

## Getting Started Guide version 1.5.0

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## Welcome to PusheR!

First off, congratulations on becoming a PusheR user. We hope that you will have great fun in controlling Reason from the Push hardware!

Before you continue on reading this guide, here are some basic facts which will help you to better get familiarized with PusheR:

- The PusheR app handles all the communication between the hardware and Reason. It needs to be running in the backgroud at all times when you want to use PusheR
- PusheR utilizes Push's User ports for communicating with the hardware. This allows for the possibility of controlling Live and Reason at the same time
- The display will present information based on the selected mode. There are modes for track control, device control, and mixer control. These are accessed by using the "Encoder Modes" button selectors.
- If you are using Windows, you will need to install a virtual MIDI driver to create MIDI ports which both Reason and the PusheR app can use. We recommend the free LoopMIDI software which you can download from <a href="http://www.tobiaserichsen.de/software/loopmidi.html">http://www.tobiaserichsen.de/software/loopmidi.html</a>

If you have any comments, suggestions or other feedback, drop us an email at "<u>retouchcontrol@gmail.com</u>". We would love to hear from you.

All the best with your music making, RetouchControl

## **1. Installation**

## Step 1: creating the virtual midi ports

#### Windows:

Windows users will have to install a third party software to create Virtual MIDI Ports. We recommend using LoopMIDI (http://www.tobias-erichsen.de/software/loopmidi.html). For video instructions, please refer to this video <u>HERE</u>.

- 1. Go to the LoopMIDI website, download and install it.
- 2. Launch the LoopMIDI application. Follow the example below to create the MIDI ports
- 3. Create 2 MIDI ports: "from PusheR2 1", and "to PusheR2 1"

	🗑 loopMIDI				x	
	Setup Advanced	About				
	My loopback MIDI	ports				
	Name		Total data	Throughput / sec.		
					1.	Enter port name here
	+-	New port-name:				
2. Click o the + to create						
the port						

#### Mac:

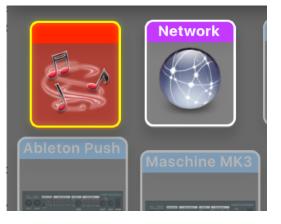
Mac users can use the native IAC bus to create the necessary ports. Please follow these steps. For video instructions, please refer to this video HERE.

**Step 1:** On your Mac, go to the Applications folders, then open the "Utilities" folder and launch the "Audio MIDI Setup" application. Then from the Window menu, choose "Show MIDI Studio"

	- V
Monitor	
🖉 Adobe Flastall Manager	
AirPort Utility	
m Audio MIDI Setup	
🕹 Bluetooth File Exchange	
🚔 Boot Camp Assistant	
🐮 ColorSvnc Utilitv	

Window	Help	
Hide Au	dio Devices	器1
Show M	IDI Studio	<b></b> #2
Show N	etwork Device Browser	ж3
Show P	revious Tab	^☆→
Show N	ext Tab	$^{} \rightarrow$
Move Ta	ab to New Window	
Merge /	All Windows	
Close		жw
Minimiz	е	ЖM
Zoom		
Bring A	l to Front	
🗸 Audio D	evices	

Step 2: Double click on the IAC icon to open the set up screen.



#### Step 3:

- a. keep the device name empty
  b. click on the + sign to create 2 ports and and give them the following names "Push2\_IN", "Push2\_OUT"
- **c.** click on "Apply"

		Prop	erties		
	а.	Device Na	ame:		
		Manufact	urer:	Apple Inc.	~
		Мо	odel:	IAC Driver	<b>v</b>
				Device is online	
		Do	rto		
		Po	rts		
_		_	h .		
			_		
_					
Push2_OUT				MIDI In: 1	Ĵ
				MIDI Out: 1	\$
				indi out.	Ď
+ -	Add and Re	emove Ports			
?)				Revert	Apply
		You can set up the MIDI device the device. Then indicate the Ports Push2_IN Push2_OUT	a. Device Na Manufactu Ma Manufactu Ma Manufactu Ma Ma Ma Manufactu Ma Ma Ma Manufactu Ma Ma Ma Ma Ma Ma Ma Ma Ma Ma Ma Ma Ma	Manufacturer:         Model:         Model:         Ports         You can set up the MIDI device's port structure her         the device. Then indicate the number of MIDI in an         Ports         Push2_IN         Push2_OUT	A.       Device Name:         Manufacturer:       Apple Inc.         Model:       IAC Driver         IAC Driver       IAC Driver         Image: Comparison of the device. Then indicate the number of MIDI in and out connectors for each protein and out connectors for:         Ports       Connectors for:         Push2_JN       Push2_OUT         Push2_OUT       MIDI In: 1         MIDI Out:       1

## Step 2: Installing the Remote files

Navigate to the "Remote" folder contained in the "PusheR" download. Double click on the installer files for your operating system. The installer will create "PusheR2" folders and copy the Remote files to the following directories on your HD:

#### macOS:

Macintosh HD/Library/Application Support/Propellerhead Software/Remote/Codecs/Lua Codecs Macintosh HD/Library/Application Support/Propellerhead Software/Remote/Maps

**Attention Mac Users!** if you have Reason 11 or later and you did not update from a previous version of Reason but installed from scratch, then the remote files are not installed in "Application Support" but are contained inside the application bundle. Right click on the Reason application icon and choose "Show Package Contents", there you'll find these folders:

Contents/Resources/Remote/DefaultCodecs/Lua Codecs Contents/Resources/Remote/DefaultMaps

#### Windows\* (choose to "create directory" when the installer prompts you):

C:/ProgramData/Propellerhead Software/Remote/Codecs/Lua Codecs C:/ProgramData/Propellerhead Software/Remote/Maps

\* please note, ProgramData is hidden by default on Windows. You need to enable "Show Hidden Files" in the Windows Files Explorer in order to access it.

Install_Remote_OSX.command			
Lua Codecs	^ Name	Date modified	Туре
Maps	Lua Codecs	12/14/2023 2:05 AM	File folder
	📜 Maps	12/14/2023 2:05 AM	File folder
	Install_Remote_Windows	12/13/2023 11:25 PM	Windows Batch File

### Installer script on Mac

#### **Installer Windows**

Please note, the installer might be blocked from copying the remote files by the permissions settings of the file system on your computer. In that case, you can always copy and paste the folders manually. This is pretty easy to do. Follow these steps:

- Go to the download, open Remote Files, then "Lua Codecs", copy the entire PusheR2 folder and paste at this location OSX: Macintosh HD/Library/Application Support/Propellerhead Software/Remote/Codecs/Lua Codecs Windows: C:/ProgramData/Propellerhead Software/Remote/Codecs/Lua Codecs
- 2) Then go back to the download, open Remote Files, then "Maps", copy the entire PusheR2 folder and paste at this location OSX: Macintosh HD/Library/Application Support/Propellerhead Software/Remote/Maps Windows: C:/ProgramData/Propellerhead Software/Remote/Maps

3) Restart Reason

Attention Mac Users! if you have Reason 11 or later and you did not update from a previous version of Reason but installed from scratch, then the remote files are not installed in "Application Support" but are contained inside the application bundle. Right click on the Reason application icon and choose "Show Package Contents", there you'll find these folders:

Contents/Resources/Remote/DefaultCodecs/Lua Codecs Contents/Resources/Remote/DefaultMaps

## Step 3: Creating Control Surfaces in Reason

Launch the PusheR app first. From more info on how to launch the app, please see the next chapter.

Now launch Reason then go to "Preferences" and select "Control Surfaces". Click on "Add" and in the window that pops up, select "RetouchControl" from the Manufacturer's drop down menu. The available control surfaces from the Model menu are "Push2Transport", "Push2Devices" and "Push2Mixer". Add "Push2Transport" first and set the IN and OUT ports as shown in the table below and make it the master keyboard.

	IN port	OUT port
Mac	Push2_IN	Push2_OUT
Windows with LoopMIDI	from PusheR2 1	to PusheR2 1

#### **Reason MIDI Ports configuration**

Once you have added "Push2Transport" to your list of control surfaces, please proceed with adding the remaining two and set the IN and OUT ports as above. Please note, Reason will issue a warning in the form of a yellow triangle when you do this. Simply ignore it as it won't affect anything. This is Reason telling you that more than one control surface are using the same MIDI ports.

neral Audio Contro	Surfaces Sync	Advanced		
Manufacturer:	RetouchC	ontrol		0
Model:	Push2Dev	ices		0
PushDevices				
	Name: Re	touchControl Pus	sh2Devices	
	In Port:	Push2_IN	0	Find
	Out Port:	Push2_OUT	0	
?			Cancel	ОК
asy MIDI Inputs				
		y Remote are listed ig - no setup neede		for easy playing, Enabled
Input Port				
ecording and basic pa				
Input Port Push2_IN				



eneral Audio Con	trol Surfaces Sync Advanced Language
of your MIDI keyboa	I and set up control surfaces, including MIDI keyboards. One rds will automatically be made the master keyboard – this i e for playing devices in Reason.
Control Surface	X
Manufacturer:	RetouchControl
Model:	Push2Transport
Pe nircipan	
Name:	RetouchControl Push2Transport
Name: In Port:	RetouchControl Push2Transport

MIDI ports settings on Win



Use this page to add and set up Control Surfaces, including MIDI keyboards. One of your MIDI keyboards will automatically be made the Master Keyboard – this is the keyboard you use for playing devices in Reason.

Attached Surfaces:	Auto-detect Surfaces
"RetouchControl Push2Devices"	
Model: RetouchControl Push2Devices	
Use with Reason	
"RetouchControl Push2Mixer"	
Pushe Mixer	
Use with Reason	
"RetouchControl Push2Transport"	
PushTroport	_
Use with Reason	<u> </u>
Add Edit Delete	Make Master Keyboard
Master Keyboard Input:	
<ul> <li>Standard (Master Keyboard Input to selected track.)</li> </ul>	
<ul> <li>Separated (Independent selection and Master Keyboard Input.)</li> </ul>	
	?

Reason's warning when adding all 3 surfaces

**Attention!** please disable all Push and PusheR ports in the Easy MIDI Input field under Control Surfaces in order to avoid getting unwanted note triggers when pressing pads and touching the encoders.

"RetouchControl Push2Devices"   Model: RetouchControl Push2Devices   Image: Street Stree				
Implement		"RetouchControl Push2Devic	ces"	
"RetouchControl Push2Transport"   Model: RetouchControl Push2Transport   This is the master keyboard.   Image: Control Push2 Transport   This is the master keyboard.   Image: Control Push2 Transport   This is the master keyboard.   Image: Control Push2 Transport   This is the master keyboard.   Image: Control Push2 Transport   Image: Control Push2 Transport   This is the master keyboard.   Image: Control Push2 Transport   Image: Control Push2 Transport   Image: Control Push2 (Live Port)   Network Session 1		Model: RetouchControl Push2Dev	vices	
"RetouchControl Push2Transport"   Model: RetouchControl Push2Transport   This is the master keyboard.   Image: Control Push2 Transport   This is the master keyboard.   Image: Control Push2 Transport   This is the master keyboard.   Image: Control Push2 Transport   This is the master keyboard.   Image: Control Push2 Transport   Image: Control Push2 Transport   This is the master keyboard.   Image: Control Push2 Transport   Image: Control Push2 Transport   Image: Control Push2 (Live Port)   Network Session 1		es		
Model: RetouchControl Push2Transport This is the master keyboard. Use with Reason Edit Delete Use No Master Keyboard sy MIDI Inputs MIDI input ports that are not used by Remote are listed below. Use these for easy playing, pording and basic parameter tweaking - no setup needed. Input Port Enabled Ableton Push 2 (Live Port) Ableton Push 2 (User Port) Network Session 1		🔽 Use with Reason	<b></b>	
This is the master keyboard.   Use with Reason   Edit Delete Use No Master Keyboard sy MIDI Inputs MIDI input ports that are not used by Remote are listed below. Use these for easy playing, cording and basic parameter tweaking - no setup needed. Input Port Ableton Push 2 (Live Port) Ableton Push 2 (User Port) Network Session 1		"RetouchControl Push2Trans	sport"	
Edit Delete   Sy MIDI Inputs   MIDI input ports that are not used by Remote are listed below. Use these for easy playing, cording and basic parameter tweaking - no setup needed.   Input Port   Ableton Push 2 (Live Port)   Ableton Push 2 (User Port)   Network Session 1		Model: RetouchControl Push2Tra	nsport	
Edit       Delete       Use No Master Keyboard         isy MIDI Inputs       MIDI input ports that are not used by Remote are listed below. Use these for easy playing, cording and basic parameter tweaking - no setup needed.       Uncheck the box Push and PusheF avoid double note         Input Port       Enabled         Ableton Push 2 (Live Port)       Input Port         Ableton Push 2 (User Port)       Input Port         Network Session 1       Input Port	ushTr <u>asp</u> a	This is the master keyboard.		
Edit       Delete       Use No Master Keyboard         isy MIDI Inputs       MIDI input ports that are not used by Remote are listed below. Use these for easy playing, cording and basic parameter tweaking - no setup needed.       Uncheck the box Push and PusheF avoid double note         Input Port       Enabled         Ableton Push 2 (Live Port)       Input Port         Ableton Push 2 (User Port)       Input Port         Network Session 1       Input Port	+++	Use with Reason		
sy MIDI Inputs MIDI input ports that are not used by Remote are listed below. Use these for easy playing, sording and basic parameter tweaking - no setup needed. Input Port Ableton Push 2 (Live Port) Ableton Push 2 (User Port) Network Session 1	Edit		Lise Ne Master Keyboard	
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Ableton Push 2 (Live Port) Ableton Push 2 (User Port) Network Session 1	MIDI input po	orts that are not used by Remote are lis		
Ableton Push 2 (User Port)	MIDI input po ording and ba	orts that are not used by Remote are lis	eded.	Push and Pushe
	MIDI input po ording and ba nput Port	orts that are not used by Remote are lis asic parameter tweaking - no setup ne	eded.	Push and Pushe
Push2_OUT	MIDI input po ording and ba nput Port Ableton Pusł	orts that are not used by Remote are lis asic parameter tweaking - no setup ne h 2 (Live Port)	eded.	Push and Pushe
	MIDI input po ording and ba nput Port Ableton Pusł	orts that are not used by Remote are lis asic parameter tweaking - no setup ne h 2 (Live Port) h 2 (User Port)	eded.	Push and Pushe
	MIDI input po ording and ba nput Port Ableton Pusł Ableton Pusł Network Ses	orts that are not used by Remote are lis asic parameter tweaking - no setup ne h 2 (Live Port) h 2 (User Port) ssion 1	eded.	Push and Pushe
	MIDI input po ording and ba nput Port Ableton Push Ableton Push Network Ses Push2_OUT	orts that are not used by Remote are lis asic parameter tweaking - no setup ne h 2 (Live Port) h 2 (User Port) ssion 1	eded.	Push and Pushe
	MIDI input poo ording and ba nput Port Ableton Push Ableton Push Network Ses Push2_OUT ster Keyboa	orts that are not used by Remote are lis asic parameter tweaking - no setup ne h 2 (Live Port) h 2 (User Port) ssion 1 ard Input:	eded.	Push and Pushe
	MIDI input poo ording and ba nput Port Ableton Push Ableton Push Network Ses Push2_OUT ster Keyboa	orts that are not used by Remote are lis asic parameter tweaking - no setup ne h 2 (Live Port) h 2 (User Port) ssion 1 ard Input:	eded.	Push and Pushe
Standard	MIDI input poo ording and ba nput Port Ableton Push Ableton Push Network Ses Push2_OUT ster Keyboa Standard (Master Key Separate	orts that are not used by Remote are lis asic parameter tweaking - no setup ne h 2 (Live Port) h 2 (User Port) ssion 1 ard Input: d yboard Input to selected track.)	eded.	Push and Pushe
<ul> <li>Standard (Master Keyboard Input to selected track.)</li> <li>Separated (Independent selection and Master Keyboard Input.)</li> </ul>	MIDI input poo ording and ba nput Port Ableton Push Ableton Push Network Ses Push2_OUT ster Keyboa Standard (Master Key Separate	orts that are not used by Remote are lis asic parameter tweaking - no setup ne h 2 (Live Port) h 2 (User Port) ssion 1 ard Input: d yboard Input to selected track.)	eded.	Push and Pushe
Standard (Master Keyboard Input to selected track.) Separated	MIDI input poo ording and ba nput Port Ableton Push Ableton Push Network Ses Push2_OUT ster Keyboa Standard (Master Key Separate	orts that are not used by Remote are lis asic parameter tweaking - no setup ne h 2 (Live Port) h 2 (User Port) ssion 1 ard Input: d yboard Input to selected track.)	eded.	Push and Pushe

# 2. Prepare for Use

After you have created and configured the "PusheR" control surfaces in Reason, you are ready to start using Push to control Reason. There are two scenarios in which you are likely to use PusheR:

- 1) Reason in standalone mode, i.e. without using Ableton Live at the same time
- 2) Reason in Rewire mode, i.e. with Ableton Live running as the Rewire master (for older version of Reason and Live deprecated in the latest versions)
- 3) Reason in standalone mode with Ableton Live synced via Ableton Lync.

In all cases, PusheR's functionality remains the same. If you are using Reason in Rewire mode or synced with Ableton Lync, you toggle the "User" button to switch from controlling Live to controlling Reason and vice versa. You can use Push to control Live and Reason at the same time without interfering with each other since PusheR communicates via Push's "User Port". **Important**: make sure the Push User Ports are not configured and used in Live's MIDI Preferences or the PusheR app won't be able to communicate with the device. Also, please follow the order described in Appendix B when launching the programs.

**Please note**: PusheR only works with Reason standalone. It does not work when Reason is used as a plugin inside Ableton Live or any other host.

## Launching the PusheR app

The first thing to do to start using PusheR is to launch the app! But before you do so, make sure you have Push connected to your computer and turned on so that its MIDI ports are avaiable.

Then navigate to the "App" folder in the download. Select the folder for your operating system and open it.

After launching the application, it should look like the images below.

**MAC USERS**: double click on the file called "PusheR2". You might want to drag this file on the dock for faster launching in the future.

WINDOWS USERS: double click on the file named "PusheR2.exe". You might want to drag and pin the PusheR icon to the taskbar.







PusheR app on Mac

Please make sure that the app has the same ports settings as the ones shown above (the Windows pic shows the ports with LoopMIDI). In general, the PusheR app will set its ports according to the instructions included in a file called "Settings.json". You can find this file in the "Support" folder of the PusheR application folder. If you are on Mac, you can access this folder by right clicking on the PusheR app icon and then clicking on "Show Package Contents".

## Initializing Push and the control surfaces

After you have successfully launched the "PusheR" app, your Push device will initialize to "User" Mode. If you are currently using Push to control Ableton Live, the app will automatically switch to "User" mode for you.

Now it is a good time to launch Reason. At this point, you can select one of the "Mode" buttons to activate the display. To learn more about the "Mode" buttons, please go to the next chapter.

To activate "Mix" mode, make sure to lock the "Push2Mixer" to the Master Section. This is shown on the next page.

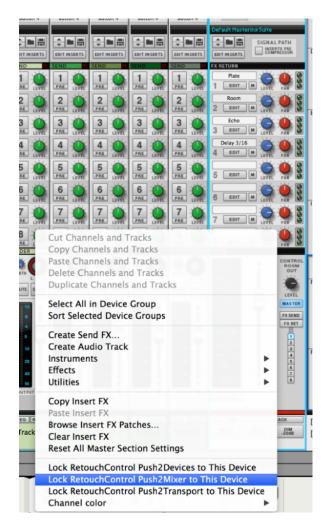


Push after launching the PusheR app

Right click on the master section and from the context menu, choose "Lock RetouchControl PushMixer to This Device". You can do this in the Rack or in the Mixer view, as shown below. If you save this setting in your template song, the locking will be remembered everytime you create a new song.



# Locking "Push2Mixer" to the master section in the rack



# Locking "Push2Mixer" to the master section in the Mixer

## A note on controlling devices

For more details on "Device Mode", please go to the next chapter. In general, aside from the big mixer, you will be able to control any supported device, whether a native instrument, effect, or a Rack Extension, by creating a sequencer track for it and giving it master keyboard focus, or by selecting it in the rack and making sure the device has "remote" focus, has shown below for Malstrom (selection in the rack only works with Reason 8.3 and above).



There might be times when you are playing an instrument, let's say Malstrom, and you would like to tweak the parameters of an attached effect device. Now, if you give keyboard focus to the effect device, you won't be able to play Subtractor, and if you give master keyboard focus to Subtractor, you won't be able to tweak the effect's parameters. There is a solution to this conundrum and it consists in selecting the effect device in the rack and giving it remote focus (blue highlight) while master keyboard focus in the sequencer remains on the instrument.

## Quitting PusheR

In order to quit the application, use the "Quit" button on the application's main screen. This offers several advantages compared to quitting from the "File/Exit" menu or by clicking on the red cross of the application window. For one, it completely closes the app on your computer. Furthermore, it returns the Push hardware to a clean state before exiting. If you quit the application by any other means, the Push hardware will remain in the same state as right before you quit.

# **3. Functional Description**

A. Overview





Control Mode select buttons

Encoder Group: function depends on Mode selected



**Pads Matrix** 



**Transport Controls** 

Add devices and patch navigation



Assignable touch strip



8

Cursor (up/down, left/right)

Note & Session mode, Scale and Layout selection

**Repeat and Accent buttons** 



Octave up/down and Control pages navigation



**Key-commands** buttons



Mute and Solo buttons



Master/Device volume knob



Shift & Select buttons



Undo & Delete buttons

16

Desktop mirroring controls

## B. Track Mode (Encoder Group)

By pressing the "**Clip**" button, you access Track Mode. The top row of the display shows the name of current song. Below that, the type of device, the selected track and patch name on the left while the playhead position in bars:beats:16th, the Left and Right Loop locators position in bars on the right. The bottom line shows the song tempo in BPMs, Quantization and PreCount on and off, move the loop braces left or right, rewind and forward, and finally Loop on/off. The Encoder Group controls will function as described below.



**Clip** button: engages "Track" mode. If "Switch Views" is enabled in the Settings, it switches the Reason view to the Sequencer. Otherwise, press "Shift" and then "Clip" to switch view.



Changes the track selection

Change the track selection. Keep these buttons pressed to scroll thru the tracks



#### Changes the patch for the selected device



Change the patch selection. Keep these buttons pressed to scroll thru the patches



Changes the playhead position in bars. If "SHIFT" is pressed, changes the playhead position in 16th steps.

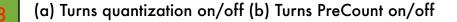


Changes the Left Loop locator position in bars



Changes the Right Loop locator position in bars

(a) Sets the loop to the selected clip(s) and starts playing (b) Moves the playhead to the Left Loop Locator position (c) Moves the playhead to the Right Loop Locator position





(a) Moves the loop brace to the left by an entire loop length (b) Moves the loop brace to the right by an entire loop length



Turns the Loop On/Off

## C. Device Mode (Encoder Group)

By pressing the **Device** button, you access Device Mode. The top row will show the selected device, track and patch names. The next two rows of the display will show the control names and values for the selected bank. The fourth row will show the name of the available banks of controls. The currently selected bank is highlighted. Each device can have up to 24 banks. You navigate between banks of 8 by pressing the **Next Page/Previous Page** buttons. The Encoder Group controls will function as described below.



1

2

**Device** button: engages "Device" mode. If "Switch Views" is enabled in the Settings, it switches the Reason view to the Rack. Otherwise, press "Shift" and then the "Device" button to switch view to the Rack.

Each of the encoders changes the value of the device parameter shown below it



Changes the master volume of the selected instrument at the device level (not the Mixer level!)



Each of the buttons selects the bank of controls shown above it



Each of the buttons changes the value of the same device parameter controlled by the encoder above it. They are useful when the device parameter is of type "button" like an on/off switch. If they are used for a parameter of "continuous" type, they will toggle it between its lowest and maximum values



Navigate between 3 banks of 8 control banks each, for a total of 24 banks. Simpler devices will only have a few banks of controls, while more complex devices like Thor or Kong will have all banks filled

## D. Mix Mode (Encoder Group)

By pressing the **Mix** button, you access Mix Mode with its 4 submodes for Volume, Pan, Width and Channel Strip. These submodes are accessed by pressing the first 4 top left buttons.



#### **D.1 Volume Submode:**

**Mix** button: engages "Mix" mode. If "Switch Views" is enabled in the Settings, it switches the Reason view to the Mixer. Otherwise press "Shift" and then the "Mix" button to switch view to the Mixer.

Selects the "Volume" submode

Changes the Master Volume

#### www.retouchcontrol.com

2

3

- Change the volume for the respective channel
- Each button mutes or solos the corresponding channel depending on whether "mute" or "solo" mode is enabled
- The mute button engages "mute" mode, while the solo button engages "solo" mode. The two modes are exclusive. If "Shift" is pressed, the mute and solo buttons act as "clear all mutes" and "clear all solos" buttons respectively.
- Change control by 8 channels at a time. If "Shift" is pressed, then they change control by 1 channel at a time.

#### **D.2 Pan and Width Submodes:**

5

6

7

By pressing the button over "**Pan**", you access Pan Mode. The controls are the same as in "Volume" mode with the exception that now the encoders control the Mixer channels pans and not volumes. Pressing the **button over** "**Width**" changes the encoders to control channel widths.



Pan Mode

### **D.3 Channel Strip Submode:**

By pressing the button over "**Chan Strip**", you access Chan Strip submode. In this submode, you will be able to control the entire channel strip for the selected Mixer channel. You select which channel is currently displayed by using the **Next Page/Prev Page** buttons (6). The top row of the display will show the name of the currently selected channel in green. The next two rows will show the names and values of the selected bank of controls. The last row will show the name of 8 available control banks. The Encoder Group controls will function as described below.





Each of the encoders changes the value of the device parameter shown below it

2

- 3 Changes the volume for the selected channel
- 4

Each of the buttons selects the bank of controls shown above it

5

If the "Inserts" bank is selected, (a) Goes to the previous insert fx patch, (b) Goes to the next insert fx patch, (c) Activates bypass for the insert fx



Change the currently selected channel. Each button press corresponds to moving the selection by one channel at a time. If "SHIFT" is pressed, the selection will move by 8 channels at a time.



Mute mutes the currently selected channel. Solo will solo it.

## E. Master Mode (Encoder Group)

By pressing the **Master** button, you access Master Mode. In this mode, you will be able to control the mixer's Master Section, including the Bus Compresson, Insert, Send and Return FXs. The controls are similar to the **Chan Strip** mode with the exception that Encoder 9 now controls the Master Volume. The **Next Page/Prev Page** buttons and the **Mute/Solo** buttons are not used in this mode.





**Engages Master mode** 



Each of the encoders changes the value of the device parameter shown below it



Changes the Master Volume



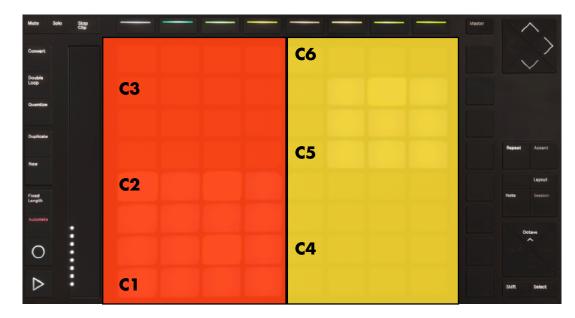
Each of the buttons selects the bank of controls shown above it

## F. Note Mode (Matrix)

The Matrix of pads on Push has two main modes: **Note** mode and **Session** mode. By pressing the **Note** button, you will access Note mode. Additionally, Note mode has 4 submodes which depend on the type of device selected. The 4 submodes are:

- 1. Kong submode
- 2. Redrum submode
- 3. Dr.OctoRex submode
- 4. Any other device
- 5. 64 Drum Mode

The type of submode is selected automatically as you change the track selection. The 4th mode defaults to an isomorphic keyboard (see below for more info). However, by pressing "Select + Note" you can access 64 drum mode.



Press Select + Note for 64 drum mode

#### Kong submode

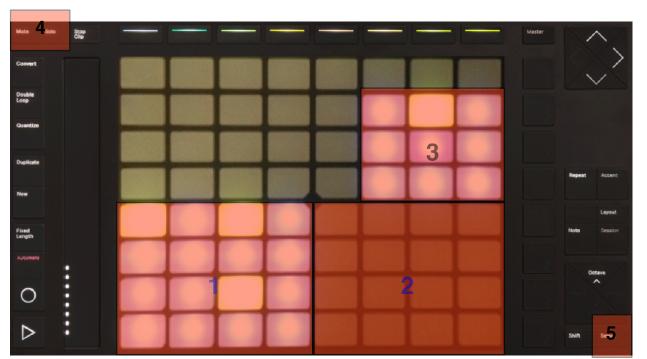
Play the 16 pads in Kong. Pads on Push will light up in response to notes being played in the sequencer. If the **Mute** button is engaged, the pads act like mute switches. Similarly if the **Solo** button is engaged, the pads act like solo switches. If the **Select** button is pressed, hitting a pad will select its associated drum for editing. Also, it will select it for 16 velocity levels (see below)

Play the selected drum at 16 velocity levels. The pad at the lower left plays the softest velocity while the one at the top right plays the loudest velocity

3

2

Set the pad group for the selected pad. The top row assigns the pad to the "Mute" groups, the second row assigns the pad to the "Link" groups while the third row assigns the pad to the "Alt" groups



4

If **Mute** is engaged, pressing a pad in (1) will mute it. If "SHIFT" is pressed, pressing the **Mute** button will clear all muted pads. If **Solo** is engaged, pressing a pad in (1) will solo it. If "SHIFT" is pressed, pressing the **Solo** button will clear all muted pads.



If Select is pressed, pressing a pad in (1) will select its drum for editing and it will assign the pad for 16 velocity levels (2)

#### Redrum submode

1

Play the 10 drums in Redrum. They will light up in response to notes being played in the sequencer. If the **Mute** button is engaged, they will mute a pad if pressed. Similarly if the **Solo** button is engaged, the pads act like solo switches. If the **Select** button is pressed, hitting a pad will select its drum for editing. Also, it will select it for 16 velocity levels (see below)

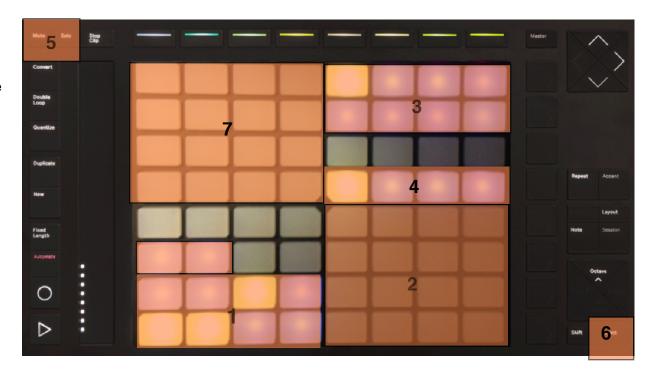
Play the selected drum at 16 velocity levels. The pad at the lower left plays the softest velocity while the one at the top right plays the hardest velocity

3

Switch patterns 1 to 8 on the step sequencer starting with pattern 1 on the top left



Switch patterns banks A thru D on the step sequencer starting with bank A on the left



If **Mute** is engaged, pressing a pad in (1) will mute it. If **Solo** is engaged, pressing a pad in (1) will solo it.

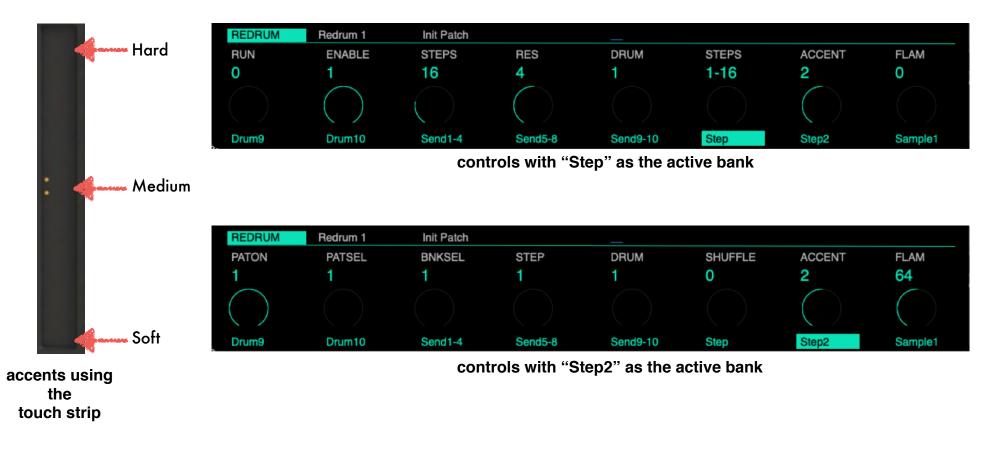


5

If **Select** is pressed, pressing a pad in (1) will select its drum for step sequencing (7) and it will assign the pad for 16 velocity levels (2)



Step Sequencer quadrant: this is activated when the bank of controls is set to "Step" or "Step 2". If the sequencer is enabled, you will see a running light advancing from the lower left to the top right of the quadrant. You can edit 16 steps at a time for the selected drum (see 6 for how to select a drum). Which steps you are editing depends on where the "Edit Steps" control is set. You can edits steps 1-16, 17-32, 33-48 and 49-64. When entering a step, you can either choose to enter a "Hard", "Medium" or "Soft" accent. You can use the "Accent" knob to select the type of accent and then enter the step. A more intuitive way to accomplish the same thing is by using the touch strip on Push. If you keep your finger at the top of the strip, the step you enter will be "Hard". If you keep it at the bottom, it will be "Soft". If the strip is in the middle position, the accent will be "Medium".



#### Dr.OctoRex Submode



Play the first 32 slices in the selected loop



Trigger the loop for the respective slot. The first pad from the top left corresponds to slot1 in Dr.OctoRex and so on. The loop will trigger based on the "TrigNext" setting

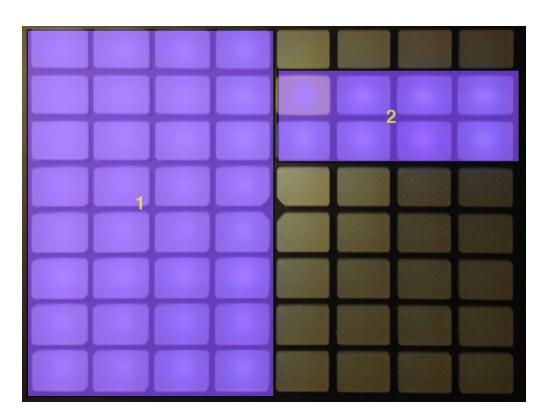


With the "Loop" bank selected, it selects which loop is being played in (1)

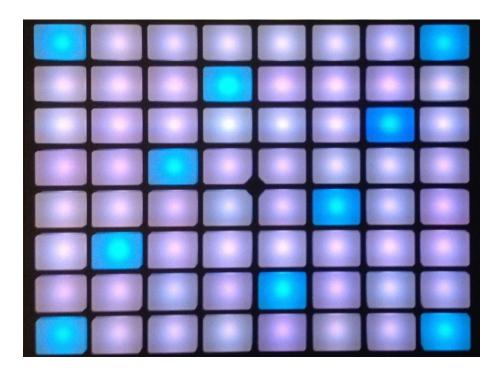


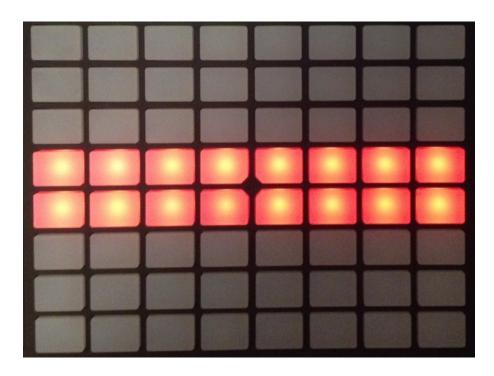
With the "Loop" bank selected, it selects the quantization level for triggering the next loop





#### Generic Device Submode







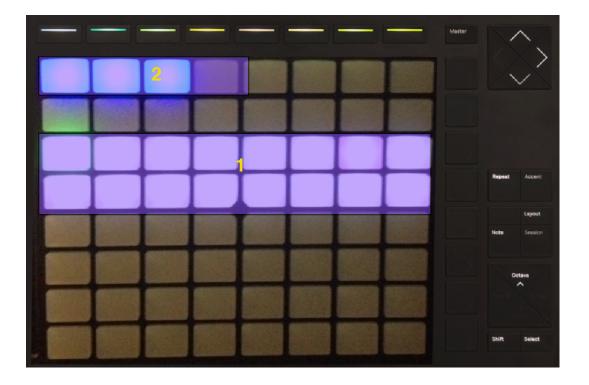
Playing mode for synths, samplers, etc. The isomorphic layout can be changed by pressing the **Scale** button



secondary Note mode accessed by pressing the "SHIFT" + **Note** buttons. It can be used to control the gates of the step sequencer in Thor and other devices, or access additional control banks in the *ppp* sampler (depends on the Remote mapping)

### G. Session Mode (Matrix)

By pressing the **Session** button, you will access Session mode. This mode allows you to "navigate" your song by jumping from one song section to another. The middle two rows of pads represent 16 distinct "sections", with the pad at the top left representing the first section in the song and the bottom right pad respresenting the last available section. The length of each section is equal to the legth of the loop brace. *Please note, the loop brace has to be at least 2 bars long*. By pressing one of the 16 pads, you will force the playhead and the loop brace to move to the corresponding position in the song. The move is quantized to the bar and the current beat position is visually indicated by the top row of pads which illuminate after each beat. Please be aware that this mode works best with Reason in standalone mode.





Select the section of the song to jump to. The order is from the top pad on the left to the bottom pad on the right



Visual feedback showing the current playing beat

### H. Scale & TouchStrip settings

By pressing the **Scale** button, you will access the Scale page where you can adjust the properties of the matrix note layout. Here you can set the type of scale and the key. Also, you will be able to choose between the "InKey" and the "Chromatic" modes. These modes are similar to the ones found when using Push with Ableton Live.



**Scale Page** 

By pressing the "Layout" button, you will access additional settings. In particular, you can change the way the layout is built (4th's up, 4th's to the right, 3rd's up, 3rd's to the right) and you can also change to which parameter the TouchStrip is assigned. By default, the TouchStrip is assigned to "PitchBend" which means it will return to the middle position when the finger is lifted. But you can change it to "Linear" mode and assign it to other parameters like ModWheel, Expression or one of the 8 Encoders. For example, if you assign the TouchStrip to Encoder 1, then it will control whichever parameter is currently assigned to Encoder 1.

Quick Tip: to change the TouchStrip from PitchBend to ModWheel without accessing this page, press "Shift" and then press the TouchStrip (press it at the bottom so it starts at 0). Press "Shift" and press the TouchStrip again to return to PitchBend.

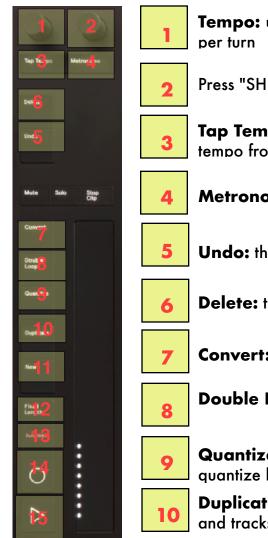
On this screen you will be able to change the **Accent** velocity by turning encoder 7. The pads brightness for the isomorphic layout can be changed by turning encoder 8. Please note, the default brightness can be changed in the Settings Menu. Additionally, you can turn Aftertouch On or Off, as explained in section "N" below.



#### Press the Layout button to access additional controls

## I. Transport controls

The controls on the left side of the Push are dedicated to transport functions. See below for more details.



**Tempo:** use this encoder to set the song tempo in BPMs. The tempo is incremeted/decremented in 1BPM per turn

Press "SHIFT" + turn this encoder to change the Metronome volume

**Tap Tempo:** tap this button to tap in the tempo. If the display in in track mode, you will be able to see the tempo from the controller

Metronome: turns on/off the Metronome. If "SHIFT" is pressed, it turns on/off the "Pre-Count".

**Undo:** this triggers the Undo function in Reason. If "SHIFT" is pressed, it will trigger Redo instead.

- Delete: this works as a Delete button. Use it with care!
- **Convert:** access the key shortcuts pages

**Double Loop:** works as the "Z" command to zoom into the currently selected clip(s)

**Quantize:** turns on the "Quantize during Recording" in Reason. If "SHIFT" is pressed, it will work as the quantize keycommand in the Sequencer so it can be used to quantize selected notes

**Duplicate:** this works as the Duplicate key command in Reason. It can be used to duplicate rack devices and tracks, as well as notes and clips in the sequencer.

11

**New:** it works as the "Alternative Take" button and it creates a new sequencer lane while muting the previous one. If "SHIFT" is pressed, this works as the "New Overdub" button and it creates another sequencer lane without muting the previous one.

12

Fixed Length: turns Loop on/off



Automation: turns "Automation" recording for the selected track



**Rec:** this enables the Rec button in Reason

**Play:** this enables the Play button in Reason. If the song is playing, it works as a Stop button. If "SHIFT" is pressed and the transport is stopped, it will move the playhead to the start of the song

### L. Key commands

In addition to Remote controls, PusheR includes many key commands. For these to work, the Reason window has to be on the foreground (i.e. clicked on). There is a dedicated page of key commands which is accessed by pressing the "Convert" button. See below for more details.



**Browse:** opens/closes the patch browser (Reason 8 and above). If "SHIFT" is pressed, then it will browse patches for the currently selected device in the rack.



Add Track: opens the instruments browser. You can navigate through the soundbanks with the cursor buttons. Pressing the > curson button can be used to open folders. If "SHIFT" is pressed, it creates an audio track



Add Effect: opens the effects browser. You can navigate through the soundbanks with the cursor buttons. Pressing the > curson button can be used to open folders



**Stop:** functions as a "Cancel" button. Use this when you want to close the browser without making a selection. If "SHIFT" is pressed, it functions as the "Enter" button. Use this when you want to select a patch from the browser and open it in the device



**Cursor:** functions as the Up/Down and Left/Right arrow keys on the computer keyboard. Use these buttons to navigate the instrument and patch browser, or to select clips or notes in the sequencer. Keeping the buttons pressed will trigger them at a steady rate. If "SHIFT" is pressed, the Up/Down buttons change the patch for the currently selected device, and the Left/Right buttons navigate through the tracks in the sequencer.

**Convert:** opens the key commands page. Access additional keycommands by pressing the **Next** Page button



#### First key commands screen



#### Second key commands screen

Convert

#### M. Note Repeat and Accent

The note repeat in PusheR functions just like the one in Live. You engage the **Repeat** button and then select the desired repetition rate. You can use the note repeat in all the matrix submodes, i.e. Kong, Redrum, Dr.Octorex, etc.

When you press on a pad with **Repeat** on, the velocity of the repeats will vary depending on how soft or hard you press. This acts polyphonically for the Kong, Redrum and Dr.Octorex submodes, that is, if you press on more than one pad at a time, each will send its aftertouch independently of the others.

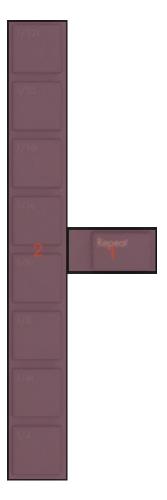
The repeat rates are automatically tempo-synced to the song tempo in Reason.



Repeat button: turn on note repeat



Change the repetition rate to the specified note subdivision



Accent

By pressing the **Accent** button, the pads velocity will be fixed to a defined level. By default, this is set to full velocity (127). However, you can change this to any value you like. In order to do so, press the **Layout button**. Adjust the current accent velocity by turning encoder 7.

### N. AfterTouch, Sustain Pedal, Expression

The type of aftertouch transmitted by the pads depends on the layout mode. For Kong, Redrum and Dr.Octorex, the pads will transmit poly pressure, i.e. each pad transmits its own aftertouch value. This makes it possible to record dynamic takes for each pad separately when the note repeat is engaged.

For synths, samplers and other devices, the pads will transmit channel pressure, i.e. the aftertouch for the last note played. If you don't want this type of aftertouch to be recorded in the Reason sequencer, you can turn it off in by pressing the "Layout" button and then using button 1 to turn off Aftertouch, as shown below.

If you have a sustain pedal, you should plug it into the first slot in the back of the Push hardware. Similarly, if you have an expression pedal, this should be plugged into the second slot in the back of the Push hardware.

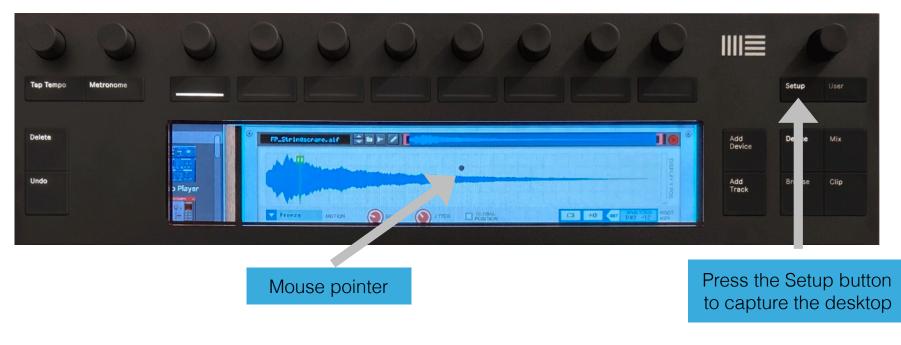


### O. Desktop Mirroring

It is now possible to display sections of the computer screen directly on the Push. More precisely, the Push can show a subsection of the computer screen of dimensions of 960 x 160. To move around the full computer screen, you can use the encoder on the top right corner just above the "User" and "Setup" buttons. This encoder was previously used to control the Master and Device volumes, which are now controlled from the Metronome encoder (press shift and turn the knob if you want to adjust the Click volume instead).

Furthermore, it's possible to superimpose the desktop and the PusheR view on top of each other and you can adjust the amount of transparency. All these functions are explained in the pictograms below. Please note, as you move the section of the computer screen which is captured, the mouse pointer moves as well, and it is shown as a round dot.

**IMPORTANT**: if you are on Mac, the first time you enable desktop mirroring, the OS is going to issue a warning asking you to give permission to the PusheR application to capture the screen. See the Appendix for instructions on how to grant the app permission to capture the computer screen.





# rotate the encoder to move sideways



		00	0	0	0	P	P	≡	A	9
Tap Tempo Metro	onome								Setup	User
Delete	GPAIN STARTPOS	Filter Chord Filter Chord	ZOOM	MOTION freeze	SPEED 43.8%	JITTER 34.4%	GLOBPOSI	Add Device		Mix
Undo	2 Player	LF03:reeze suffilter		Mod2	Mod3:3 +0	$\overline{()}$	Mod5	Add Track	Brise	Clip
					_			oress Shif	t <sub>+</sub> th	e Setun

Shift

Select

press Shift + the Setup button to enable hybrid mode



## 4. Settings

The PusheR app contains a "Settings" window which can be used to set up user's preferences. Press on the "settings" grey button on the lower left corner of the PusheR app to open the window. From here, you will be able to change various configurations on startup, like the pads brightness, the scale and key for the isomorphic keyboard, etc.

Once you have made your selections, press "Save" and the next time the app launches it will start using your preferences.





**Settings window** 

## **Appendix A - Key commands**



Buttons Functions when Shift is NOT pressed

||||≡ **BUTTONS FUNCTION (Shift ON) PreGount** Tap Tempo On/Off Redrum Kit Disco Kit RDK Delete Add Device Show Show RUN O ENABLE STEPS DRUM STEPS ACCENT FLAM RES Mixer 16 4 3 2 0 Undo Redo Create **Open Show** Audio Browse Segz Drum9 Drum10 Send1-4 Send5-8 Send9-10 Step2 Sample1 Show EQ Prev Etter Mute Solo Prev Next Convert Track Trac ModWheel Patch Double Loop Quantize Notes Duplicate Accent New Dub Layout Fixed Length Mode .... Octave ~ 0 Return to Start Shift Select

Please note, you can make Shift "stick" by pressing Select and then Shift.

#### **Buttons Functions when Shift IS pressed**

## Appendix B - Reason rewired to Live (deprecated\*)

When using Push to control both Live and Reason in Rewire mode, it is important to launch the programs in a certain sequence.

First and foremost, in order to use Push to control both programs at the same time, <u>it is important that the Push2 User Ports are</u> <u>disabled in Live's MIDI preferences</u>.

Then, please follow this sequence when launching the programs:

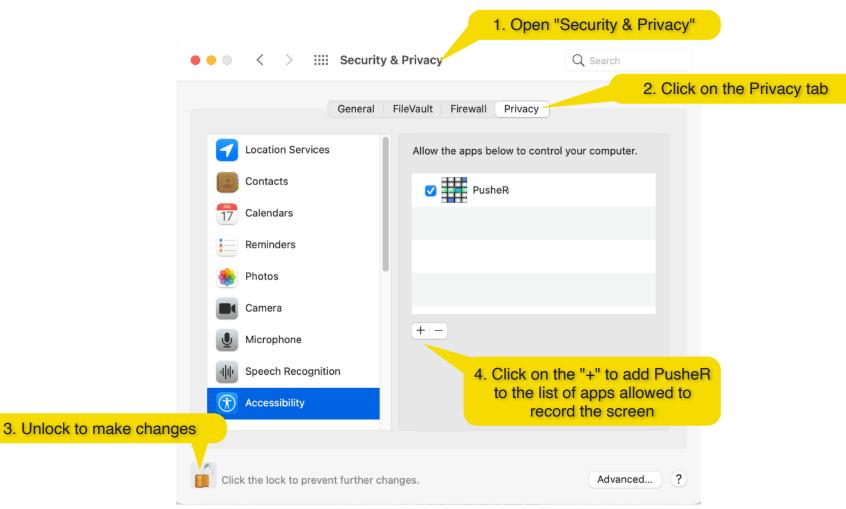
- 1. with Push2 connected to your computer and turned on, launch Live
- 2. make sure that the Push2 is in Live control mode, then press the User button to go to User mode
- 3. now launch the PusheR2 application and then launch Reason

If you follow these 3 steps above, you can use the User button to go from controlling Live to Reason and vice versa.

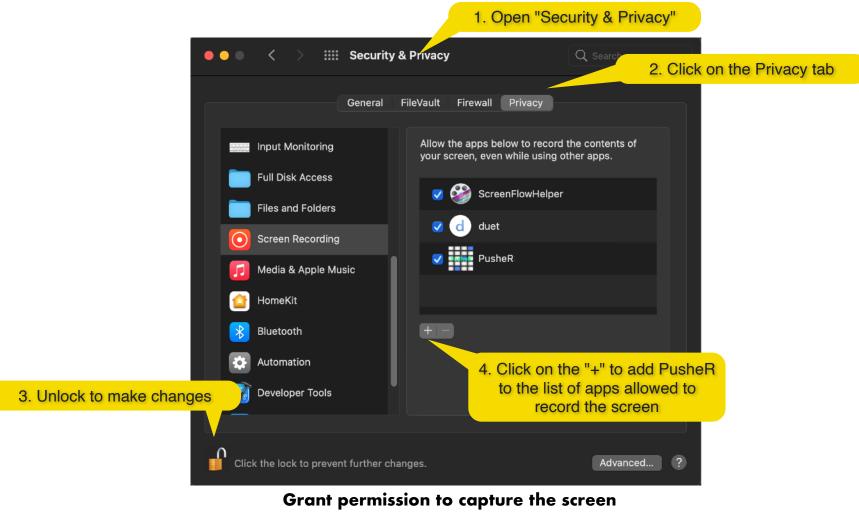
\* Reason no longer supports Rewire since version 12.

## **Appendix C - Permissions on Mac**

On Mac, users need to give the PusheR app permission to issue key commands and to capture the screen for desktop mirroring. This is done by opening "System Preferences", and then "Security & Privacy".



#### Grant permission for the key commands



for desktop mirroring