

# SCRATCH SESSION LABS

Scratch Revolution has begun

## USER GUIDE – V2.0

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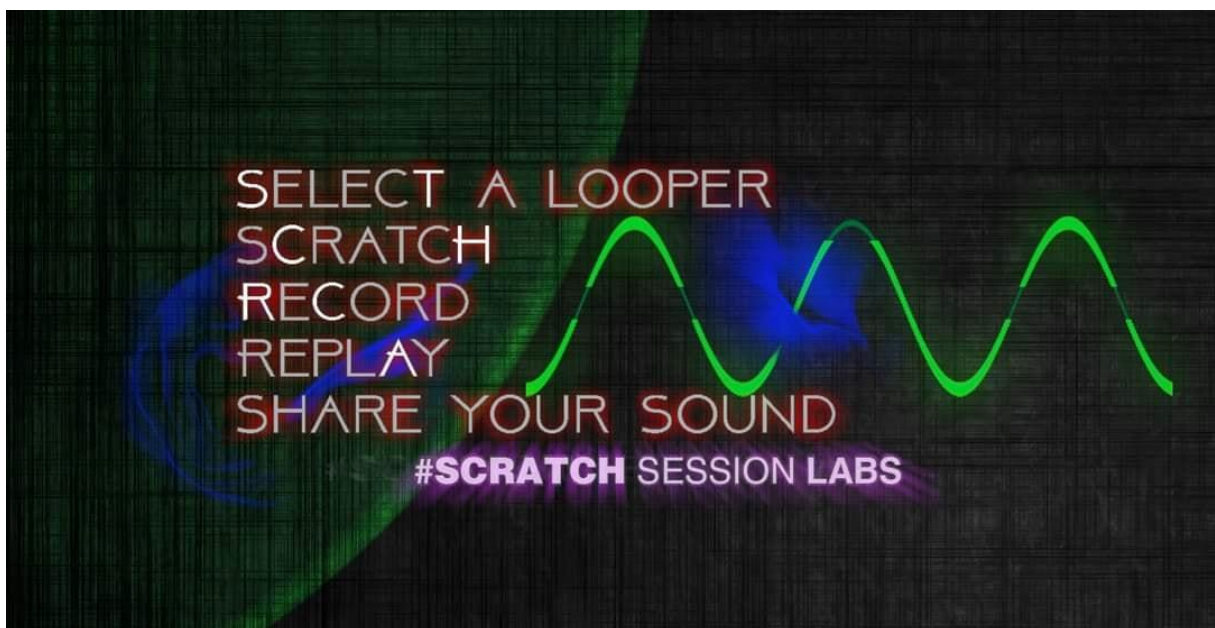
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## 1 Overview

**Scratch Session Labs** application enables to transcribe in real-time scratch movements of Turntablisms.

During scratch sessions, a new dimension is added to visually represent complexity of musical score and thus graphically annotate phases to improve in different techniques such as Chirp and flare.

Concept of Scratch Session Labs application:



*Figure 1: Application concept*

## 2 Software Installation

### 2.1 Windows OS

Procedure to launch application:

- Unzip file on computer
- Launch ScratchSessionLabs.exe

### 2.2 MAC OS

Procedure to launch application:

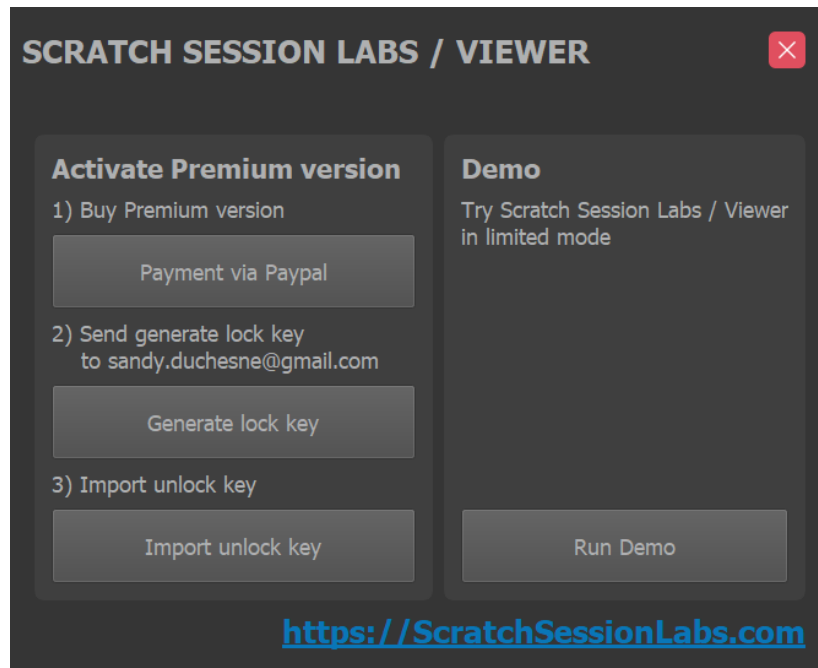
- Unzip file on computer
- Launch ScratchSessionLabs.app

Authorization:

- Select "Apple Icon -> System preference"
- Select "Security & Privacy"
- Select "General" tab
- Into "Allow apps downloaded from:" group
- Press "Open Anyway" => ScratchSessionLabs

### 3 Activation of Premium mode

The contextual menu  contains the activation menu.



Procedure to activate Premium mode:

1. Press "Payment via Paypal": pay Premium version of software on website <http://www.scratchsessionlabs.com/>
2. Press "Generate lock key" button: save \*.sslock file on the desktop
3. Send file to [sandy.duchesne@gmail.com](mailto:sandy.duchesne@gmail.com) with \*.sslock file and Paypal transaction number
4. Wait for my return email containing an unlock file (within 24 hours)
5. Press "Import unlock key" button: select \*.ssunlock file
6. Press "Good Scratch" button

## 4 Software Use

### 4.1 Presentation

**Scratch Session Labs** application has been designed to respond to needs of turtablisms in order to be the most intuitive way possible.

The functionalities have been distributed in the following areas:

- Interactive menus **1**: contextual menu, recordings menu, loopers menu & device configuration
- Curve viewers **2**: displays curves of A and B inputs
- Scratch tools **3**: launch/recording sessions, curves configuration, information display of current sound
- Wave of Scratch tools **4**: displays the sound of scratch tool wave (activated in color mode with a wav icon)
- Scratched sound and cut **5**: displays the live curve of the scratched sound and the crossfader position

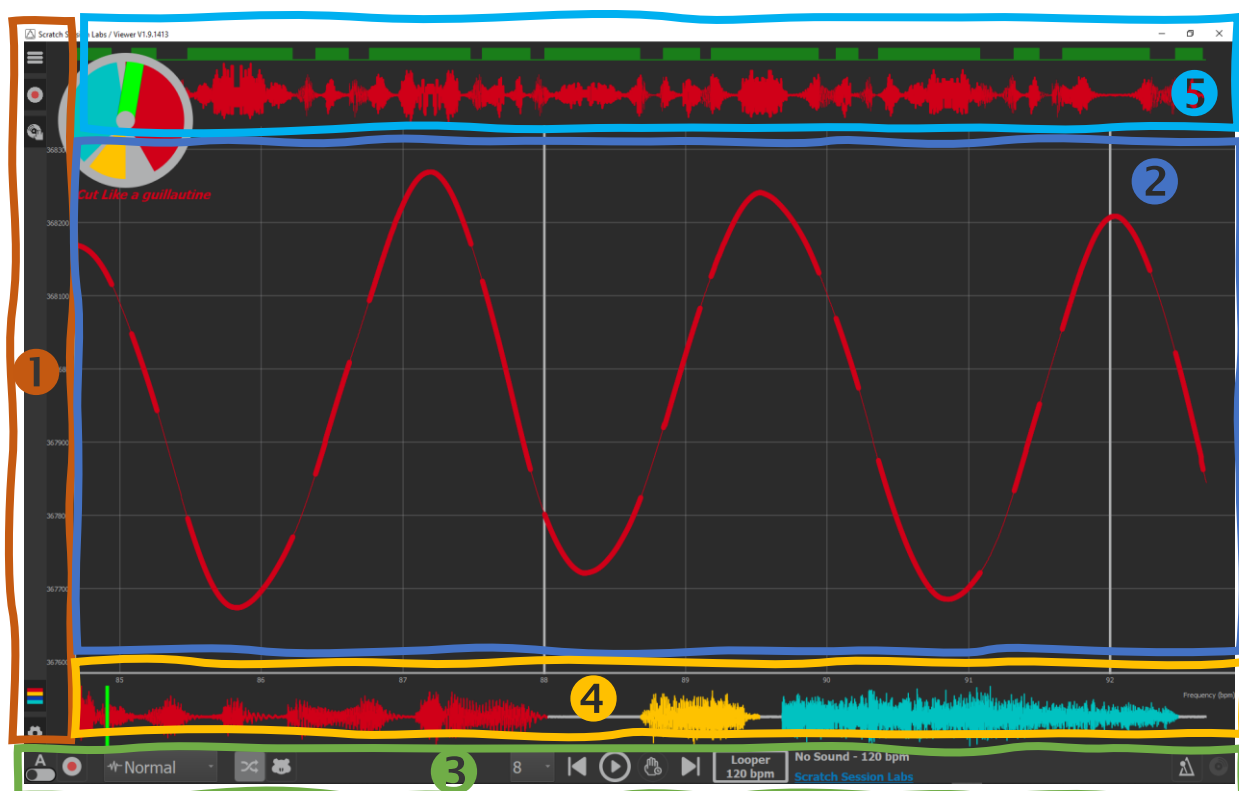
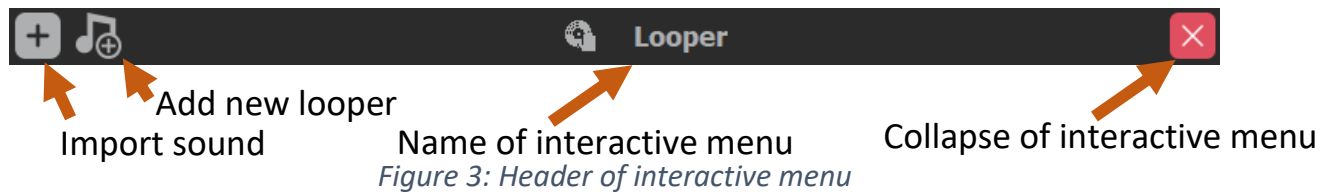



Figure 2: Interface

## 4.2 Interactive menus


The header of interactive menu:



The menus are collapsed by clicking the mouse on the interactive menu area **1**, on the red button  or on the curve viewers area **2** (Cf. 4.1-Presentation);

### 4.2.1 Add New Looper

Add new looper on looper menu:

- Picture: press picture to select another blaze
- Title: define title of looper
- Author: define author of looper
- Looper: select a sound file (\*.wav)
- Start Offset of Looper: define offset according to start of looper sound
- Bpm: define bpm of looper to synchronize curve grid
-  save

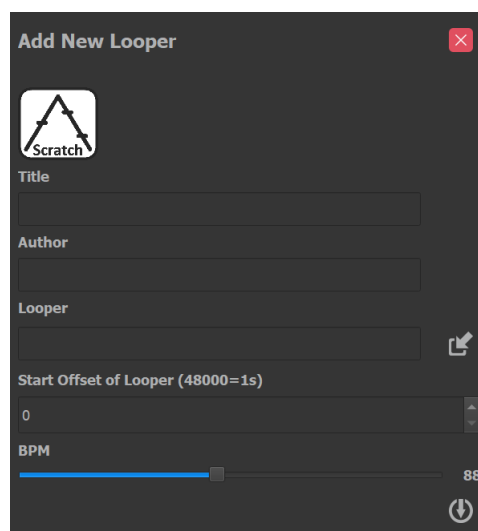




Figure 4: Add New Looper



#### 4.2.2 Contextual menu

The contextual menu  contains the following functions:

- File -> Quit: exiting of application
- Activation (Cf. *3-Activation of Premium mode*)
- Open -> AppData in explorer: Open AppData directory
- Help
  - About: information about **Scratch Session Labs**
  - Scratch Tools in explorer: Open Scratch Tools of **Scratch Session Labs** containing sound file in wav format usable with color mode

 Activate Freeware version to have Premium functions

#### 4.2.3 Recording and looper menus

Recorder and Looper menus contain the sounds and curves that can be launched.

List of actions:

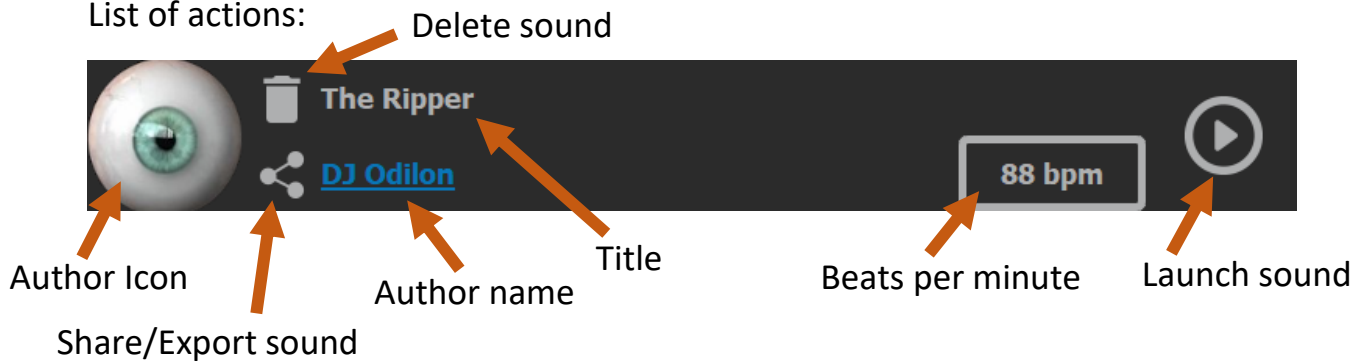



Figure 5: Detail of recording and looper menus

 Press with left mouse button on hyperlink of author name to be directed to the associated website

#### 4.2.4 Color menu

Color menu contains the curve colors and corresponding labels that can be displayed.

List of actions:

Wav mode      Overview of color position on vinyl

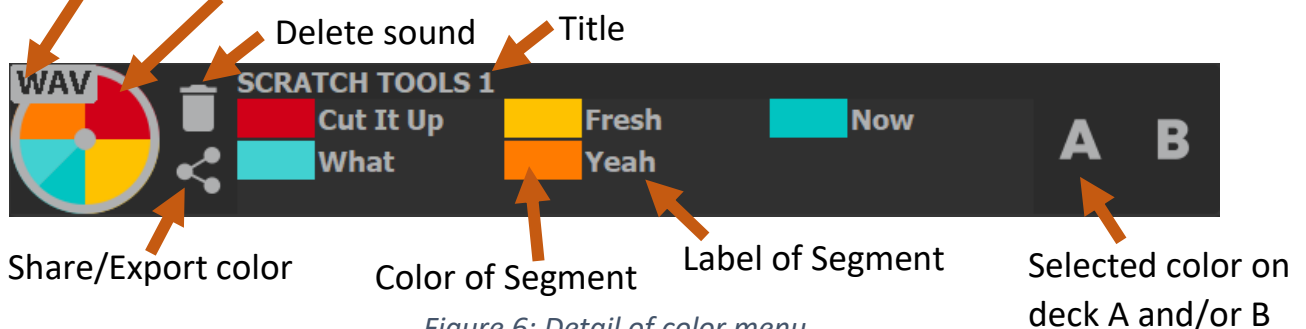




Figure 6: Detail of color menu

#### 4.2.5 Device configuration

Device configuration menu contains all options that enables to parameter application and scratch device with the following parameters:

- Device Tab:
    - Scratcher Icon: identify the scratcher with a picture
    - click on picture to add personal icon that is used in recording sounds)
    - Name: identify the scratcher name that is used in recording sounds
    - Timecode: specify timecode mode (Serato, Traktor, Generic)
    - Input A/B: specify the setup inputs corresponding to curves A/B to display
    - Master: specify the master input to recording
    - Input Midi: specify the midi input corresponding to cross fader
    - CrossFader Configuration: learn/display the input of crossfader
    - Left/Right CrossFader Values: specify values to trigger crossfader for left and right sides
    - Output Playback: specify the setup output enables to play sound of looper, metronum, deck A/B and recording
-  Beta mode: when the Deck A/B volume is greater than 0 then the wav sound is played / mode without the Serato application
- Volume: the volume of each output sound is defined



**Name**  
 Scratch Session Labs

**Timecode**  
 serato\_sideA\_FullDVS

**Input A**  
 42-[Ch A Input (Traktor Kontrol Z2 WDM Audio)]-48000/2p0-ASIO-

**Input B**  
 40-[Ch B Input (Traktor Kontrol Z2 WDM Audio)]-48000/2p0-ASIO-

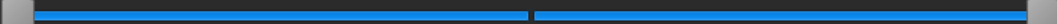
**Input Master**  
 43-[Master Input (Traktor Kontrol Z2 WDM Audio)]-48000/2p0-ASIO-

**Input Midi**  
 0:Traktor Kontrol Z2 MIDI

**CrossFader Configuration**  


Learn
 Ch04.CC.031


**Left/Right Crossfader Values**  


0
 
 127


**Output Playback**  
 39-[Haut-parleurs (Sound Blaster Z)]-48000/2p0-ASIO-TBD

**Volume**  

**Looper**  



**Deck A/B**  


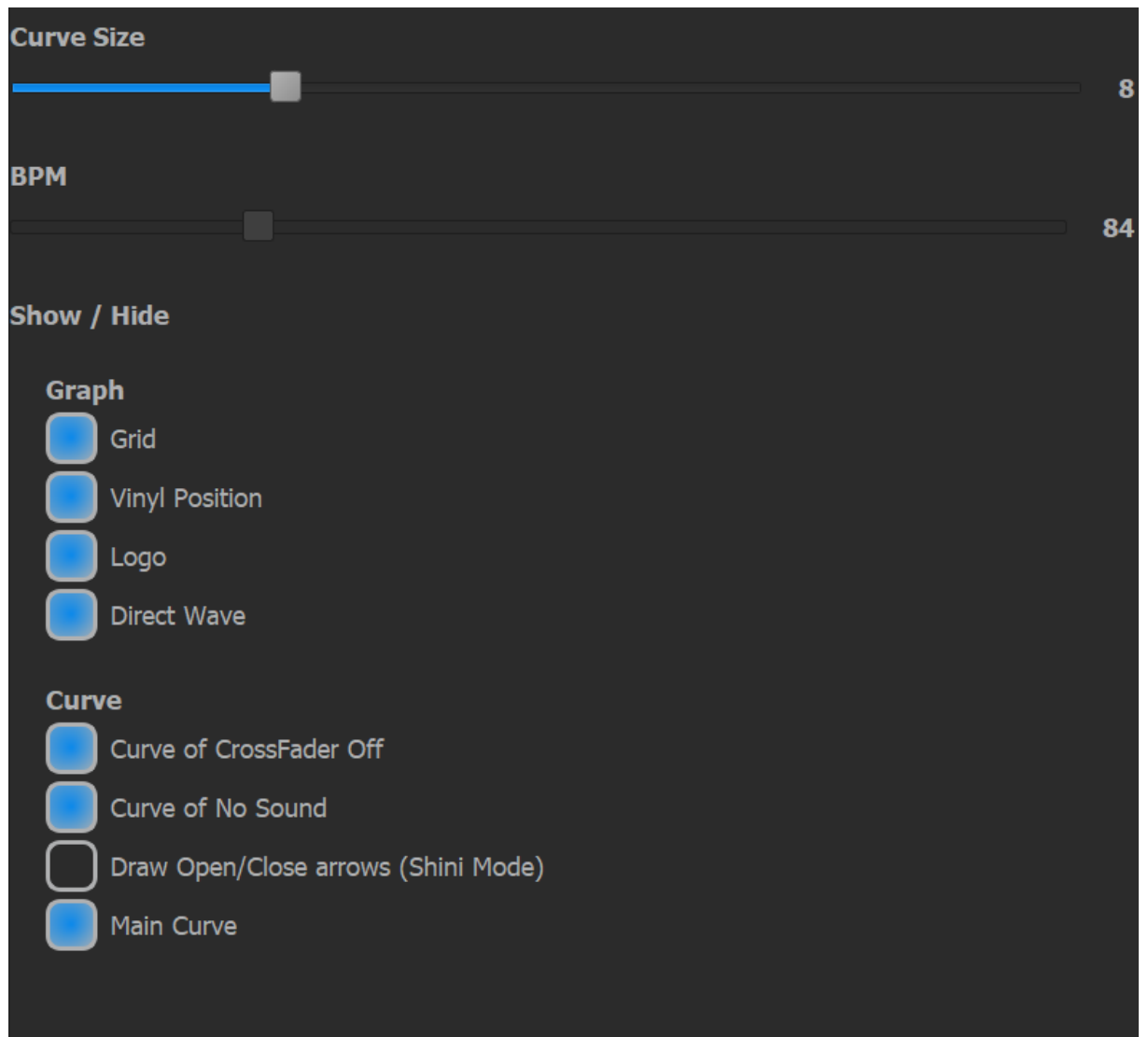
**Record A/B**  


**Metronum**  


**Option**  
☐ Deck A/B: Generate a cut-off sound

Figure 7: Example of Device Tab with a Serato vinyl and a Z2 mixer

- Display Tab:
  - Curve size: specify size of curves
  - BPM: specify the bpm of grid
  - Show / Hide:
    - Graph:
      - Grid: hide/show grid of curve
      - Vinyl position: hide/show the vinyl position
      - Logo: hide/show the Scratch Session Labs logo
      - Direct Wave: hide/show the wave at the top of the screen
    - Curve:
      - Curve of CrossFader off: Hide/show the curve when the cross fader is closed
      - Curve of No-Sound: Hide/show the curve when the color segment is not defined (no sound)
      - Draw Open/Close arrows (Shini Mode): Hide/show icons on curve corresponding to the crossfader state  

      - Main Curve: hide/show main curve. Displays only the second curve



*Figure 8: Example of Display Tab*

- Performance Tab:
  - Display Frequency: select the refresh frequency of display
  - Latency: select the size of input/output buffers and the processing step size. An overall is calculated to define the global latency

Performance	Input Buffer	Processing	Output Buffer
High	128	300	128
↑	256	150	256
	512	100	512
↓	1024	75	1024
Low	2048	50	2048

**Display Frequency**

30 ▼

**Latency**

Input Buffer		Processing		Output Buffer		Overall
2048 ▼	+	100 ▼		512 ▼		
43 ms		10 ms	+	11 ms	=	63 ms

Figure 9: Example of Performance Tab

### 4.3 Curve viewers

The curve viewers enable to transcribe in real-time scratch movements of Turntablisms. Sound information and curves are displayed and synchronized on curves viewer area.

Mouse actions:

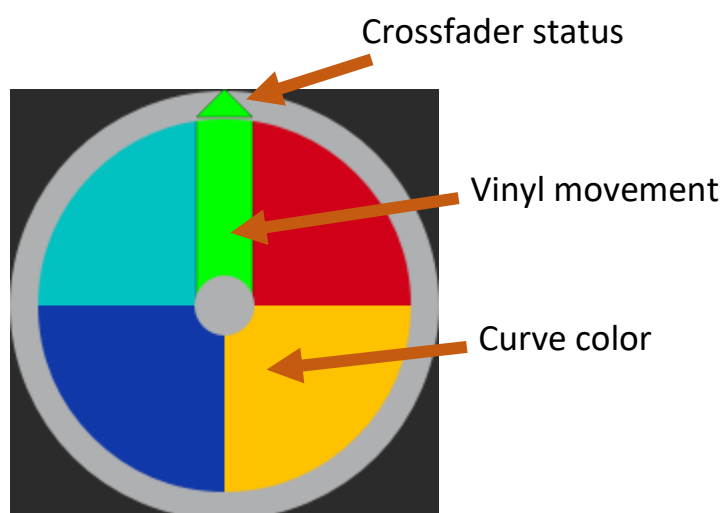
- Press the left mouse button and move the cursor: move curve
- Move the mouse wheel: change the width of curve
- Contextual menu:
  - Zoom:
    - Auto-resize: show the entire curve
    - Selection Area: select area on curve to zoom on it

 Display contextual menu:

- **Windows OS:** press the right mouse button
- **Mac OS:** press Control key + click on mouse button

### 4.4 Vinyl position

The vinyl position enables to visualize current and replay vinyl movements, and show/hide status of crossfader.



*Figure 10: Vinyl position and crossfader status*

The curve color is defined according to vinyl position.



## 4.5 Scratch tools

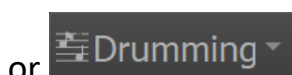
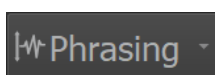
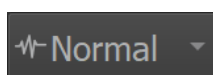
The scratch tools contain the following functions:



select inputs A, B or A/B (display two curves at the same time)



record the session



select display mode of curve:

- Normal: displays the curve according to position on time code vinyl
- Phrasing: displays the curve according to position on a color segment
- Drumming: displays the curve according to position on color segments



consider left/right sides of crossfader



switch crossfader side (reverse mode) => Hamster mode



select bpm number to display (4, 8, 16, 32 or 64)



previous sound of current list (record, looper, training)



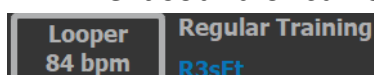
play/stop the current sound



hold mode to stop scrolling when vinyl is stopped



next sound of current list (record, looper, training)




current sound information (title, author, bpm)



metronome depending on bpm frequency



marks the beginning of a phase

 Press with left mouse button on hyperlink of author name to be directed to the associated website

## 5 Freeware/Premium options

Comparative table between Freeware and Premium versions:

Function	FREWARE	PREMIUM
Deck	Limited (only A or B setup)	✓ A, B or A/B setup
Looper	✓	✓ Modify the BPM
Replay	Limited (no scratch mode)	✓ re-scratch on the recording
Import/Share sound	✓	✓
Normal curve mode	✓	✓
Record	Limited (20s)	✓
Phrasing curve mode		
Drumming curve mode		
Color mode		
Wave curve mode		
Generate a scratch Sound		
Training mode (Work in Progress)		
Hold mode	✗	✓

*Table 1: Comparative between Freeware and Premium versions*

## 6 Mixer Compatibility

Compatibility table for mixers:

Mixer	Windows	MacOS
DJM-S5	✗	✓
DJM-S7	1 deck / No master record	✓
DJM-S9	1 deck / No master record	✓
DJM-S11	✗	✓
Native Traktor Audio 6	✓	✓
Phase devices with Native Traktor Audio 6	✓	✓
Numark Scratch	✓	✓
Rane Sixty-Two	✓	✓
Rane Seventy	✓	✓
Rane Seventy-Two	✓	✓
Reloop Elite	1 deck / No master record	✓
Z2	✓	✓

*Table 2: Compatibility table for mixers*

 **Please help me to complete this list**

## 7 Shortcut

List of shortcuts:

Action	Shortcut
Play/Stop	Space
Previous Looper	←
Next Looper	→
Initialize zero vinyl position	Deck A: Return/Enter Deck B: Backspace

*Table 3: Shortcuts*

Phrasing Mode:

Action	Shortcut Deck A	Shortcut Deck B
Create/Define angle end of area	E	I
Define angle start of area	SHIFT + E	SHIFT + I
Define empty area to area	•CTRL + SHIFT + E •COMMAND + SHIFT + E (Mac OS)	•CTRL + SHIFT + I •COMMAND + SHIFT + I (Mac OS)
Delete area	R	O
Delete all areas	SHIFT + R	SHIFT + O
Save color	S	J

*Table 4: Shortcuts for phrasing mode*

## 8 Frequently asked questions (FAQ)

- Configuration movie:  
<https://youtu.be/VI2XwQDrzyk>
- Switch Your Native Instruments Controller to MIDI Mode:  
<https://support.native-instruments.com/hc/en-us/articles/210264145-How-to-Switch-Your-Native-Instruments-Controller-to-MIDI-Mode>
- Configure a midi X-Fader in Traktor:
  - Open the Traktor application
  - Click on "Setting -> Controller Manager"
  - Select "Generic MIDI (All Ports)" in Device
  - Select "All Ports" in In-Port and Out-Port
  - Click on "Add In..." and select "Mixer -> X-Fader -> Position"
  - Click on "Learn" button to configure X-Fader
  - Click on "Add Out..." and select "Mixer -> X-Fader -> Position"
  - Click on "Learn" button to configure X-Fader
  - Follow this procedure
  - **SWITCH YOUR NATIVE INSTRUMENTS CONTROLLER TO MIDI** Mode
- File extension:
  - ssp: color file
  - sst: header file
  - ssw: curve file
  - ssz: import/export file
- Procedure to launch application if no curve on MacOS:
  - Unzip file on computer
  - Select ScratchSessionLabs.app
  - Control + Press button of mouse
  - Select "Show Package Contents"
  - Directory path: "Contents/MacOS/"
  - Launch ScratchSessionLabs.app
  - Press "Open"
  - Press "OK"

- Desynchronization of the position of the vinyl arrow:
  - In Setting menu, the timecode field must:
    - Correspond to the sideA or sideB of vinyl
    - Have the information “FullDVS”

Example: serato\_sideA\_FullDVS

- Lack data on the graph curve:
  - Increases the value of Input Buffer
    - Setting -> Performance Tab -> Input Buffer

Example: select the value 2048 in the “Input Buffer” field on an inexpensive computer running Windows

## 9 Contact

Scratch Session Labs	Link
Support	<a href="mailto:sandy.duchesne@gmail.com">sandy.duchesne@gmail.com</a>
Instagram	<a href="https://www.instagram.com/scratchviewer/">https://www.instagram.com/scratchviewer/</a>
Facebook	<a href="https://www.facebook.com/ScratchSessionLabs/">https://www.facebook.com/ScratchSessionLabs/</a>
Website (free download link)	<a href="http://ScratchSessionLabs.com">http://ScratchSessionLabs.com</a> <a href="http://ScratchViewer.com">http://ScratchViewer.com</a>

Scratch Assembly (2019) during Wednesday evening sessions at Mix'Art Myrys (Toulouse-France).



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MORE.**