

Menu Behavior

All menus in Tachyon are accessed by tapping one of the round buttons on the edge of the screen. To close any menu, tap the same button that you tapped to open the menu.

Sound Menu

The top button in the sound menu opens the volume menu. This gives you access to master volume, top-instrument volume, and bottom-instrument volume.

The top control in the volume menu is the master volume slider. This adjusts the volume of the entire instrument. If you are experiencing distortion with the instrument, reducing the master volume will usually correct the problem. To adjust the value of this slider or any other slider in these menus, touch the middle of the slider and move your finger up and down.

The middle control in the volume menu is the volume slider for the top instrument. This slider and the one immediately below it are used to balance the relative volumes of the two instruments. Such balancing may be necessary to account for personal taste or relative octave shifts between the sounds.

The bottom control in the volume menu is the volume slider for the bottom instrument.

The middle button in the sound menu opens the chorus menu. This gives you access to chorus depth and chorus rate.

The top slider in the chorus menu controls the chorus depth. Adjusting this to the minimum value will eliminate the chorus effect entirely.

The bottom slider in the chorus menu controls the chorus LFO rate. The rate is adjustable from 0.5 Hz to 3.0 Hz.

The bottom button in the sound menu opens the delay menu. This gives you access to delay rate, volume, feedback, and width.

The top slider in the delay menu controls rate. Delay rate is adjustable from 0.0 to 4.0 seconds.

The second slider in the delay menu controls the delay volume. This is the volume at which the delay is added to the output, and it does not affect the delay feedback.

The third slider in the delay menu controls the delay

feedback. This determines how much the delayed signal is attenuated each time it passes through the delay buffer.

The bottom slider in the delay menu controls the delay width. If the delay width is set at zero, the delay will be the same in the left and right channels. If the delay width is set to one, the delay will have a strong ping-pong effect between the channels.

Playing-Surface Menu

The top button in the playing-surface menu opens the scale menu. The scale menu has two options: scale type and root note.

The scale-type menu lets you choose from five different preset scales: major, harmonic minor, chromatic, major pentatonic, and minor pentatonic.

The scale-root menu lets you set the root note of the scale. Note that this is the scale root and not the lowest note on the playing surface, which is set elsewhere in the playing-surface menu.

The range selection menu lets you choose the size of the playing surface. More precisely, the range

selection determines the number of semitones searched, starting at the lowest note, which is specified elsewhere in the playing-surface menu. A note will be placed on the playing surface if it is within the search range and it is contained in the specified scale. Including the bottom note, the range selections of 1, 1.5, 2, and 3 octaves correspond to 13, 20, 25, and 37 semitones, respectively.

The lowest-note selection menu lets you choose the lowest note of the search range for the playing surface. If this note is not in the selected scale, it will not be placed on the playing surface. For instance, if you choose a lowest note of G-sharp, and your selected scale is C major, the lowest note on the playing surface will be A.

The display menu lets you turn note labels and note lines on and off.

The lock-pitch button lets you determine how the pitch changes when you slide your finger from one note to another. When lock-pitch is activated, the pitch snaps to the new note. When lock-pitch is deactivated, the pitch slides to the new note.

Instrument Selection

The buttons on the right side of the screen open the instrument-selection menu. The top button allows you to select the top instrument, and the bottom button allows you to select the bottom instrument.

Each shape corresponds to a sound. Some of the mappings are literal (the violin shape corresponds to a violin sound), while some are more abstract (the starburst shape in the top-right corresponds to an electric drill).

The number buttons allow you to shift the sound up or down one octave from its standard tuning. In combination, the two instruments can be shifted up to two octaves apart, which allows for some interesting layering possibilities. With the octave-offset buttons, some interesting opportunities for experimentation are present even when the top and bottom instruments are the same.

Octave Buttons

The octave buttons allow you to change the octave offset of the entire playing surface. To lower the octave offset, tap the left button. To raise the offset, tap the right button. The number in the middle indicates the current offset.

In the Mac version of the app, the left and right arrows and the 'z' and 'x' keys can also be used to change the octave.

Preset Menu

The left button in the preset menu opens the save-preset dialog.

The middle button in the preset menu opens the load-preset dialog.

The right button in the preset menu locks the playing surface. When the playing surface is locked, the scale, range, and lowest note are not loaded when a preset is loaded. This allows you to load new sounds without changing the scale or range.

Preset Storage

The presets are stored as property list files. They are accessible through file sharing, which allows you to easily backup and restore all of your presets.

The preset numbered -1 is supplemental settings for the app that are not stored in the other preset files.

Preset 0 is the autosave preset that ensures the app is exactly the same when you open it as it was the last time you closed it.

While the other presets are numbered (starting with 1), the numbers do not necessarily correspond to the list ordering.

The "master_presets" property list provides the mapping from file number to list position. The "extracted_presets" property list keeps a record of which pre-loaded presets have been added to the list so the same pre-loaded preset is not added multiple times.