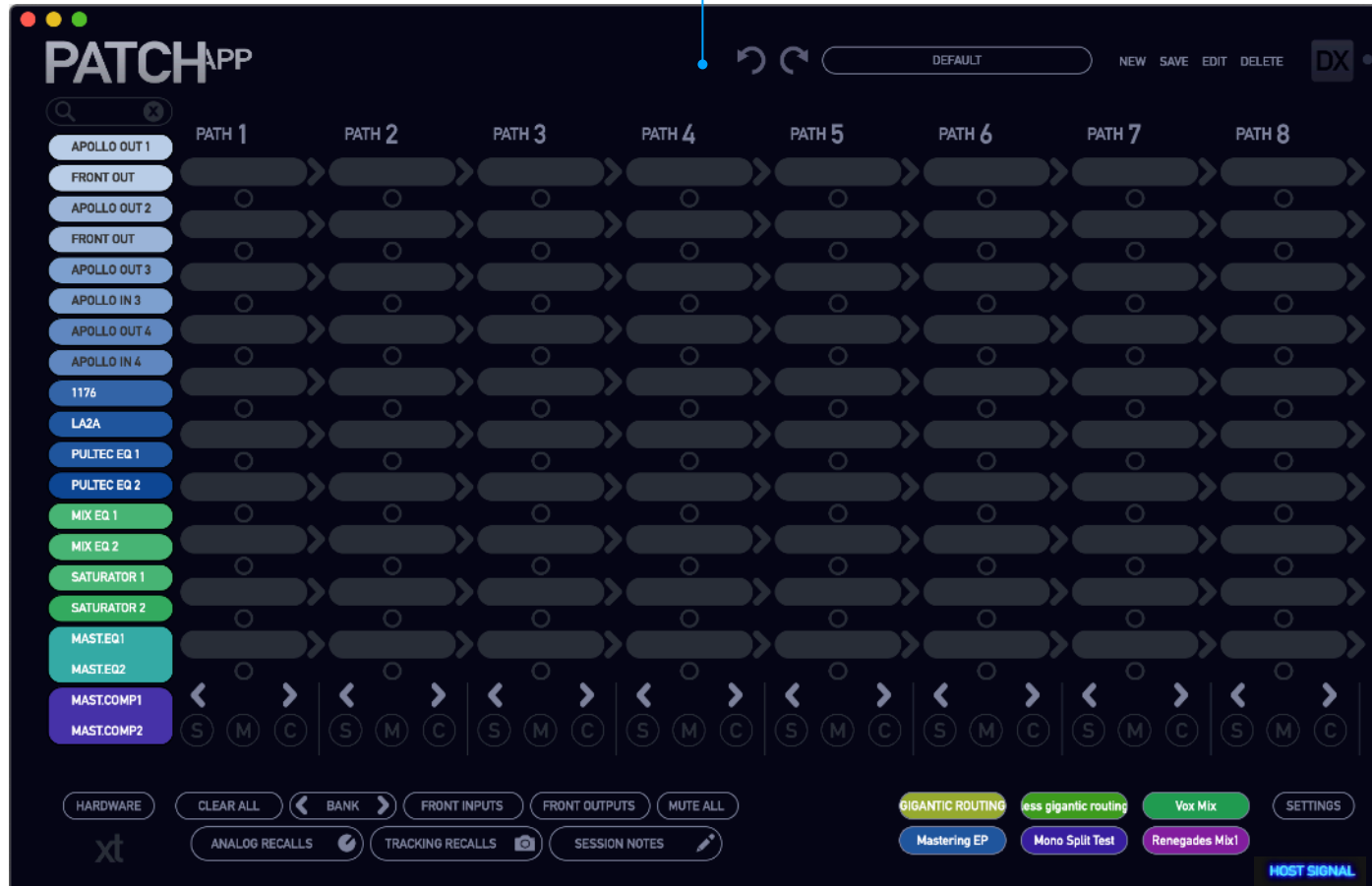
Sincerely,



Darren Nakonechny
(CEO/Director/Founder)



PATCH^{APP} DX



INTRODUCTION TO THE PATCH APP DX

The **PATCH APP DX** software application (OSX, Windows, iPad iOS and iPhone iOS compatible) is designed with familiarity in mind in reference to our Award Winning PATCH APP Classic.

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. This analog audio equipment is cataloged in the Hardware Index located on the left side of the PATCH APP DX.

PATCH APP DX also introduces wireless iPad and iOS connectivity, allowing users to control their PATCH Series units from an iPad and/or iPhone from anywhere on the same WiFi network. *More information on Pages 22 and 28.*

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

IMPORTANT NOTICE:

PATCH APP CLASSIC and PATCH APP DX CANNOT BE OPENED AT THE SAME TIME ON THE SAME OPERATING SYSTEM. HAVING BOTH APPLICATIONS OPEN SIMULTANEOUSLY WILL CAUSE NETWORK COMMUNICATION ISSUES. IT IS RECOMMENDED TO ONLY HAVE ONE APPLICATION VERSION OPEN AT A TIME.

THE PATCH APP DX OVERVIEW

PATH

All signal flows in the PATCH APP DX 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 DX. PATH signal flows go from top to bottom in each PATH Routing column. Users can also rename their PATH's by right-clicking on the PATH name and clicking "Edit".

"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, you can **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 according to the user's preference. This **Hardware Setup Menu** also includes various other settings including 48V Safeguard toggles, Stereo Pairing, Digital Rack Space controls and Link/Unlinking controls. More information on Page 15.

"C" Clear Single PATH

Clicking the "C" at the bottom of each PATH will clear all active Digital Rack Spaces from the PATH.

Hardware Index

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



PATCH APP DX

SOFTWARE CONTROLLER OVERVIEW

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 and manage all existing analog Routings from the Routings Menu. This menu allows the user to store and 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 of each Digital Rack Space, **Multing** capability will be enabled, allowing users to split a signal processing chain into multiple PATH's.

Settings Menu

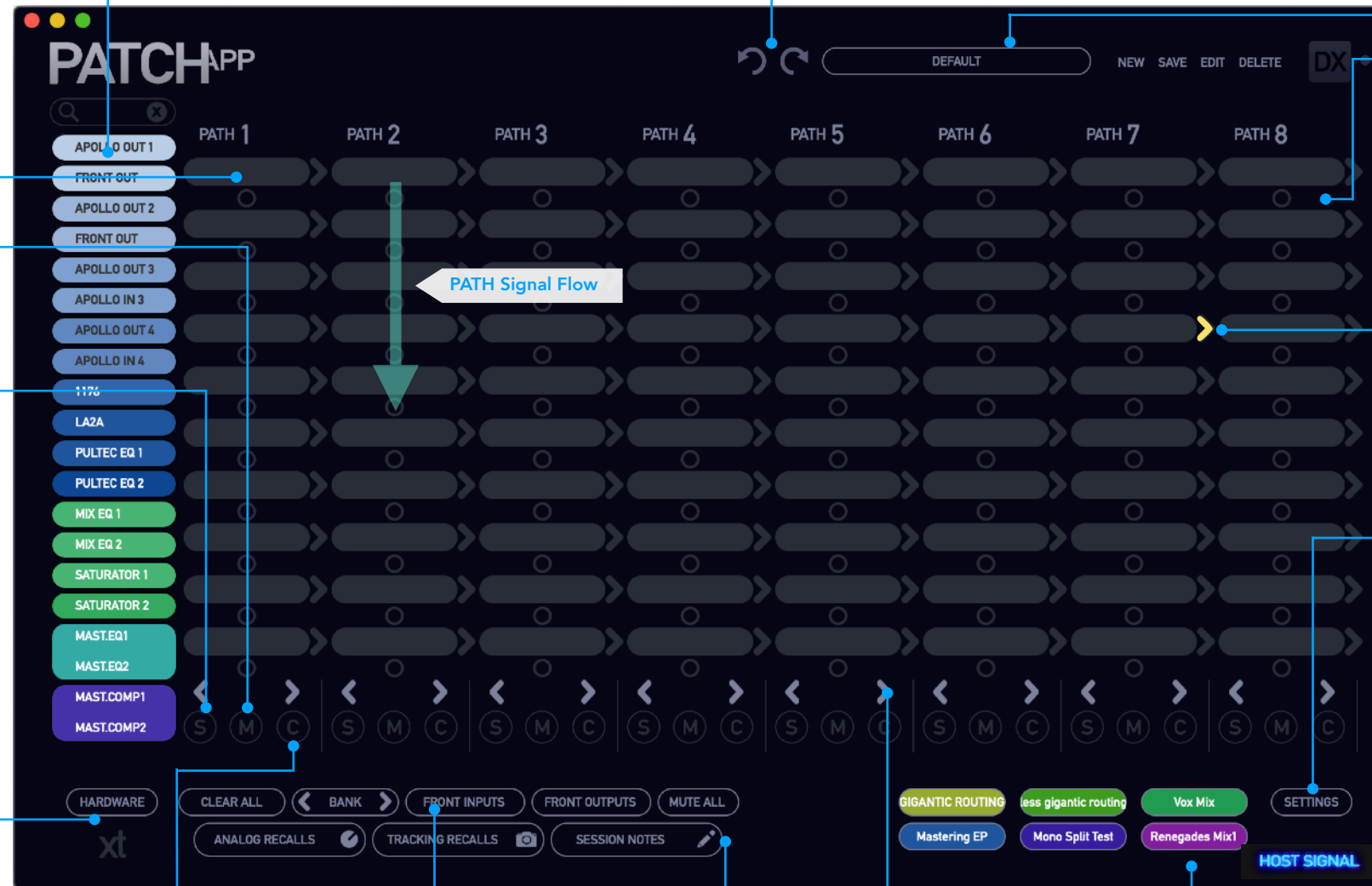
User preference settings, support, updates & Multiple Unit Setup parameters are located in the Settings menu.

Host Signal

This indicator will illuminate in blue when the PATCH APP DX is properly communicating with the PATCH Series hardware. If the **Host Signal indicator** is red, the connection between the Software & Hardware needs to be reset. Users can also click on this indicator to open the Hardware Details menu, which displays useful information about all connected PATCH Series units.

Quick Strip

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



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. More information on Pages 13 & 14.

Hardware Management

Users can now store photos of their analog hardware settings right in the PATCH APP DX and keep notes of their sessions in the same menu. For a more in-depth look into this feature, navigate to Page 23.

Movable PATH Arrows

These arrows allow the user to move entire populated PATHs (signal chains) left or right throughout the Active Routing Grid.

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 in more detail later on in this user manual.



Routing Menu Overview



ROUTINGS MENU

Create, store & recall Routings from the PATCH APP DX's Routing menu. Users can create active Routings and store them for later recall with this simple and easy-to-use menu.

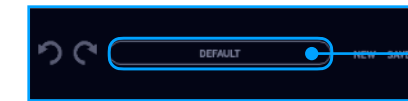
New - Clicking "**New**" will open a Save-As window allowing the user to save a desired active Routing in the the Routings Menu Folder.

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



ROUTINGS 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, rearrange their list of Stored Routings and change the color of their routings.

IMPORT & EXPORT ROUTINGS

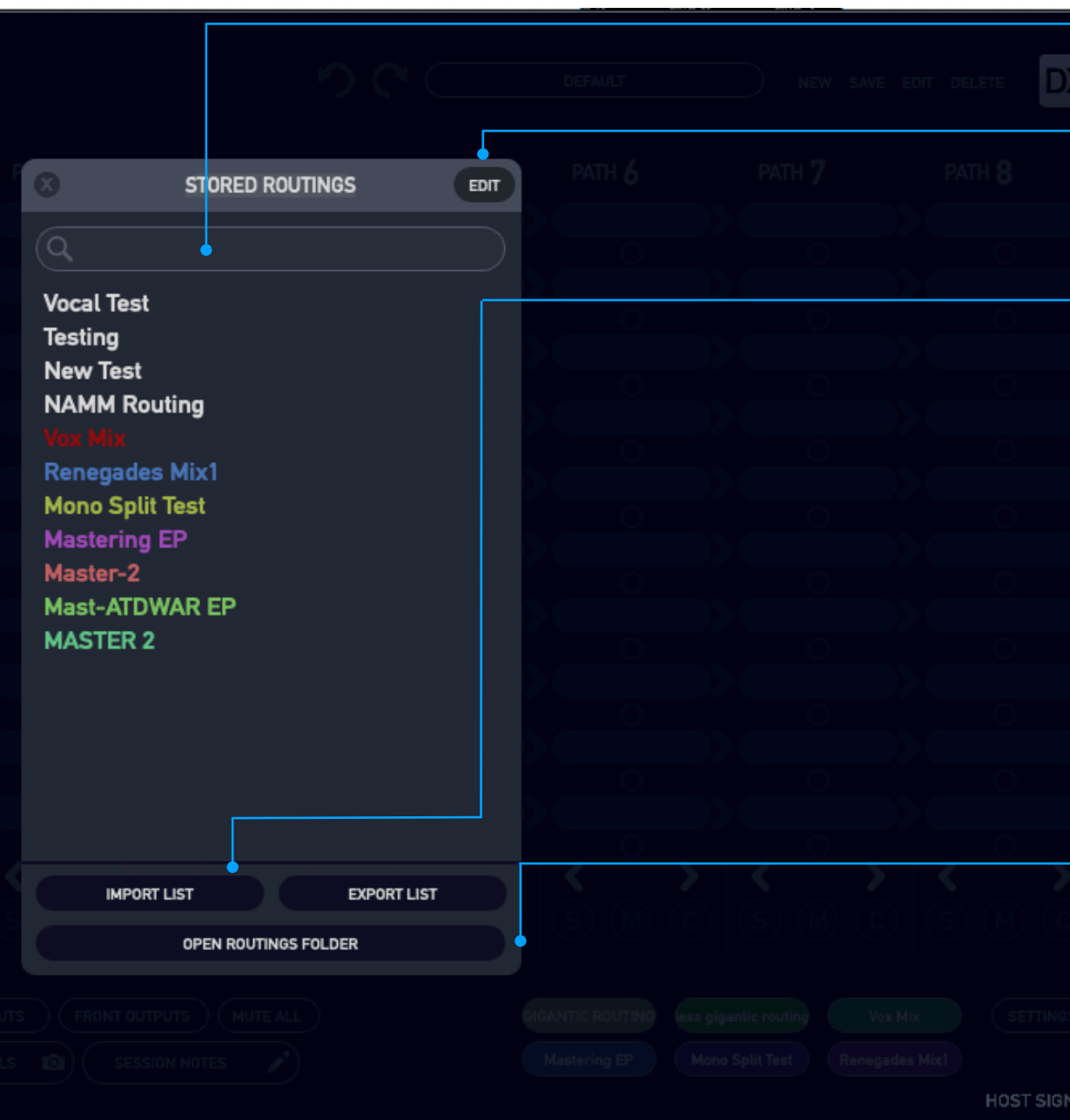
Users can easily import or export selected routings by opening the Routings menu. Once a Routing is saved, users can select to **"Export"** this Routing into a client's session or desired folder of choice for further archiving.

Once the Routing is exported into another folder, users can choose **"Delete"** in the menu to avoid taking up space in the Routings menu. Deleting this Routing in the 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 menu.

OPEN ROUTINGS FOLDER

By default, all saved Routings are stored in a community Routings folder that is easily accessible within the PATCH APP DX Routings menu. By selecting **"Open Routings Menu"** a dialog window will open, allowing the user to remove or modify any saved Routings. Note: all PATCH APP DX Routings are saved in a **".flock"** format.



Active Routings Section Details

ACTIVE ROUTINGS SECTION

The **Active Routings** section of the PATCH APP DX is where users can 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 "●" below it, showing that the connection of that desired signal flow is active.

MOVABLE PATH ARROWS


Movable PATH arrows allow users to move entire populated PATH's throughout other various available PATH columns in the Active Routing Section of the PATCH APP DX software.

ADD OR SUBTRACT DIGITAL RACK SPACES

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

SOLO SINGLE PATH'S

Users can solo 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

MUTE SINGLE PATH'S

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

CUSTOMIZABLE PATH NAMES

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

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, you can **Un-Solo** all PATH's by holding Command + clicking "S".



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 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. (Page 15)

UNDERSTANDING SIGNAL PATHS

PATH Details

PATH's

PATH's are signal flows that go from the top of the Routing grid to the bottom. As shown in the example to the right, a teal indicator illustrates the analog audio signal flow as follows:



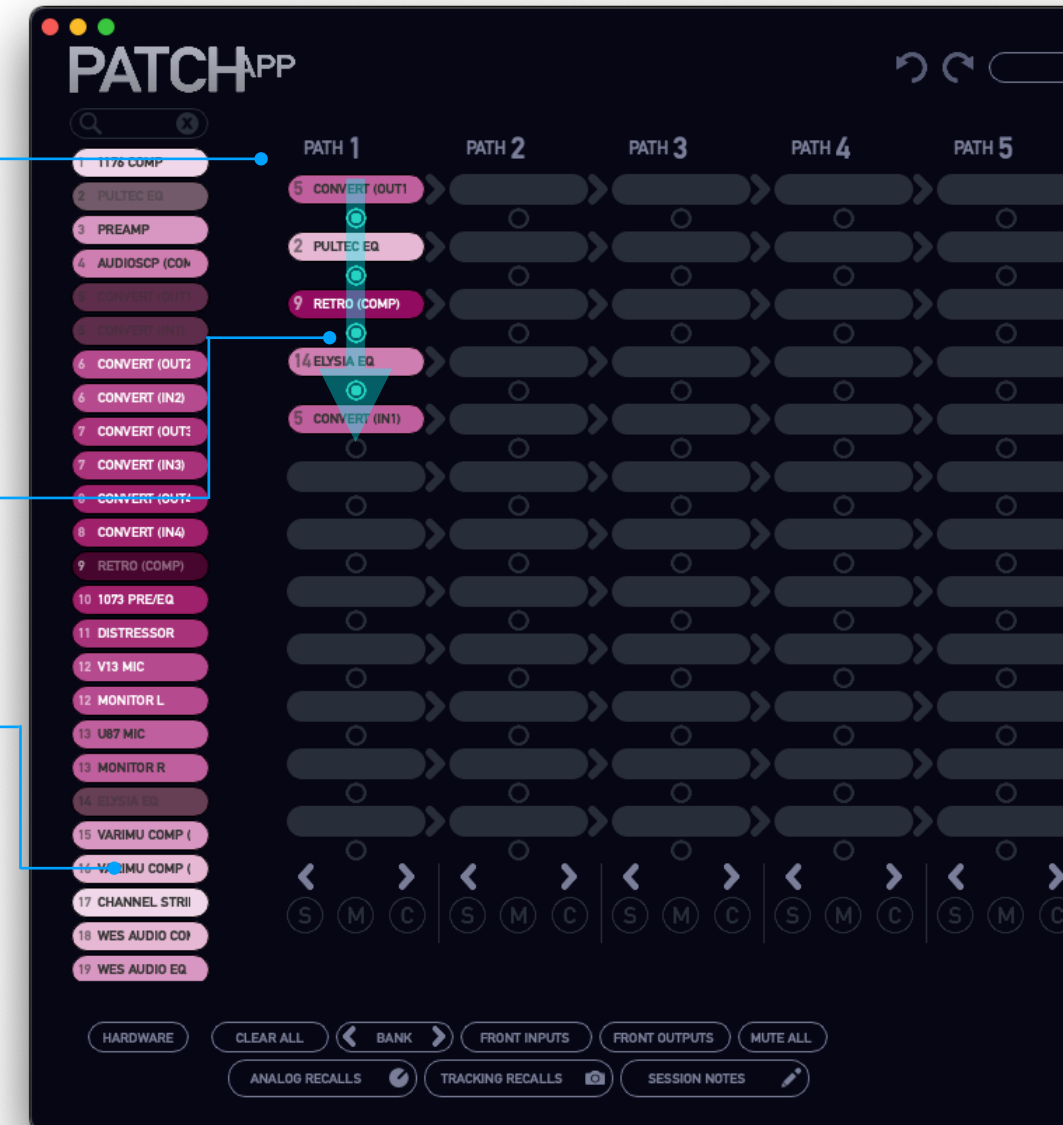
PATH Icon Indicator

USED DIGITAL RACKS

Digital Rack Spaces that are already 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 DX.

WHEN CONNECTING MICROPHONES TO PATCH

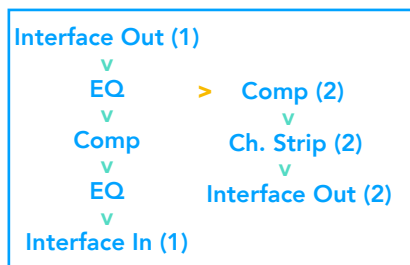
The PATCH Series models are all a **+4 Professional line level design**. When connecting microphones directly to the PATCH Series hardware, standard audio engineering practices should be exercised such as the understanding that **mixing signal levels** may or may not exhibit audio level &/or electronic noise floor artifacts. If undesired results are experienced when connecting microphones directly to a PATCH Series unit, it is recommend to have a **dB booster** or **transparent preamplifier** 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

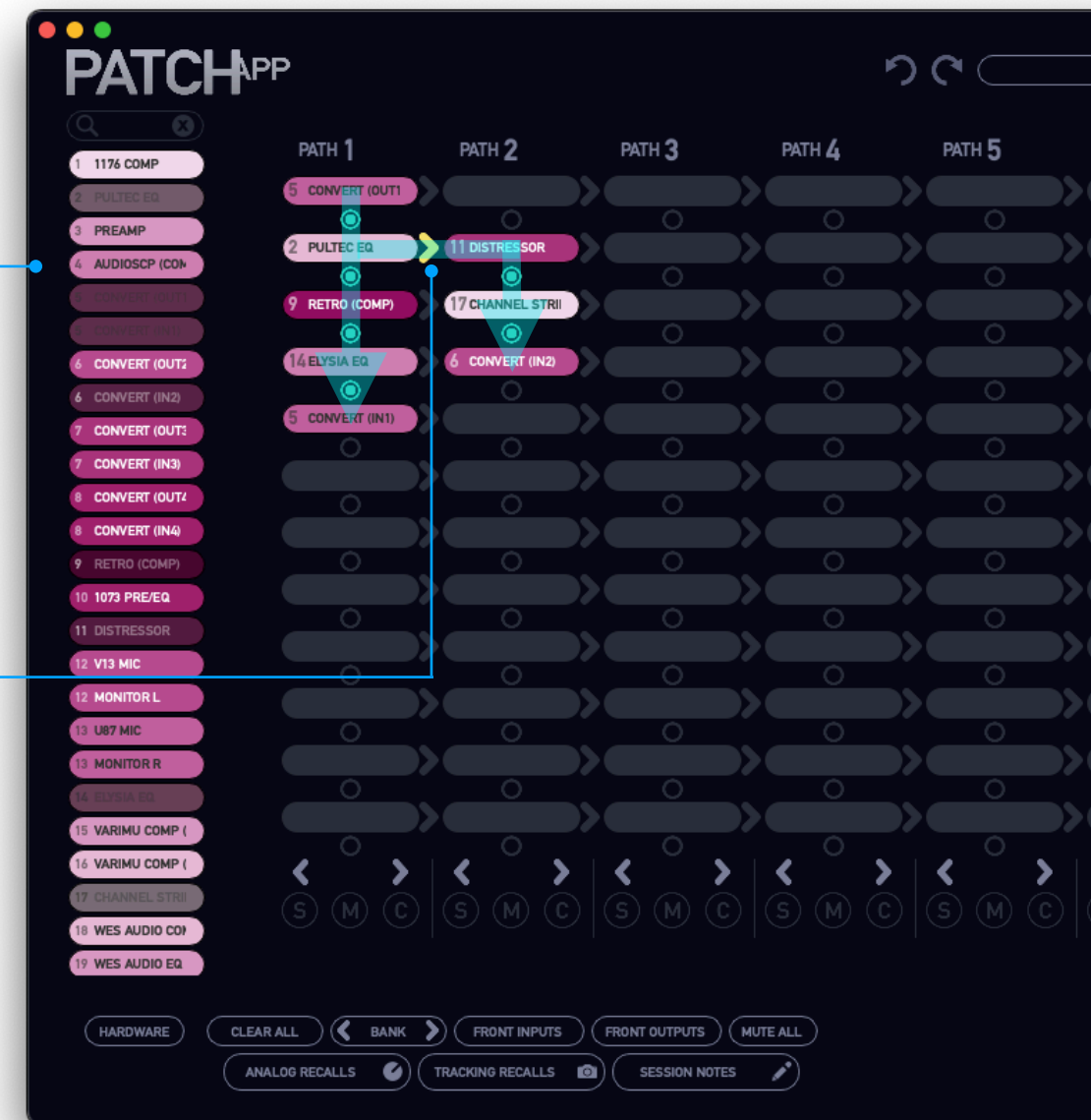
Multing capability allows a user to split an Active Routing signal flow from a desired Digital Rack Space and process the analog signal through other available analog audio equipment listed in the Hardware Index. The PATCH Series system does not introduce any impedance load issues to the Multed signal 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 **+4dB 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 a PATCH Series unit, it is recommended to have a **dB booster** or **transparent preamplifier** 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 (Ctrl + click on Mac) on the active Digital Rack Space and choose between the options of "Remove", "Bypass" or "Hardware".

Remove - Choosing "Remove" will disconnect the selected Digital Rack Space from the Routing and return the Digital Rack Space to the Hardware Index.

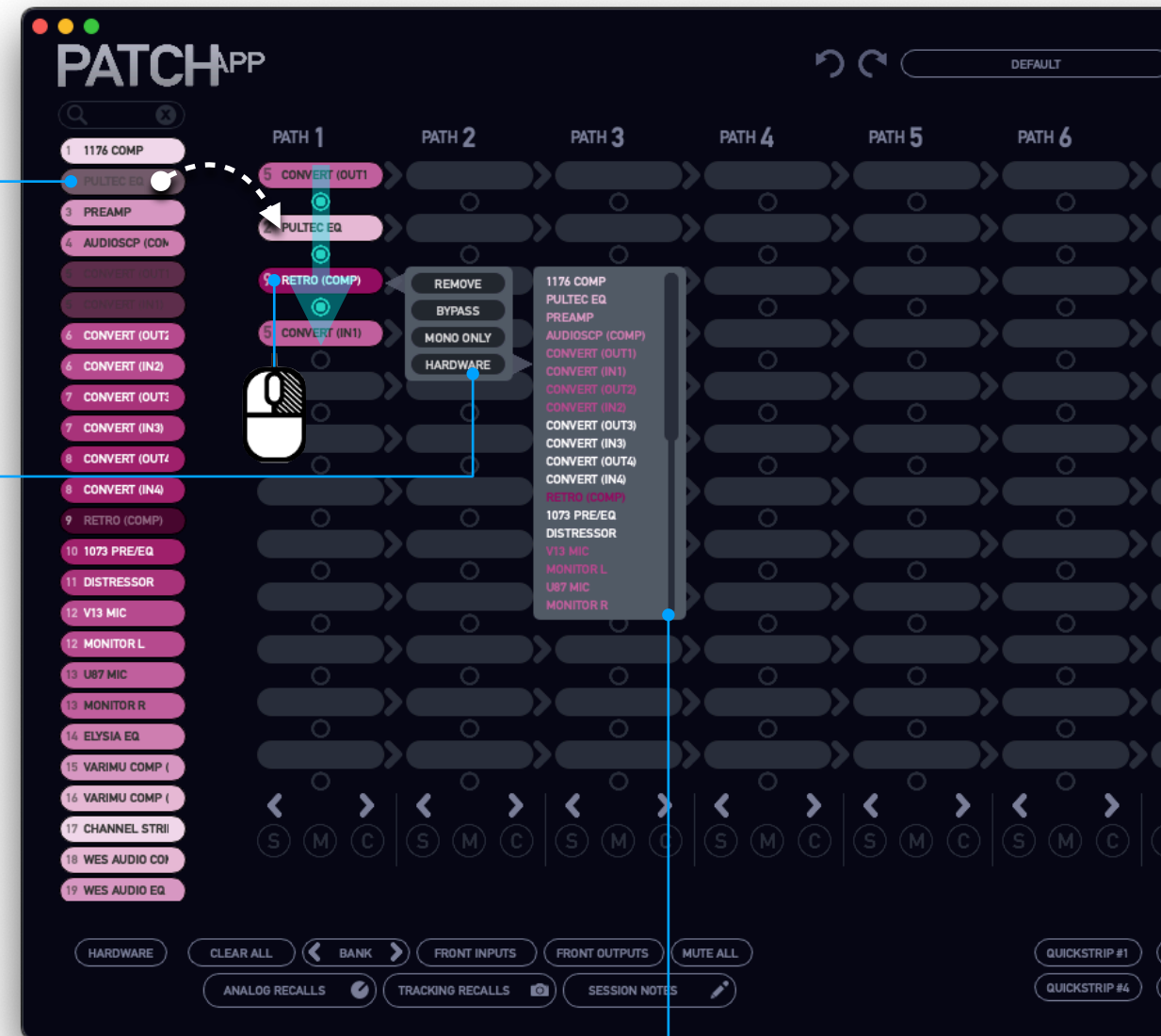
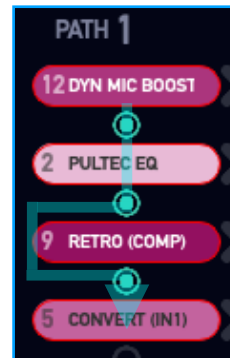
Users can also click + drag the active Digital Rack Space back to the Hardware Index to remove it.

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 (Ctrl + click on OSX) and choosing UnBypass.

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

Visual representation of a Bypassed hardware unit.



Hardware - Choosing "Hardware" after right-clicking 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 DX Toggle & Control Center will easily allow users to clear (i.e. remove) 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 in the Routings menu.

BANK

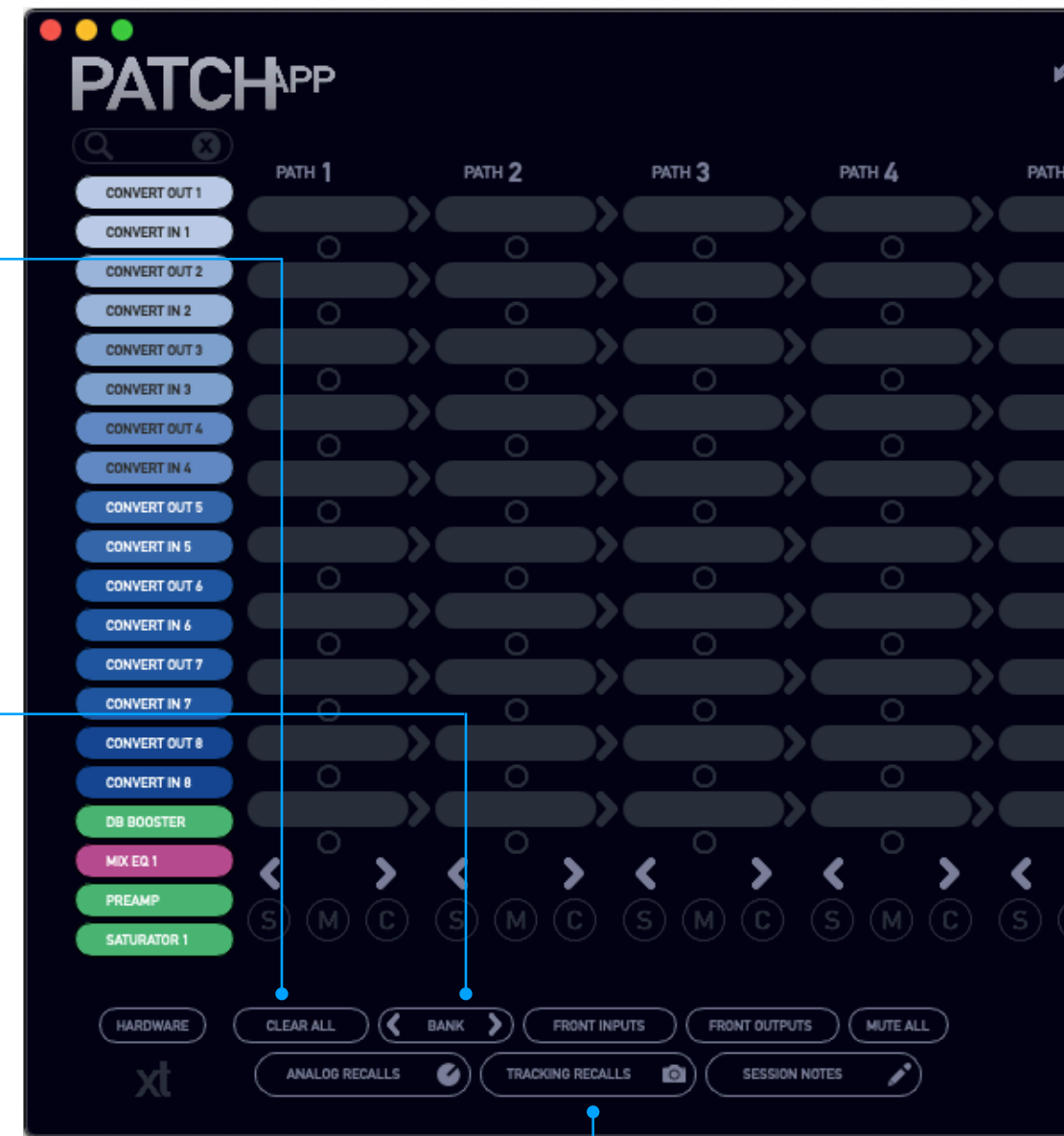
Users can easily Bank between groups of eight PATH's for quick viewing within the Active Routings section of the PATCH APP DX application. Alternatively, users are also able to use the bottom scroll bar, arrow keys &/or a touch sensitive mouse to move between various PATH's.

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

BANK THROUGHOUT THE ROUTING GRID



"Banking with the following Key Commands"



HARDWARE MANAGEMENT MENU

The Hardware Management menu allows users to take and store photos and notes of their analog hardware settings on a routing-by-routing basis for easy recallability. More information about this menu can be found on Pages 23-26.

Toggle & Control Center Features

FRONT PANEL INPUTS & OUTPUTS

The PATCH Series hardware allows users 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 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 (PATCH XT), 31 & 32 (PATCH) or 16 (PATCH 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 DX software controller.

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 (PATCH XT 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 eight hours.

AUDIO DETECTION (PXT 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.

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)



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 every Digital Rack Space 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 DX 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 within 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 one Digital Rack Space in the Hardware Index or Unlink the channels to display two Digital Rack Spaces for separate Routing configurations. When **Unlinked**, the two 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 inputs and outputs 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. Find more information on Page 25.

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.

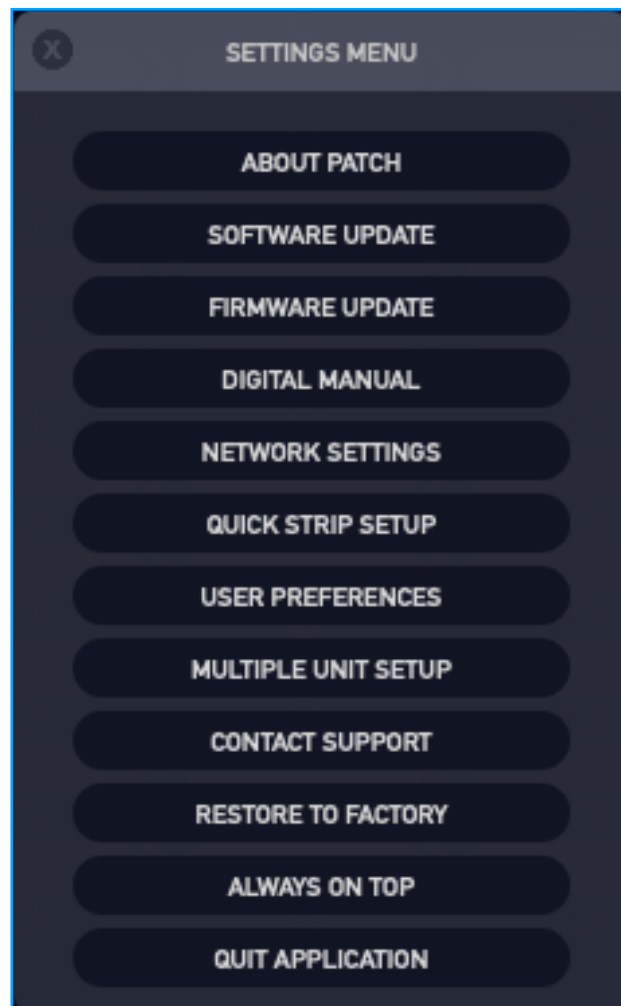
Hardware Label Color Customization - The color of each hardware label can be customized to suit the user's preference. Changing the color in this menu will change the color of the corresponding Digital Rack Space in the Hardware Index and the Routing menu.



Import/Export/Save Hardware - The PATCH APP DX has the ability to **import** &/or **export** existing hardware lists. When travelling to other recording studios that use a PATCH Series system, engineers 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 corner of the PATCH APP DX.

About PATCH - Selecting “**About PATCH**” will open an information window stating the active installed versions of both the PATCH APP DX 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 update is available for the PATCH APP DX. 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 update is available for the PATCH Series hardware. Selecting this option from the menu will open a web browser and navigate to the PATCH Series Downloads webpage.

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

Network Settings - This menu allows users to configure their PATCH XT's **Ethernet** connection.

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 bottom right of the routing grid.

User Preferences - The User Preferences menu allows users to customize the PATCH APP DX's scale size, language and font, as well as their PATCH Series hardware's fan speed and front I/O preferences. 48V and cosmetic controls are located in the adjoining Customize menu.

Multiple Unit Setup - When using more than one PATCH System within the PATCH APP DX, 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 DX allows you contact **Flock Audio Support** directly from the application's Settings menu. 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 DX to factory default settings. **Please Note:** *This function cannot be undone and will **delete** all saved routings, hardware setups, information and settings. It is recommended to **export** all Routings & Hardware Index setups prior to restoring to factory.*

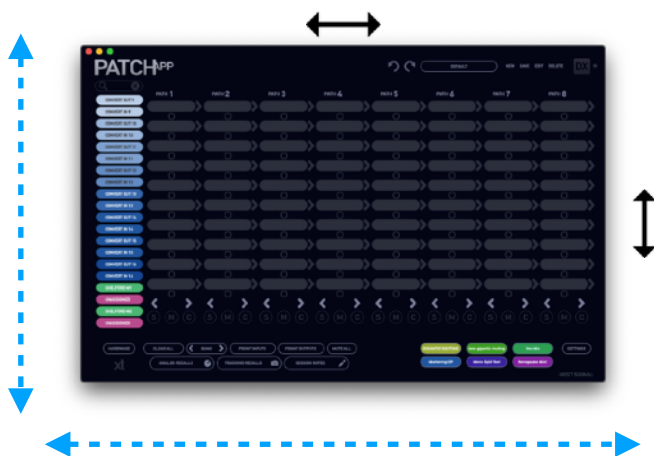
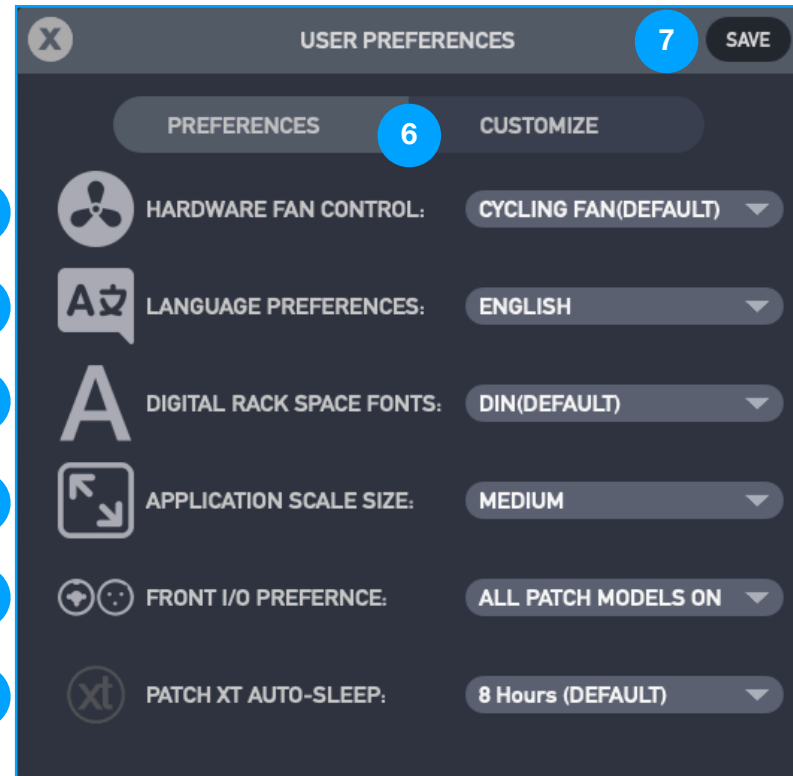
Always On Top - Selecting “**Always On Top**” will keep the PATCH APP DX above all other open applications within the present viewing display.

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

USER PREFERENCES

User Preferences Menu

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



Simply hover over any edge of the PATCH APP DX to click + drag out the PATCH APP DX 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 DX will be set to **"Cycling Fan"**, which commands 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 detects that 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 DX includes Language Preference options which will be periodically updated with new languages.

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

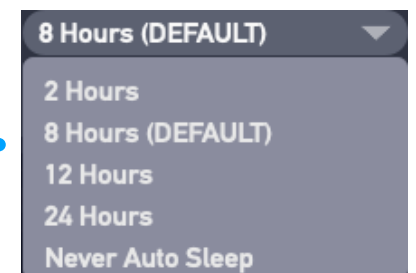
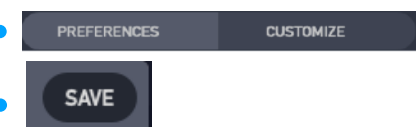
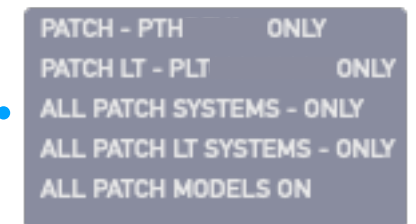
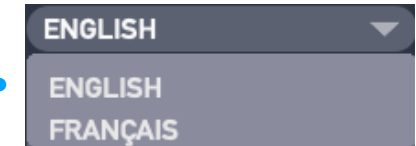
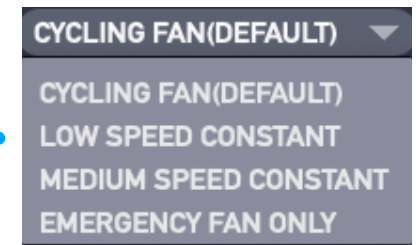
4 Application Scale Size - No matter the screen size or resolution, the PATCH APP DX allows users to customize their application's scale for the optimal experience.

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 DX Software & PATCH Series 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.

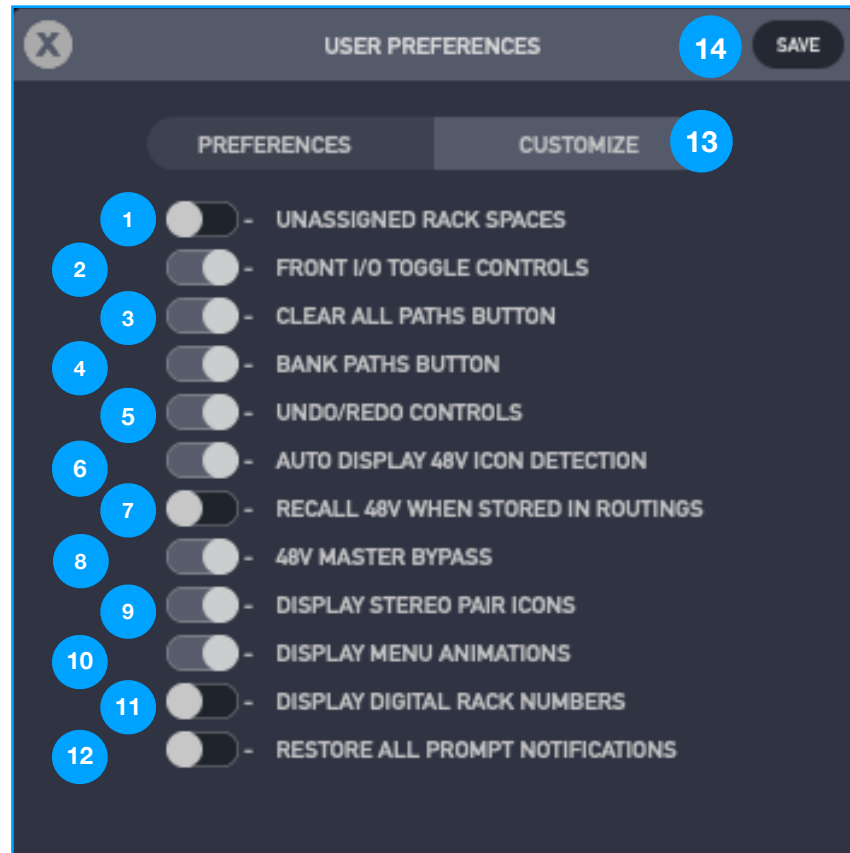
8 PATCH XT Auto-Sleep - When a PATCH XT unit has been connected to a user's computer, this option will appear in the User Preferences menu. This function allows the user to choose the time interval after which PATCH XT will automatically go to sleep after not receiving any new Routing commands.



USER CUSTOMIZE

User Customize Tab

The User Customize menu is where you can customize your Flock Audio PATCH Series system and PATCH APP DX software for a unique user experience.

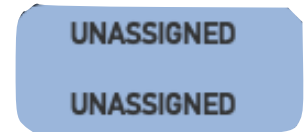


12 Restore All Prompt Notifications - If the user wants to restore all of the prompt notifications (i.e. Clear Paths warning), this toggle function will instantly restore all previously disabled prompts.

13 Preferences / Customize Tabs - The User Preferences menu has both "Preferences" and "Customize" tabs where users can set up their PATCH APP DX 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.

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.



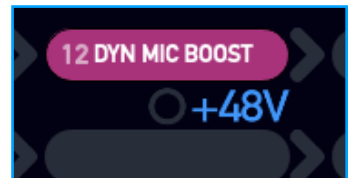
4 Bank PATH's Button - Users can choose to display or hide the "Bank" controls by toggling them on or off in the Customize tab.



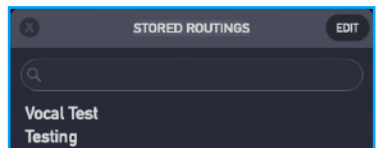
5 Undo/Redo Controls - Users can choose to display or hide the "Undo / Redo" controls by toggling them on or off in the Customize tab.



6 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.



7 Recall 48V When Stored In Routings - By default, the PATCH APP DX software will not permit the Stored Recall of active 48V-enabled devices. Users can choose to allow the recall of 48V-enabled devices when recalling a Stored Routing. **[WARNING]** If a change has occurred within the physical connection setup to your PATCH Series system, authorizing a recallable stored routing with 48V phantom power enabled may cause **serious irreversible damage** to devices that cannot accept 48V phantom power.

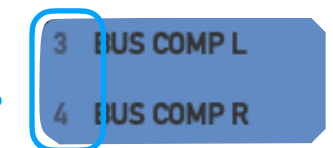


8 Master 48V Phantom Power Bypass - Users can toggle their PATCH Series unit's Master 48V phantom power on or off in the Customize tab.

9 Display Stereo Pair Icons - Users can choose to display or hide the "Stereo Pair" icons by toggling them on or off in the Customize tab.

10 Display Menu Animations - Users can choose to enable or disable the Menu Animations on their PATCH Hardware in the Customize tab.

11 Digital Rack Numbers - Users can choose to display or hide the Digital Rack Numbers by toggling them on or off in the Customize tab.



MULTIPLE UNIT SETUP MENU

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 DX according to their registered serial numbers. Rearranging the systems to a specific desired order is as simple as clicking + dragging on the unit number indicators to the left of 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 Series systems in the application. In order to send or receive audio signals between PATCH units, a specific Send &/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 setups such as Inputs & Outputs (1-8), (9-16), (17-24), (25-32) etc., which will generate 4 to 8 available sends & receives between PATCH units. Users 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 DX without any analog connections between them.

PATCH MODEL SELECTION

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

Hover over the identification icon and drag to rearrange PATCH units in a Multi-Unit setup.

UNASSIGNED
INDEPENDENT
CUSTOM USER I/O

[4 - SEND/RETURN PASSES]
INPUTS/OUTPUTS 1-4
INPUTS/OUTPUTS 5-8
INPUTS/OUTPUTS 9-12
INPUTS/OUTPUTS 13-16
INPUTS/OUTPUTS 17-20
INPUTS/OUTPUTS 21-24
INPUTS/OUTPUTS 25-28
UNASSIGNED

NO MODEL SELECTED
NO MODEL

PATCH LT

PATCH

PATCH XT

Multiple PATCH System Setup Menu (Pt.1)

The screenshot displays the 'MULTIPLE PATCH SYSTEM SETUP MENU' with a 'SAVE SETUP' button in the top right. It lists 8 units, each with a numbered identification icon (1-8) on the left, a 'SN#' field, a 'PATCH Model Options' dropdown menu, an 'INPUT/OUTPUT PASSES' dropdown menu, and a 'UNIT COLOR' dropdown menu. Unit 1 is configured with 'INPUTS/OUTPUTS 25-32' and a pink color. Unit 2 is 'UNASSIGNED' with a cyan color. Units 3 through 8 are 'UNASSIGNED' with black colors. A blue callout box labeled 'Input/Output Options' points to the dropdown menu of Unit 3. Another blue callout box labeled 'PATCH Model Options' points to the dropdown menu of Unit 5. A third blue callout box points to the identification icon of Unit 2, with a dashed arrow indicating a drag action to Unit 1's position.

Unit ID	SN#	PATCH Model Options	INPUT/OUTPUT PASSES	UNIT COLOR
1			INPUTS/OUTPUTS 25-32	COLOR (Pink)
2			UNASSIGNED	COLOR (Cyan)
3	NO MODEL SELECTED		UNASSIGNED	COLOR (Black)
4	NO MODEL SELECTED		UNASSIGNED	COLOR (Black)
5	NO MODEL SELECTED		UNASSIGNED	COLOR (Black)
6	NO MODEL SELECTED		UNASSIGNED	COLOR (Black)
7	NO MODEL SELECTED		UNASSIGNED	COLOR (Black)
8	NO MODEL SELECTED		UNASSIGNED	COLOR (Black)

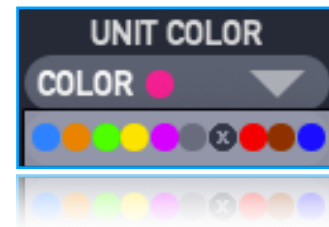
Multiple PATCH System Setup Menu (Pt.2)

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 DX.

UNIT COLOR ASSIGNMENT

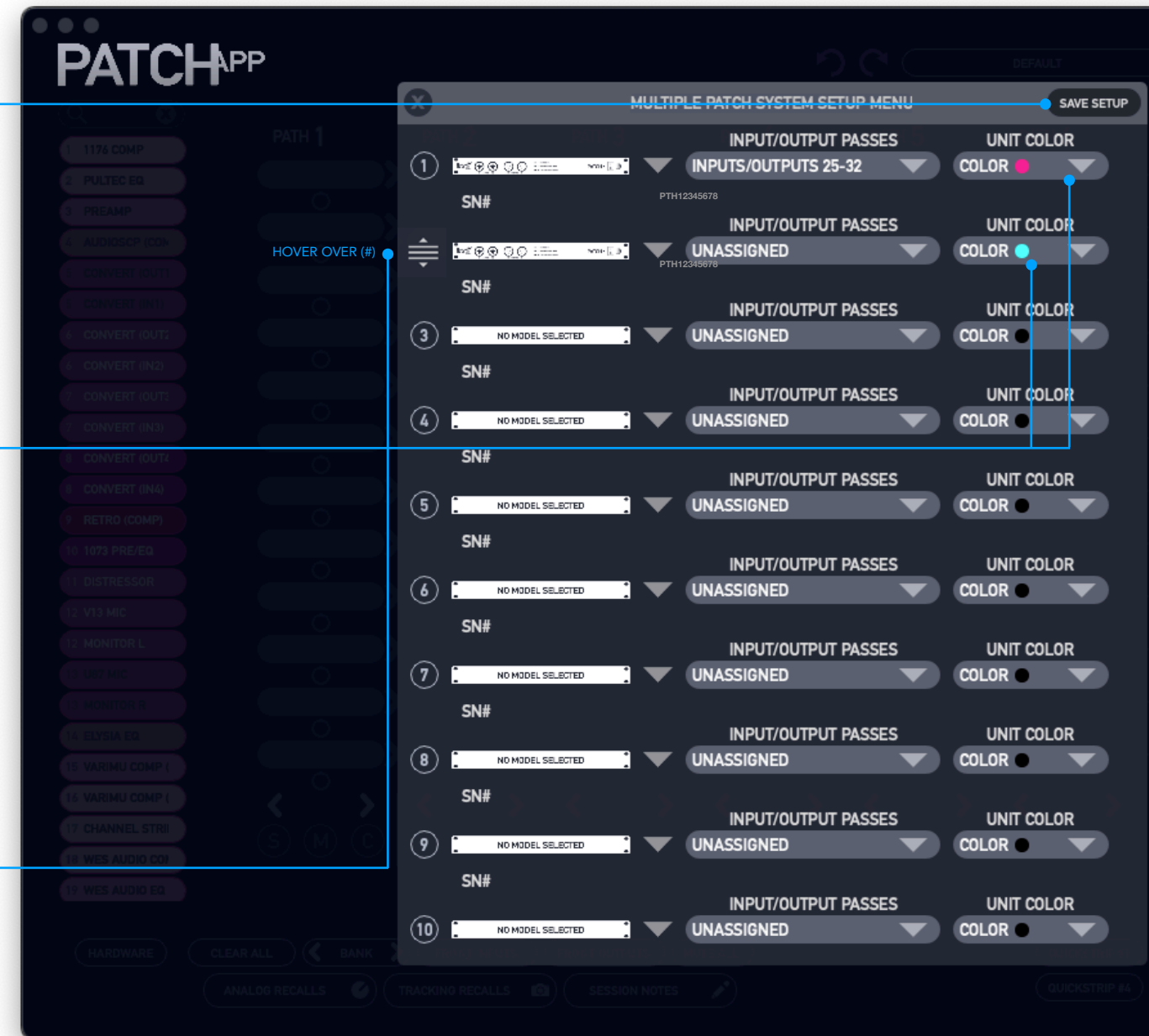
When using Multiple PATCH Series units, each PATCH Series hardware unit is identified by a colored outline around all available Digital Rack Spaces in the Hardware Index.



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

REORDERING UNITS

You can Hover your Cursor over any PATCH Series Model's # and the # will flip to a Drag + Drop Icon allowing the user to re-order your PATCH Series Models to your desired setup.



MULTIPLE UNIT 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).

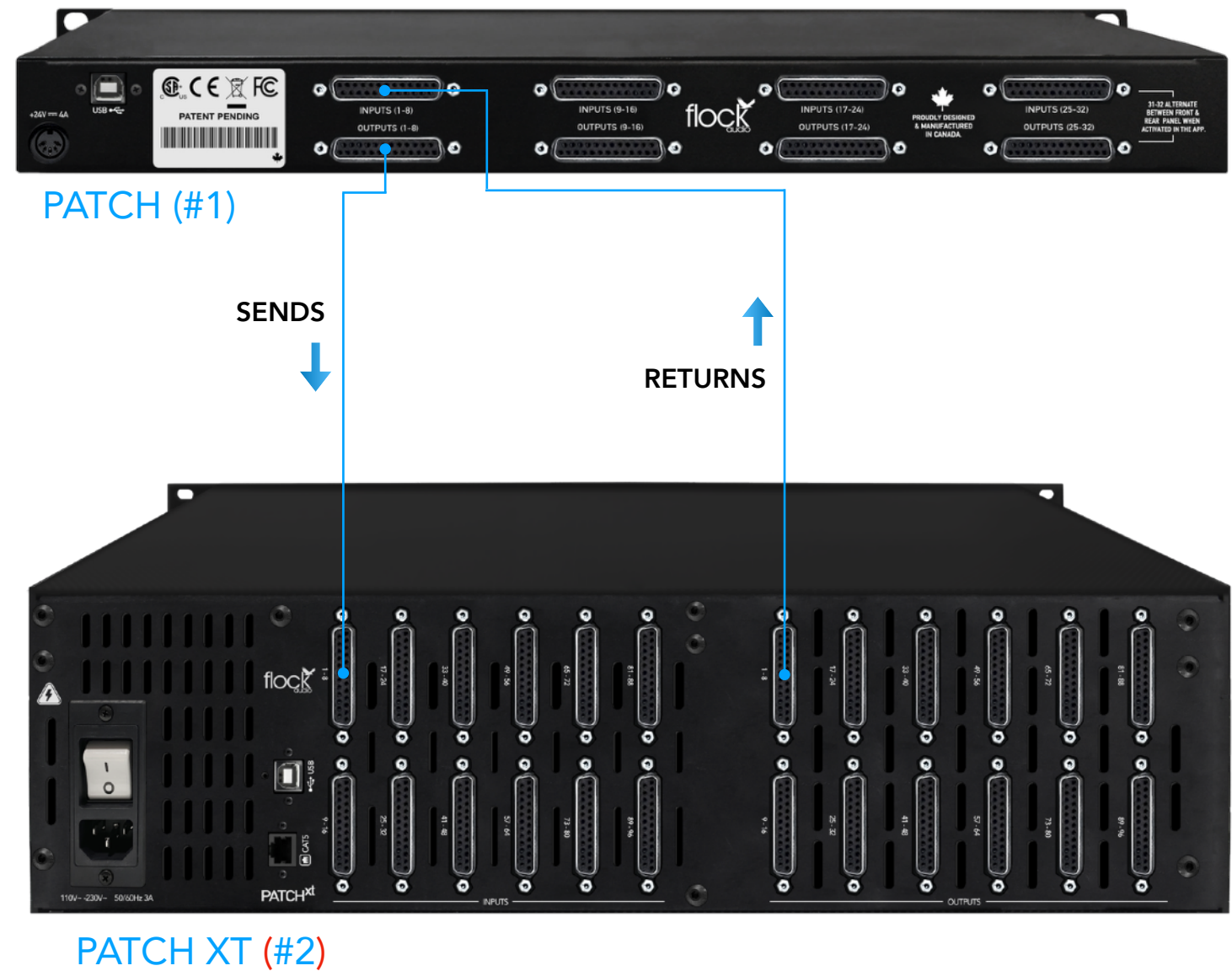
This is only one example of the possible Multi-Unit routing configurations and is not restrictive of other user desired configurations. Users may choose to have more sends than returns, more returns than sends, or sends only/receives only.

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



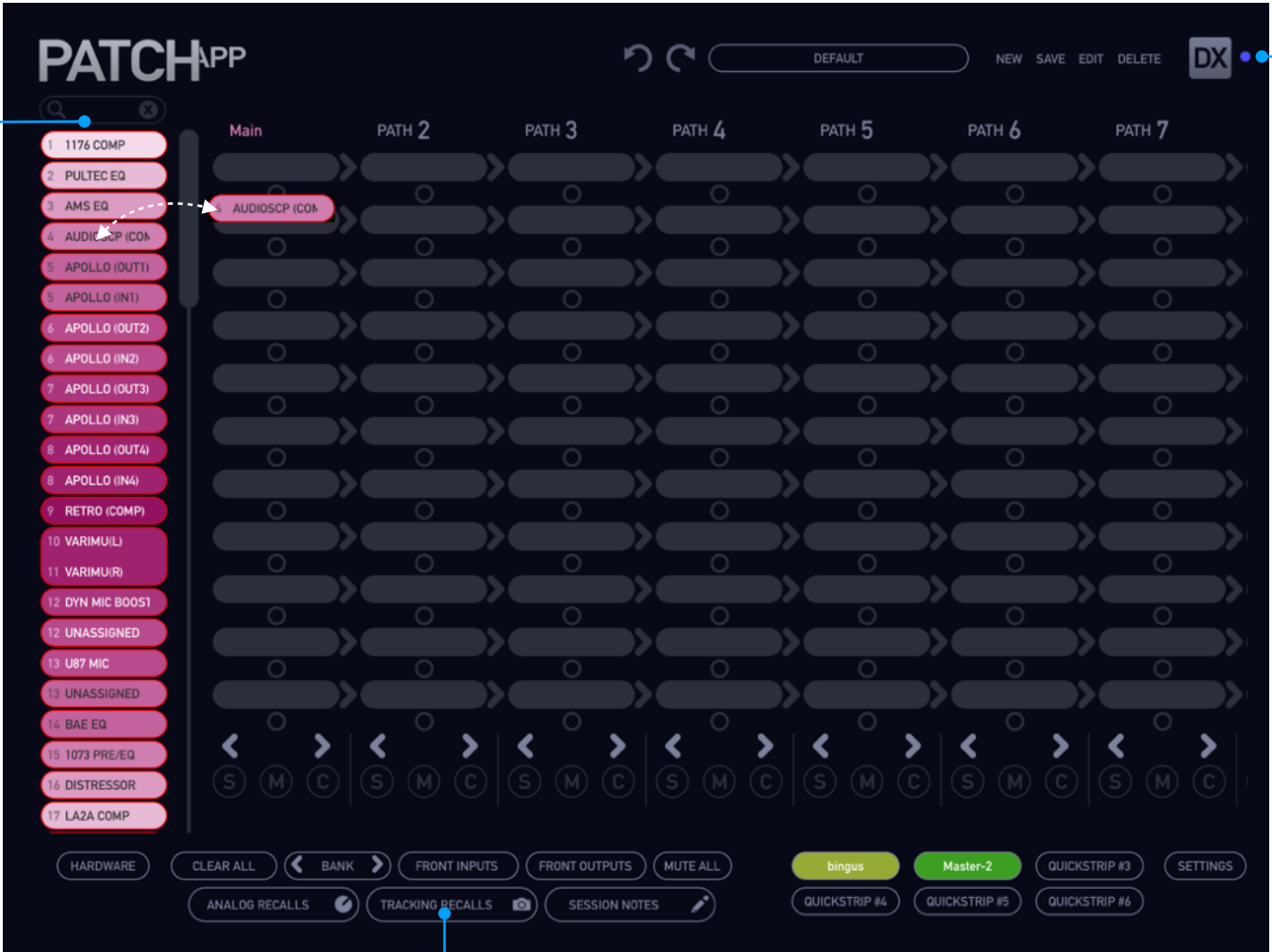
When dragging + dropping a SEND pass into an empty Digital Rack Space, the PATCH APP DX will populate both Send & Receive Digital Rack Spaces with color-coded outlined racks to allow the user to easily distinguish which PATCH Series unit is which.

Multiple PATCH System Setup Menu (Pt. 3)



Hardware Index

The Hardware Index on the iPad app works in the same way as on a computer, only with taps instead of clicks. Users can drag & drop with one finger to move Digital Rack Spaces to and from the Routing grid, and drag with two fingers to scroll through the Hardware Index. Alternatively, users can scroll through the list by using the scroll bar between the Hardware Index and the Routing grid.



Connection Indicator

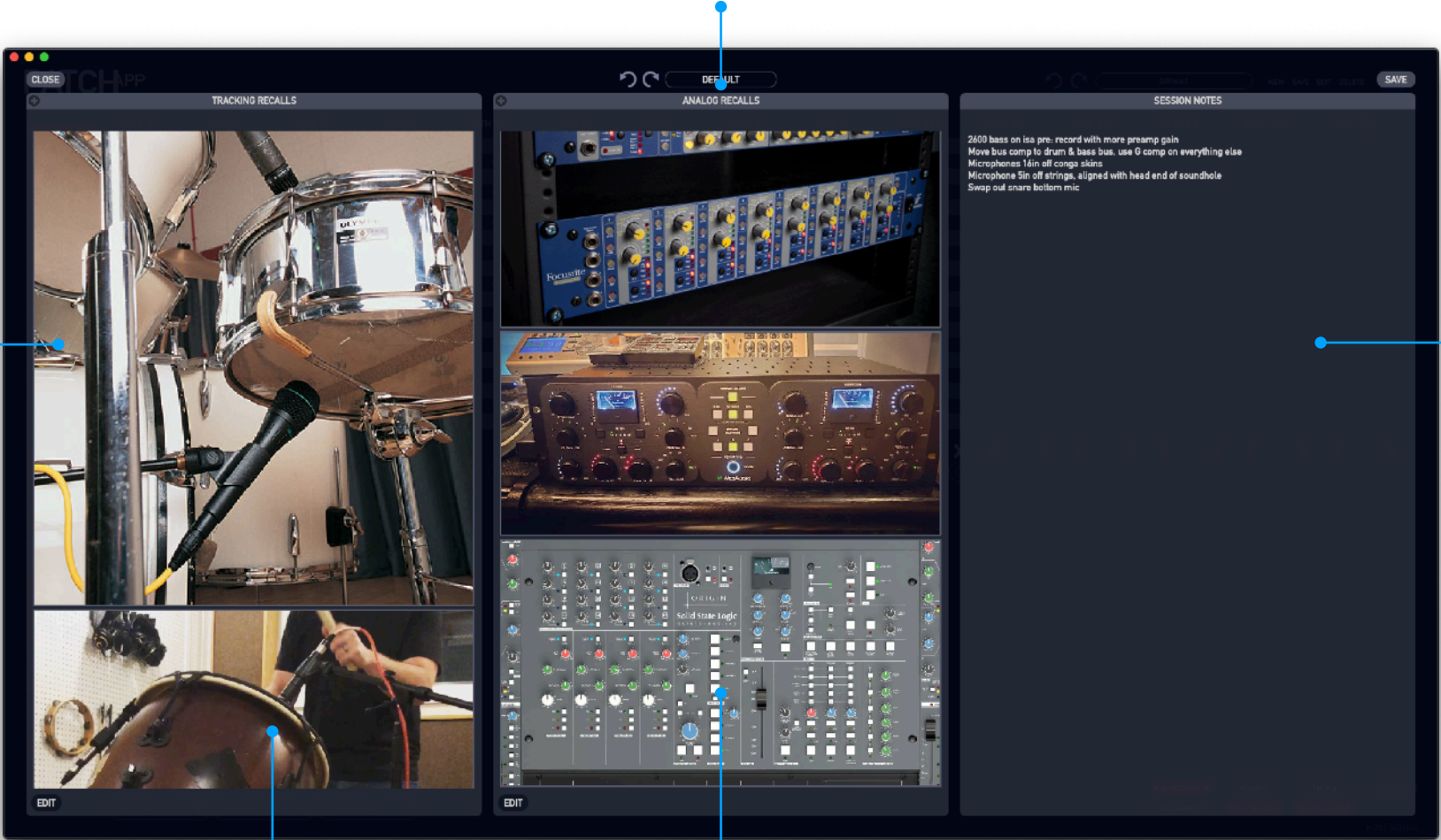
This purple indicator will light up when the PATCH APP DX is connected to another device.

Hardware Management

The Hardware Management section is where users can catalog and markup images of their analog hardware settings and their tracking information, as well as store notes of their session in specific Routings. More information on this menu can be found on the next page of this Manual.

Recalls Section

In this section, users can store vital information from their projects. It keeps tracking photos, analog hardware photos and session notes in one place, eliminating the need to store session photos in their phone's photo gallery. All recalls are stored on a Routing-by-Routing basis, so users can have a different set of photos on every unique Stored Routing. Photos can either be imported from a folder on the host computer or taken in the app with a connected iPhone or iPad.



Tracking Recalls

This section is dedicated to storing and annotating images of tracking sessions for reference. (Microphone placement, sound panel placement, etc.)

Session Notes

Users can keep track of all of their off-camera studio notes in this menu, eliminating the need to keep notes on a separate document or pad of paper.

Photo Markup

Users can view their analog & tracking recall photos in full-screen by tapping/clicking on them in the Hardware Management menu. They can then markup those photos by selecting the marker icon in the top right corner of the full-screen image.

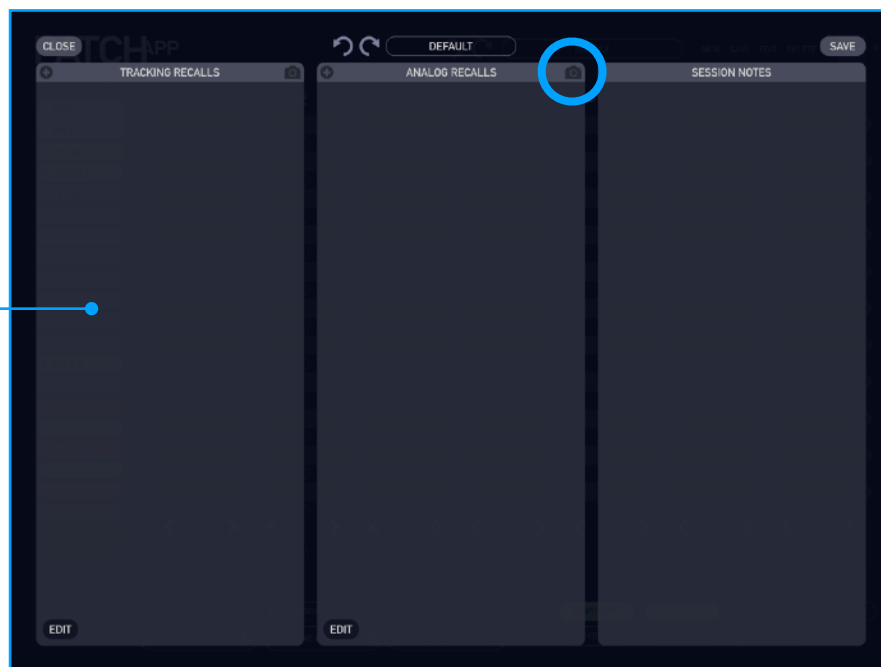
Analog Recalls

This section is where users can store and annotate photos of their analog hardware to recall their analog settings from specific Routings or sessions.

TAKING SESSION PHOTOS: iPad

1

With the Hardware Management menu open on your iPad, tap one of the camera icons to open your iPad's camera.



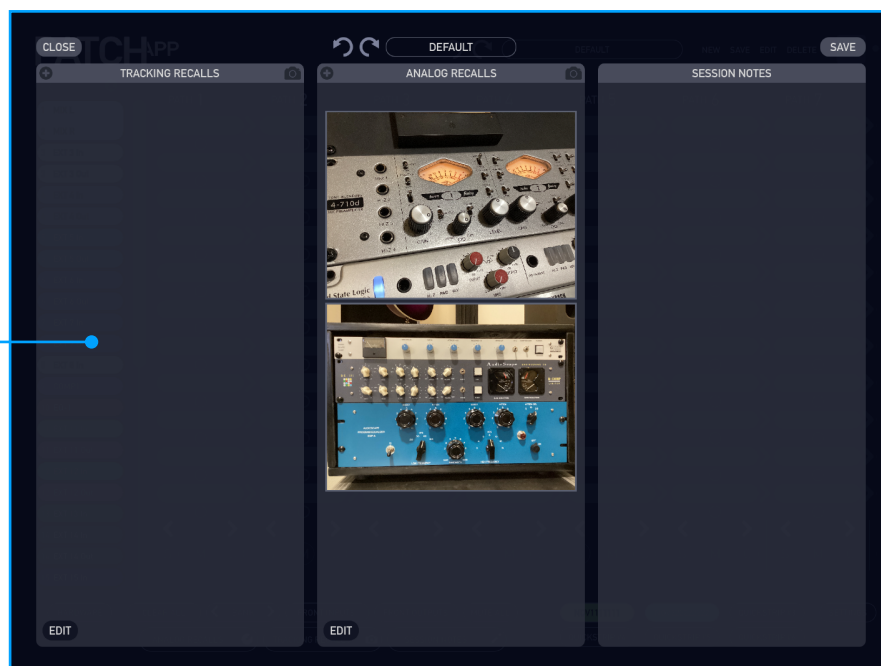
2

With your gear set to the settings you want to recall, take a clear photo of the gear's controls and click "Use Photo".



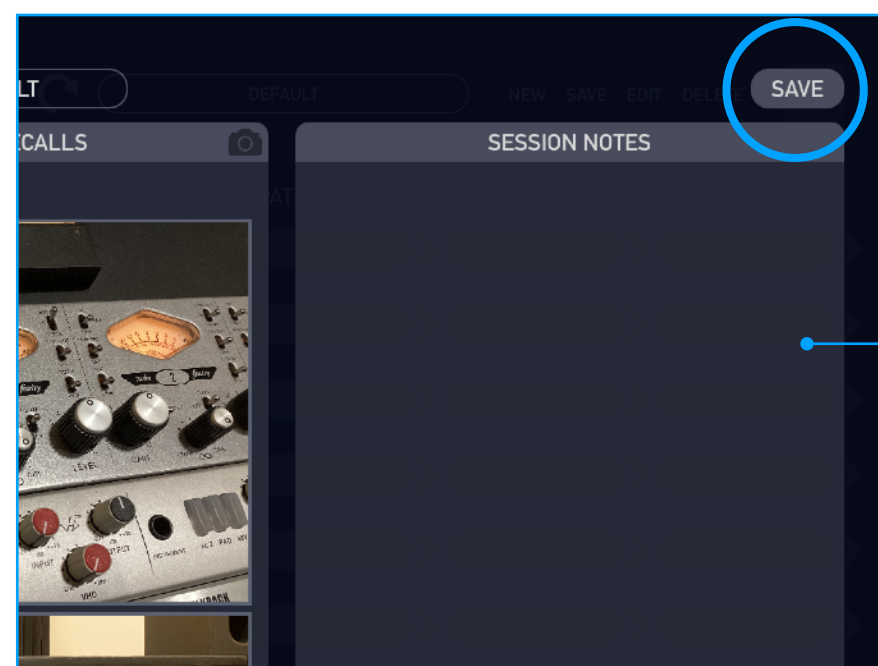
3

Repeat steps 1 & 2 until all of the settings that you want to recall are cataloged in the Hardware Management menu.



4

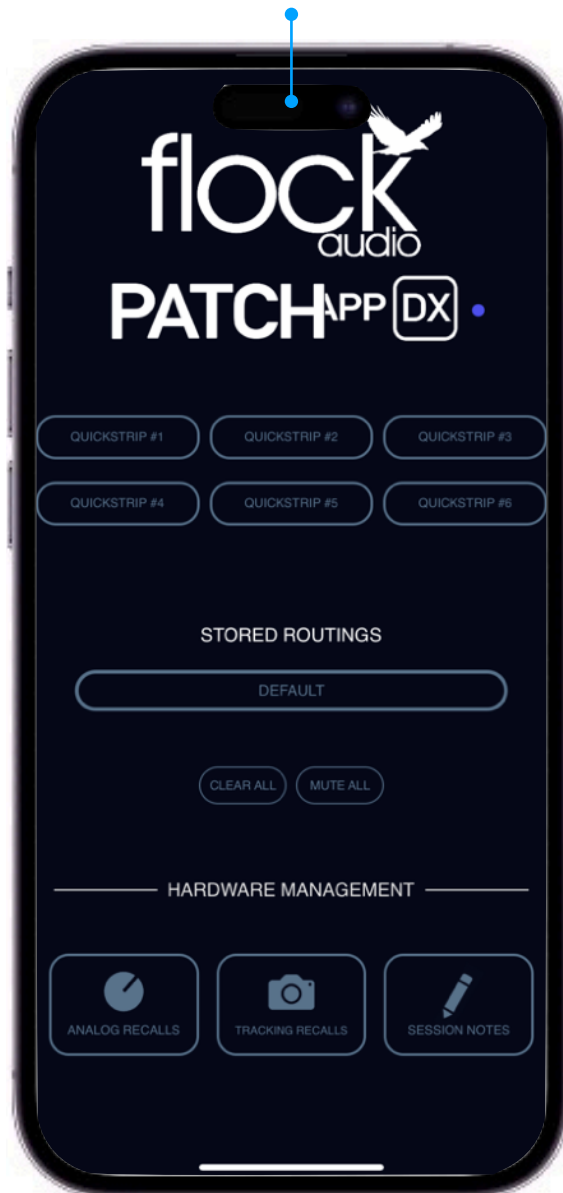
Click the "Save" button in the top right corner of the menu to save your recall photos.



TAKING SESSION PHOTOS: iPHONE

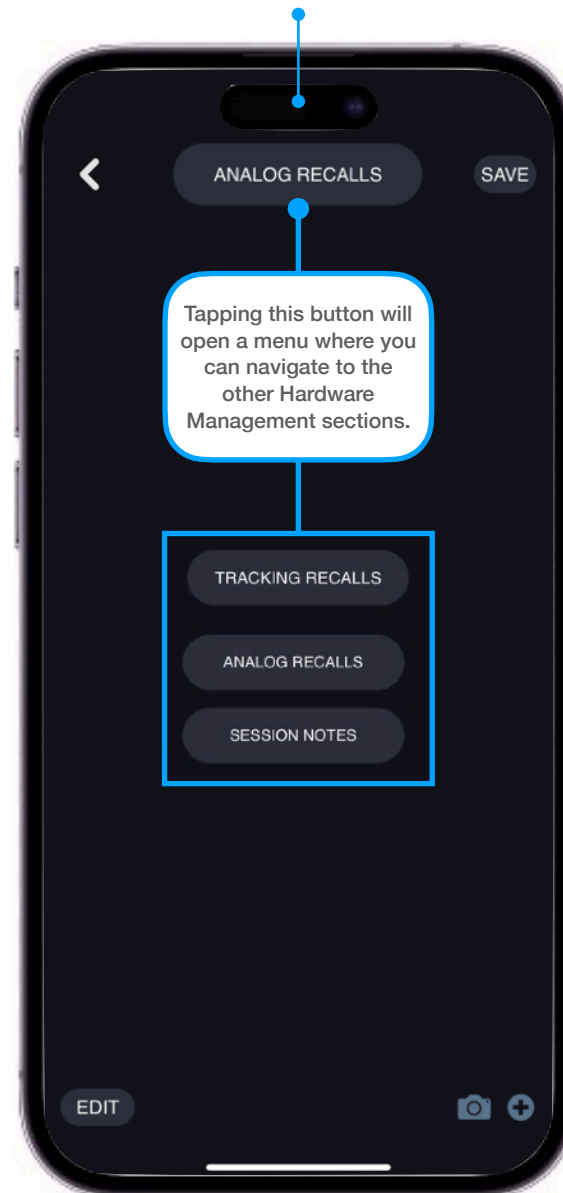
1

From the app's home screen, choose one of the Hardware Management options at the bottom of the screen.



2

With the Hardware Management menu open, tap the camera icon on the bottom right to open your iPhone's camera.



3

Once all of your gear is set to the settings you want to recall, take photos of all of your settings by repeating steps 2 & 3.

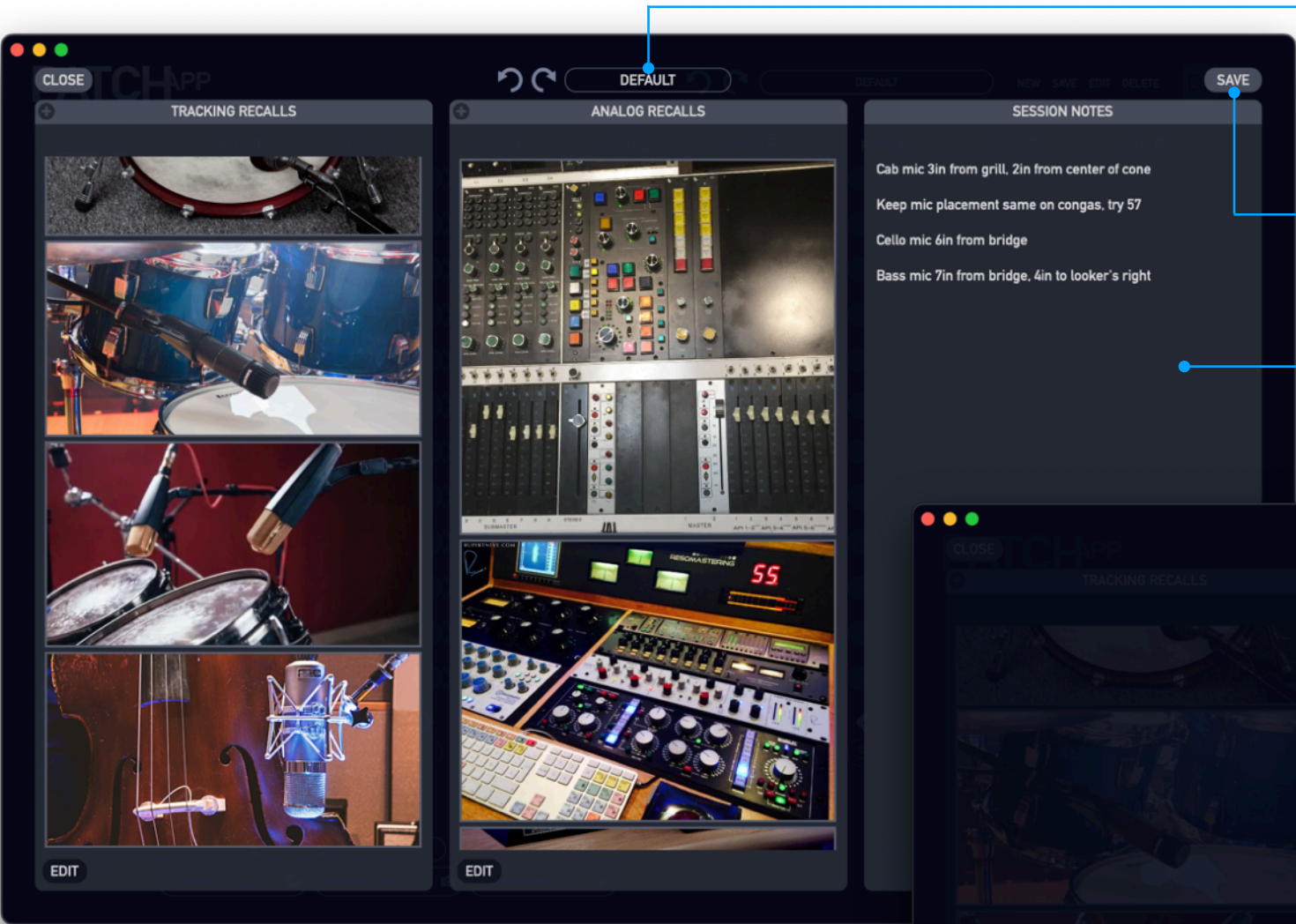


4

Once you've taken photos of all of your hardware settings, tap "Save" in the top right corner of the menu to save your photos.



MENU FUNCTIONS OVERVIEW



Routing Menu

By clicking on this icon, you can swap between different routings and different Hardware Management libraries.

Save Library

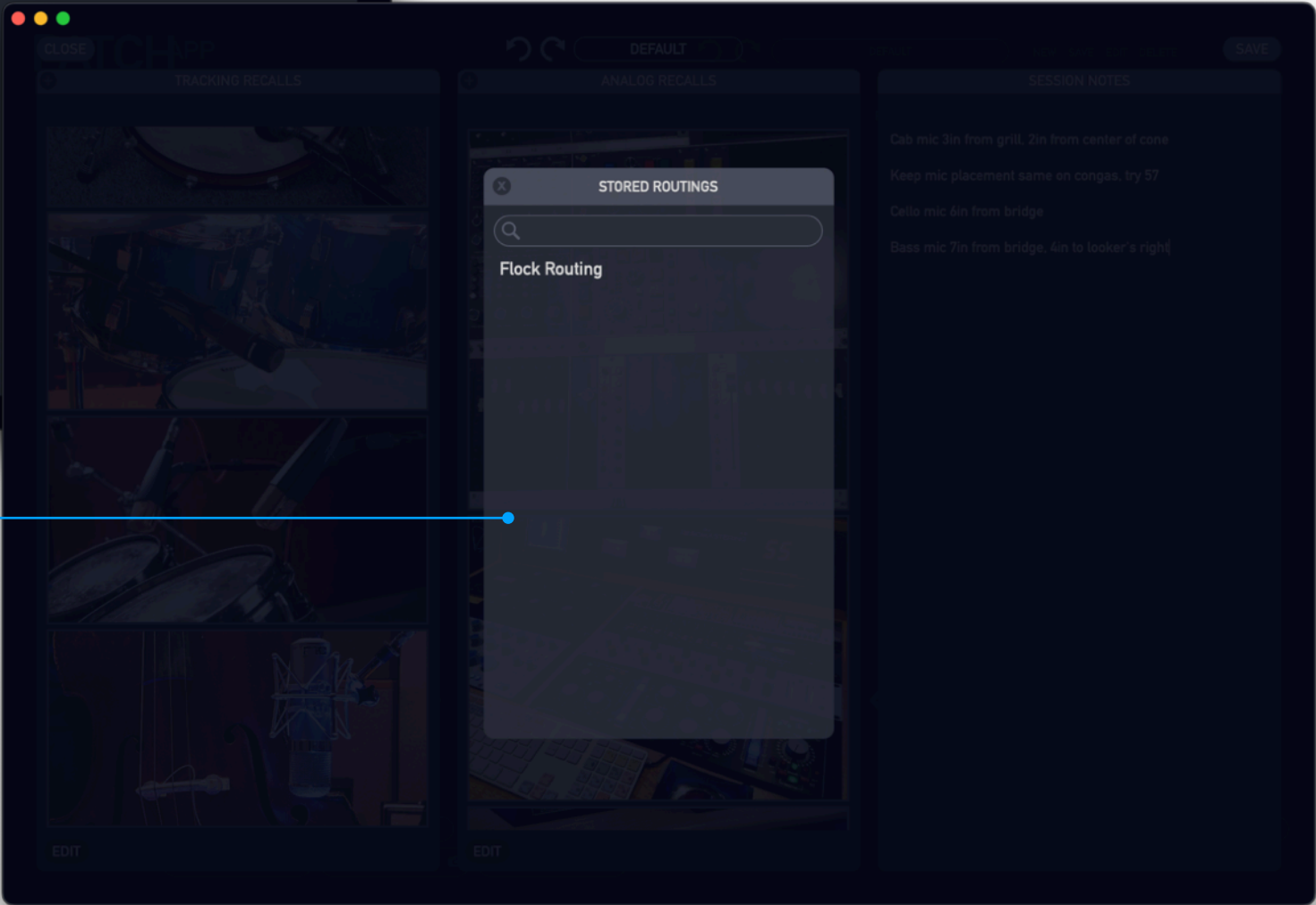
When you've finished taking photos and writing notes, click "Save" to save your changes.


Session Notes

To add notes to your session, simply click anywhere in the menu and start typing.


Routing Menu

With the menu open, you can choose any routing to load so you don't have to close the Hardware Setup menu to access their routings.




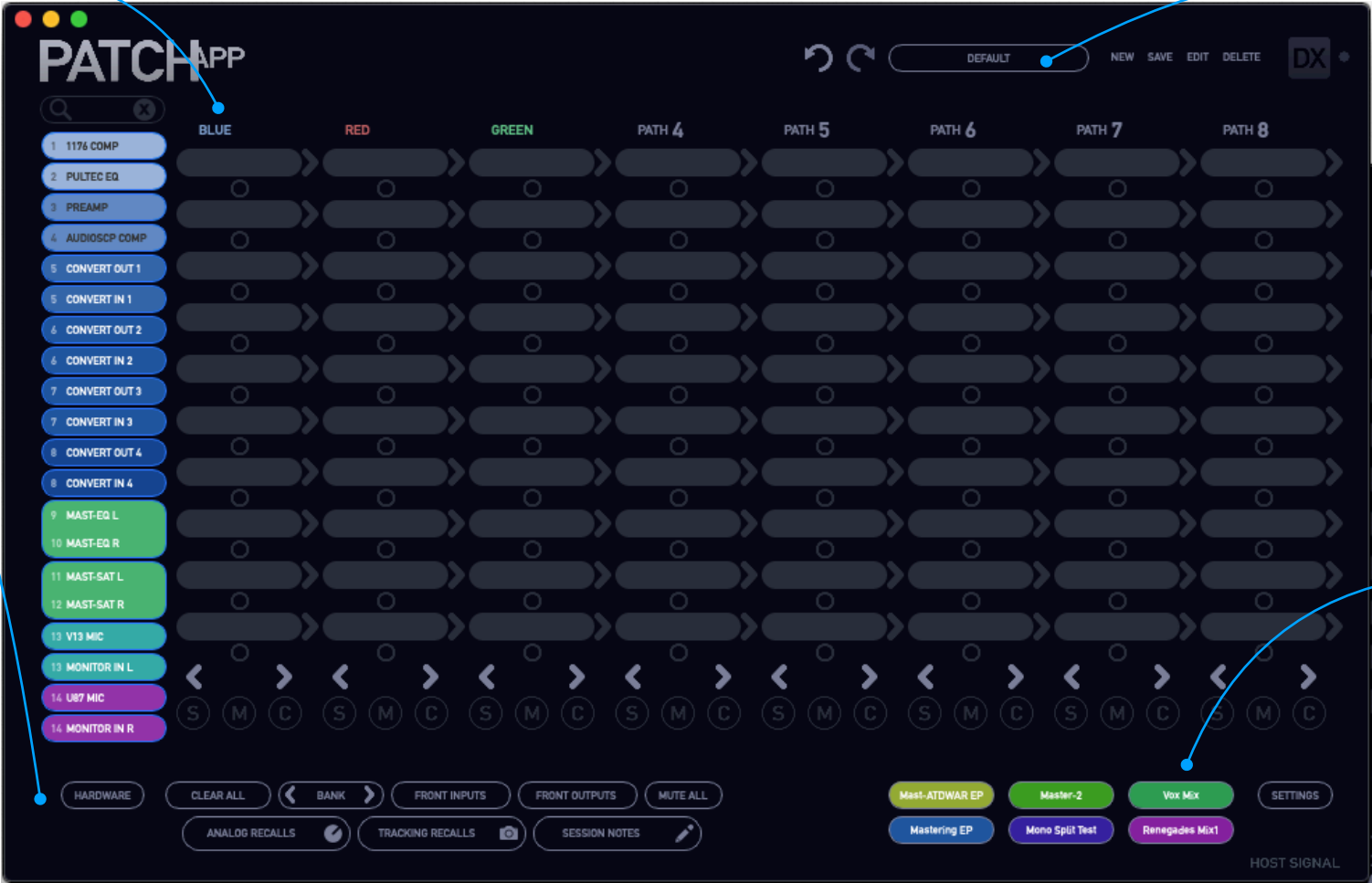
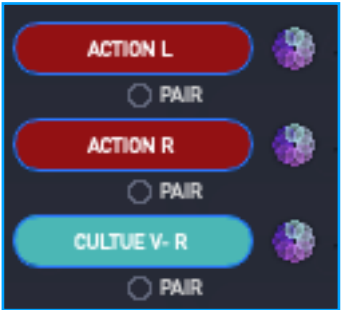
Anywhere users can see a , they can select it to choose a custom color for the assigned item.

PATH Names


By right-clicking a PATH name and selecting "Edit", users can rename PATH's and customize the color of the PATH name by clicking the  icon and selecting a color from the drop-down menu.

Digital Rack Spaces

In the Hardware Setup menu, users can click the  icon next to any piece of hardware to customize the color displayed in the main app screen.



Routings

In the Routings menu, users can customize the color of their routings by selecting "Edit" in the top right corner and clicking the  icon next to the desired routing.



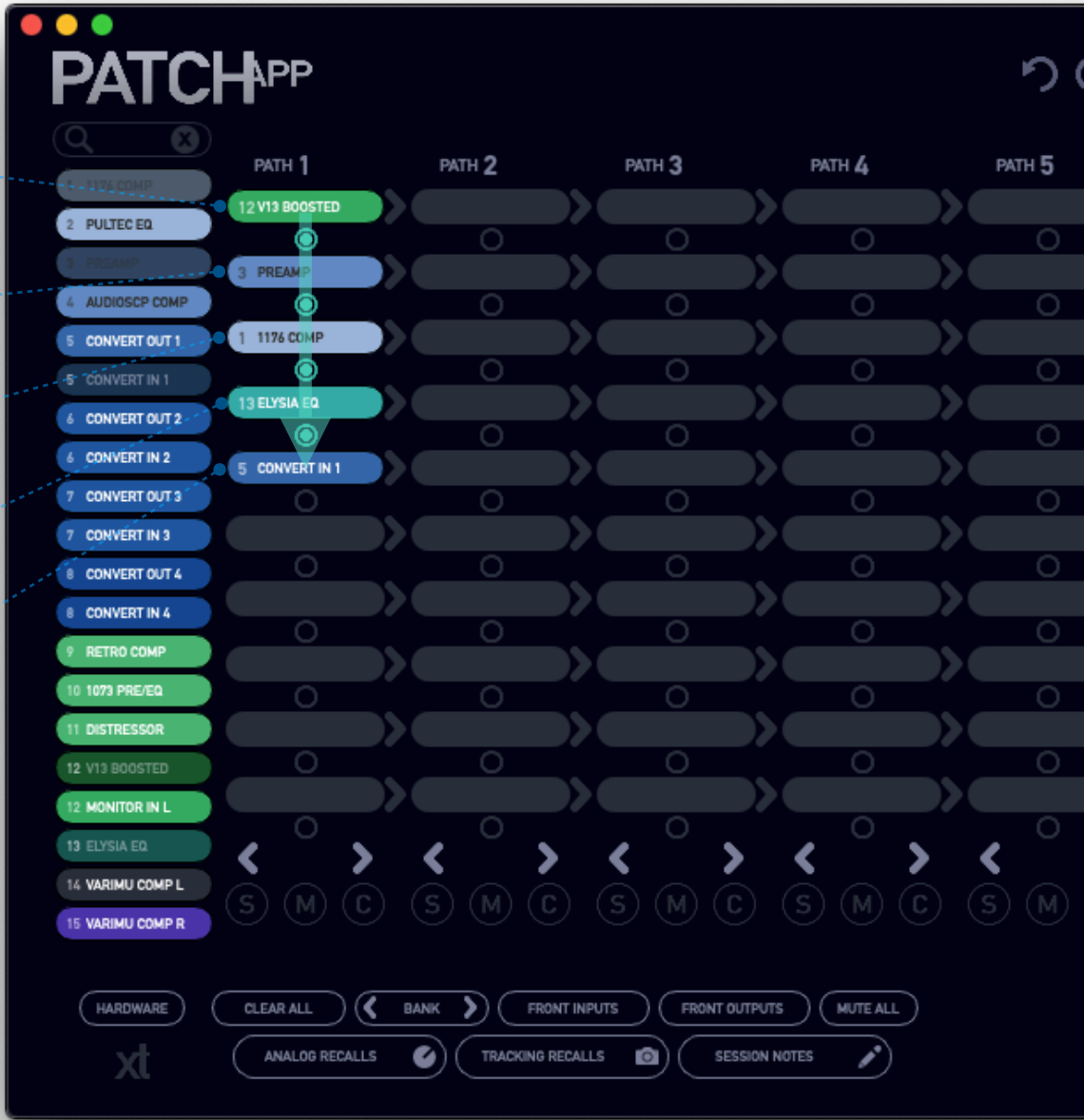
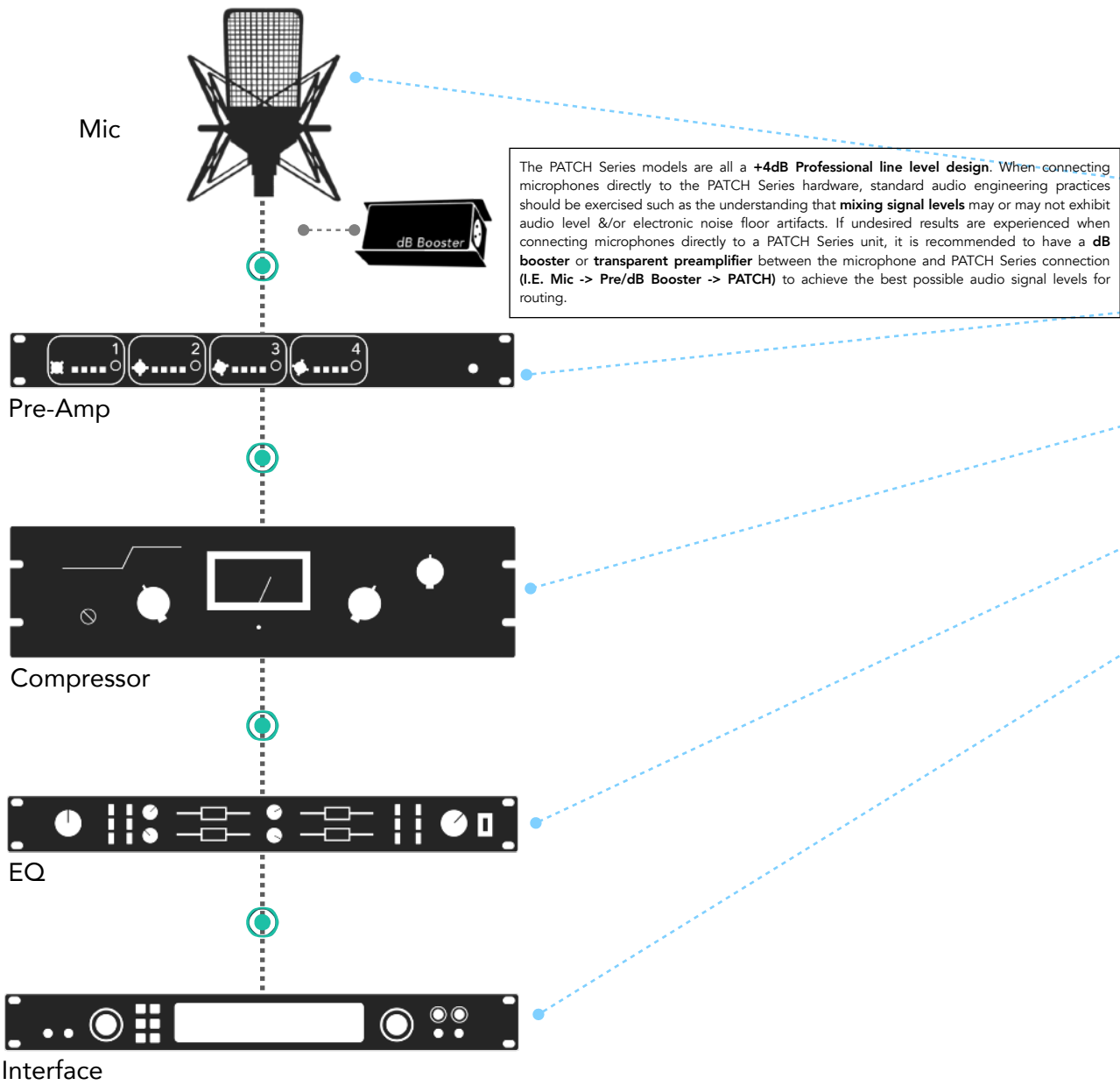
Quick Strip

In the Quick Strip Setup menu, users can choose a color to assign to their Quick Strip icons by selecting the icon next to the desired routing.

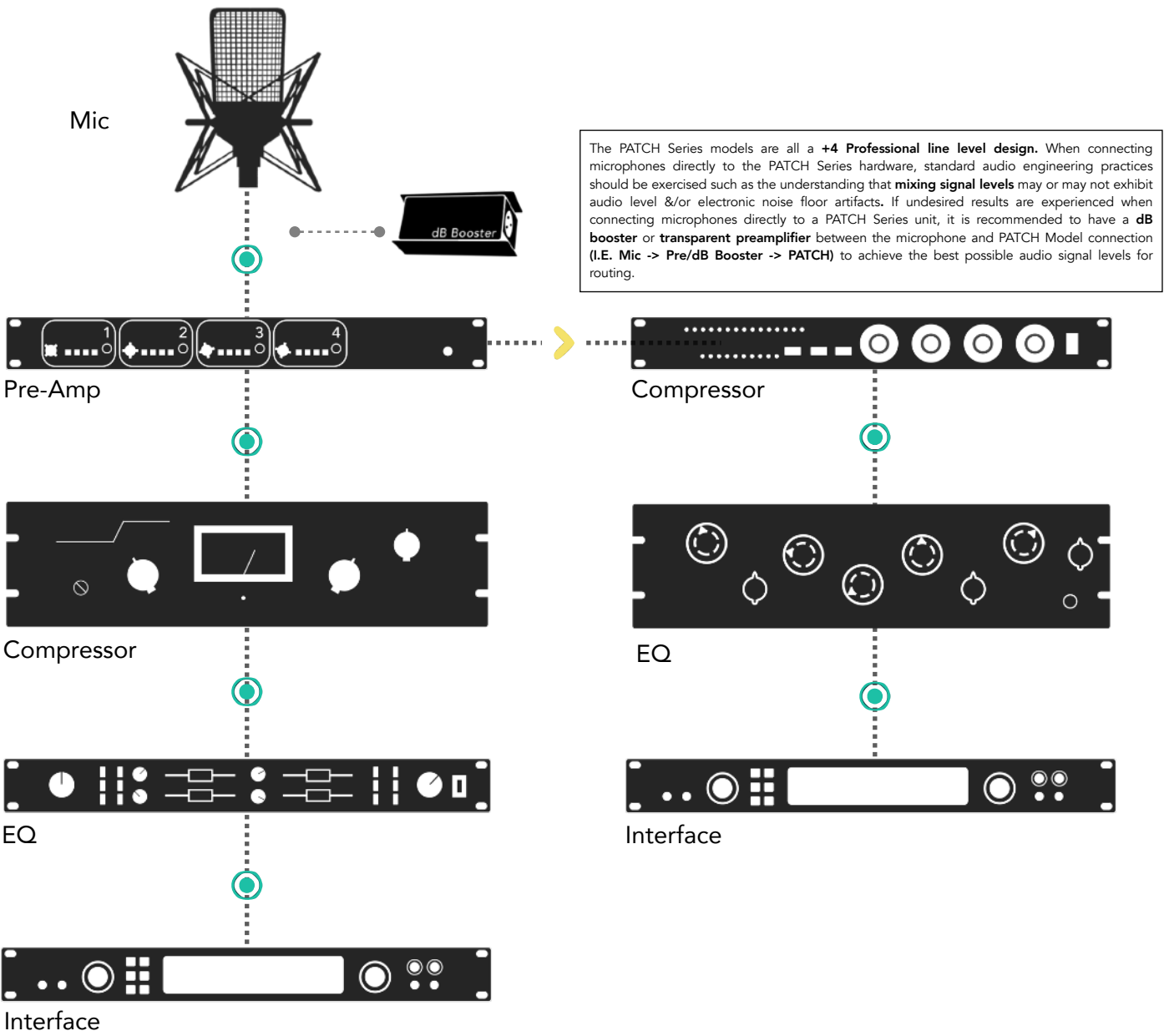




Standard Microphone Routing Example



Multing Routing Example

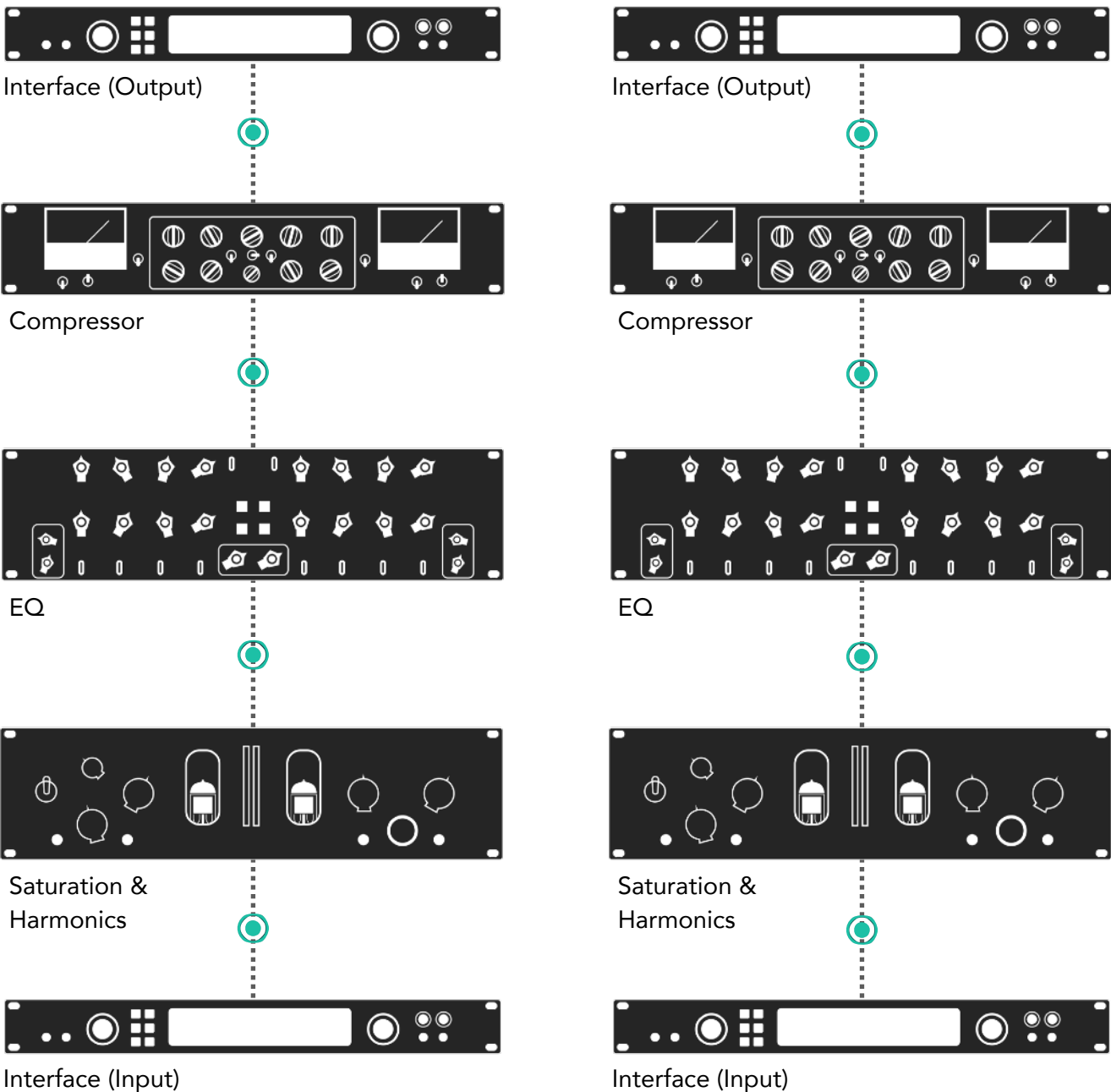


Hardware & Software Routing Overview



Mixing/Mastering Routing Example

Hardware & Software Routing Overview

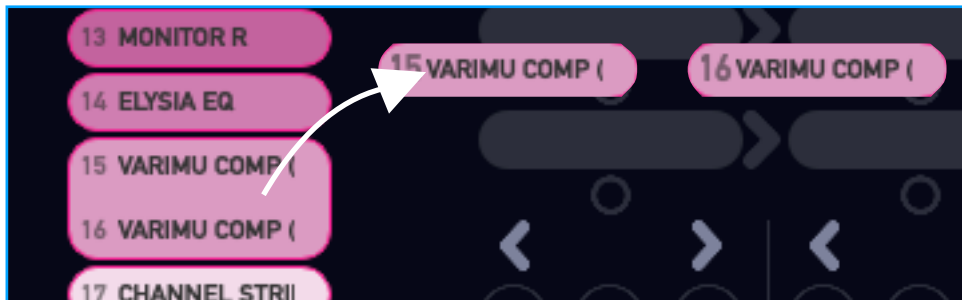


Stereo Pairing

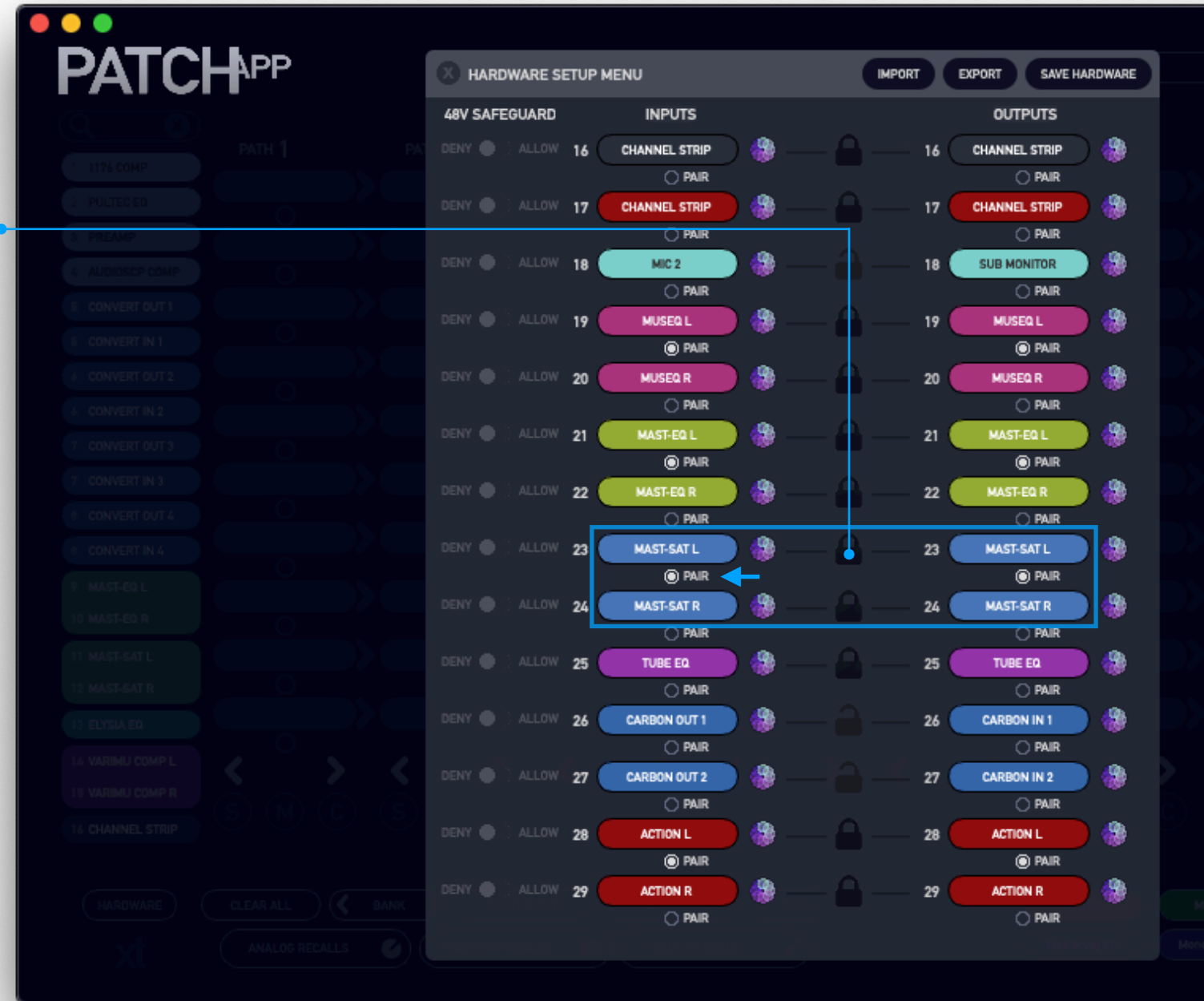
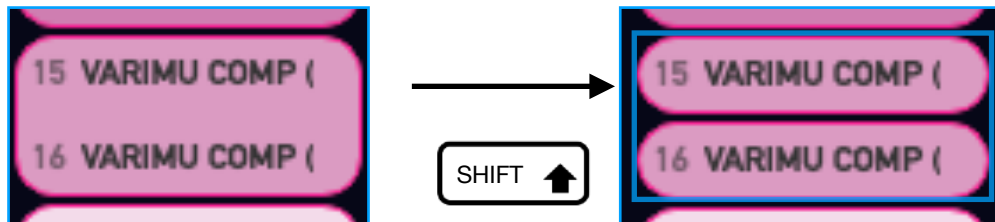
Stereo Pairing allows users to easily **pair** any two adjacent channels together to optimize their workflow.

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 DX 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, which will allow you to use any Stereo Paired channels as individual mono channels within the Active Routing grid. While holding 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 every time you open the PATCH APP DX with just a few easy steps.

#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.

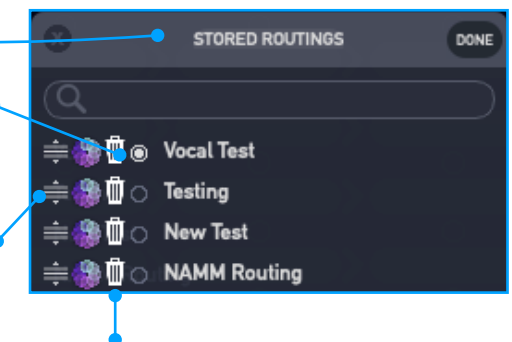
#4. The next time to launch your PATCH APP DX Software, the Software will **instantly recall** this Routing.

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



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

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

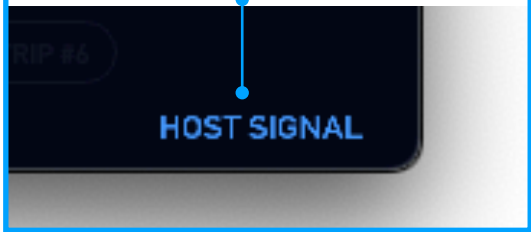


DELETE Stored Routings by Clicking the Trash Icon and confirming their removal from the Menu

Hardware Details

The Hardware Details menu shows important information about all connected PATCH Series units, such as their serial number, firmware version and connection status.

To access the Hardware Details menu, click on the Host Signal indicator on the bottom right of the PATCH APP DX window.

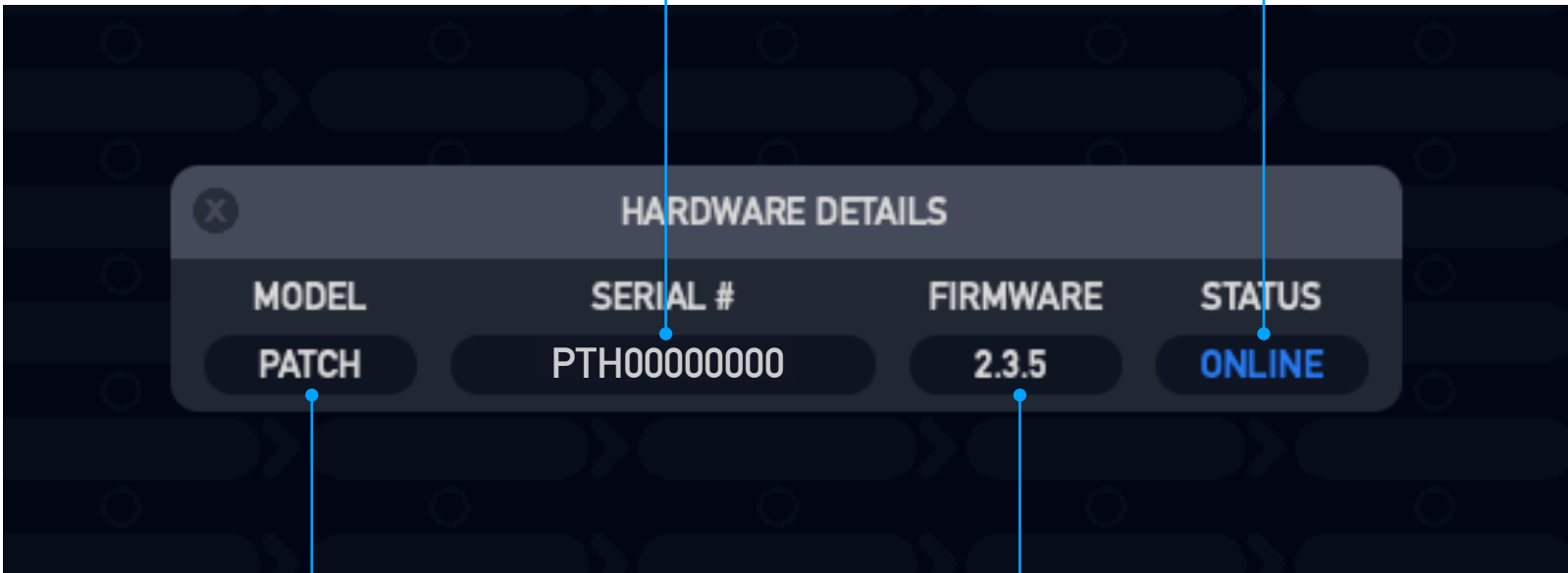


UNIT STATUS

This field indicates the connection status of each connected PATCH Series unit. "Online" means that the unit is turned on and communicating with PATCH APP DX. "Offline" means that the unit is off or otherwise not communicating with PATCH APP DX.

SERIAL NUMBER

This field shows the serial number of each connected PATCH Series unit.



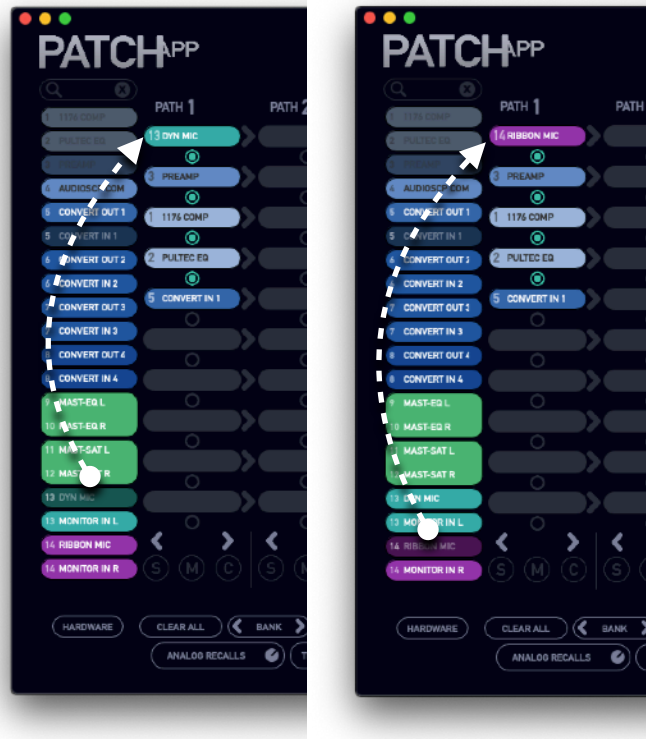
MODEL IDENTIFICATION

This field indicates which PATCH Series model is connected to the PATCH APP DX Software.

FIRMWARE VERSION

This field indicates the Firmware version that the indicated device is operating on.

Quick User Tips & Tricks



AUDITIONING MICROPHONES

The PATCH system allows users 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 of the first slot to replace and audition different connected microphones during a recording session.



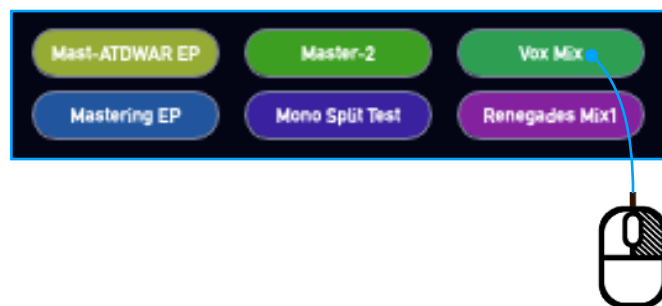
REARRANGE ACTIVE RACKS

Clicking and dragging an active Digital Rack Space over an already placed Digital Rack Space will initiate a **flip**, or alternating signal flow, between the two 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.

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 "Bank left/right with these Key Commands"

SCROLL PATH BY PATH IN THE ROUTING GRID

- Left Arrow > Right Arrow "Scroll left/right Per PATH with these Key Commands"

Troubleshooting Tips

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

Software Compatibility & System Requirements



OSX: 10.13 High Sierra or Newer

iOS: 12 or Newer

Disk Space: Minimum 512 MB available disk space

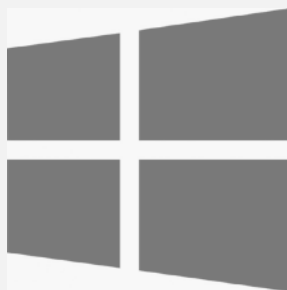
USB: 1x USB 2.0/3.0 Port (Per PATCH Series System)

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 10 or Newer

Disk Space: Minimum 512 MB available disk space

USB: 1x USB 2.0/3.0 Port (Per PATCH Series 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.



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