# Notation Mixer v2.0 User Guide

# Notation Mixer v2.0 User Guide

# 7 Credits

# Introduction

## About the Notation Mixer

The Notation Mixer is a Flash-based practice, jam, and teaching tool that synchronizes audio with music notation. It also includes an audio mixer with individual track pan and volume controls. This tool is a central feature of the Berklee PULSE Music Method, and is located in the Jam Room on the Berklee PULSE site.

Notation Mixer v.1 was developed in 2006-2007. Notation Mixer v.2, released in January 2013, is the culmination of over two years of development based on user and developer feedback.

## About This User Guide

This user guide will take you through each feature of the Notation Mixer and explain its functions in detail. We've also included some practical tips and shortcuts.

## New Features

Here are a few of the new feature additions and improvements to Notation Mixer v.2:

1. A complete redesign of the user interface.
2. Larger notation window to view more notation at one time!
3. Syncs up to 16 tracks of audio with notation.
4. New count off, click track, and visual cue options.
5. New and improved mixer.
6. Improved navigation and looping.
7. New information window to add teaching instructions and performance tips.
8. Single key shortcuts for mouse-free use.

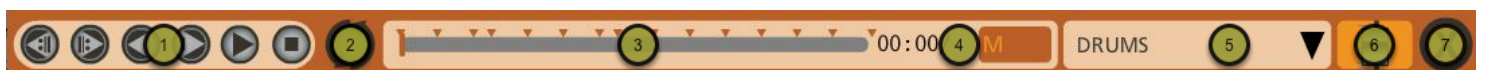# I. The User Interface: A Brief Look

# The Notation Mixer Interface

If you have used Notation Mixer v.1, the first thing you'll notice about Notation Mixer v.2 is a complete redesign of the interface.
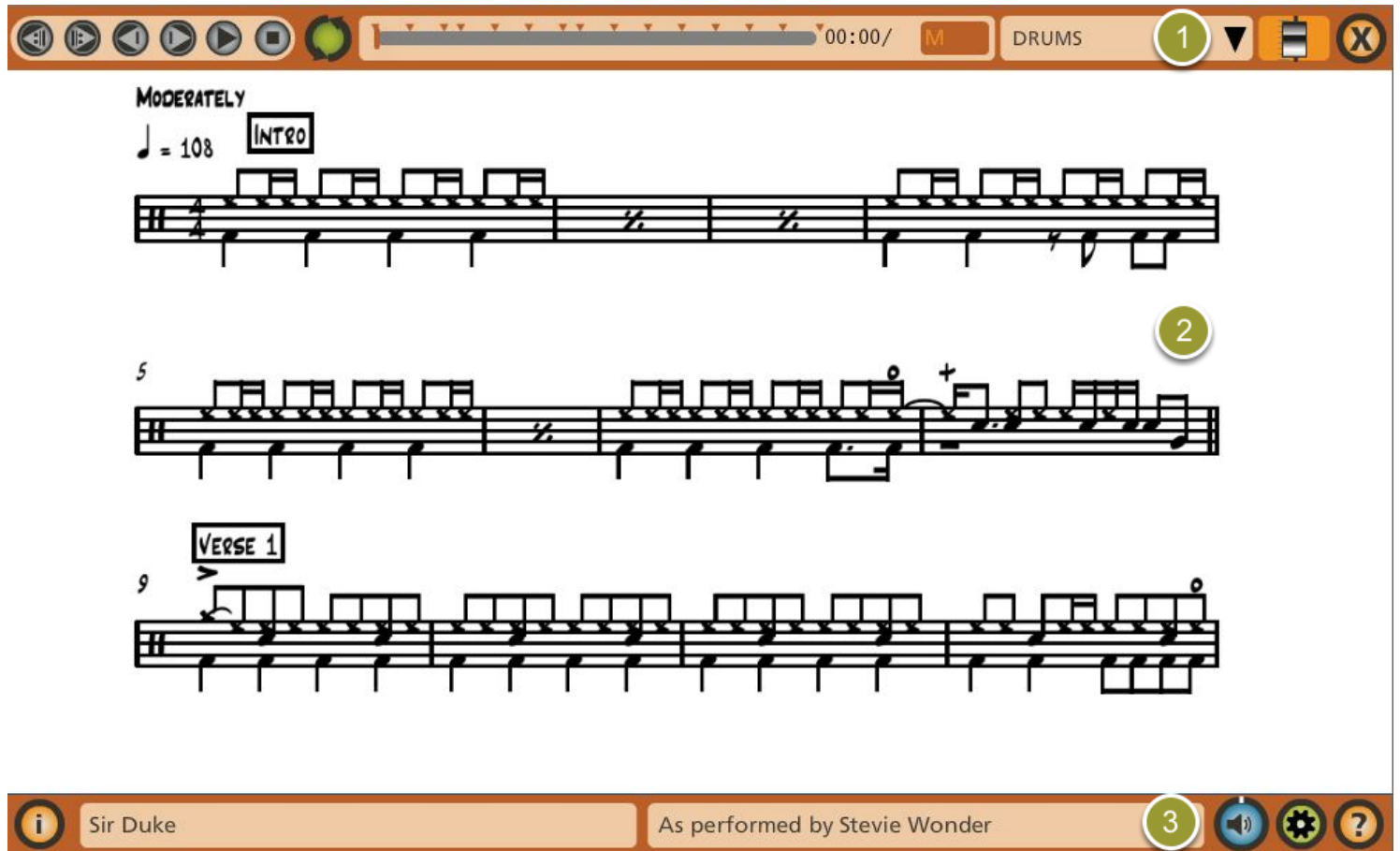


The Notation Mixer interface is divided into three sections: 1) the navigation bar, 2) the notation window, and 3) the information/global settings bar.

## The Navigation Bar



The navigation bar is located along the top of the Notation Mixer. It includes:

1. The transport
2. Loop Settings menu button
3. A moveable timeline
4. Time and measure counters
5. Notation selection menu
6. The mixer window button

7. A button to close all menus

Chapter II describes each of these in detail.

## The Notation Window



The notation window is the main notation viewing area.  See Chapter III to learn more about how notation viewing works.

## The Information/Global Settings Bar



The Information/Global Settings bar at the bottom includes:

1. The Information menu
2. Song information fields
3. Master volume setting
4. Count off, click track and visual cue selectors
5. Help menu

Chapter IV describes each of these in detail.

# II. The Navigation Bar

# A. The Transport

The transport controls playback and navigation of the Notation Mixer.  Each button includes a keyboard shortcut for use without a mouse.

***Important note:***  *In a Flash-based application like the Notation Mixer, you must be inside the Flash environment /window for the controls to operate and for the computer keyboard shortcuts to work. If the keyboard shortcuts do not work, you might be outside of the Flash window.  Simply click anywhere inside the Notation Mixer window and the keyboard shortcuts should work.*

## The Stop Button



Click the Stop button or press the "s" key to stop playback and rewind to the beginning of the song or loop starting point.

## The Play/Pause Button



Click the Play button or press the "space bar" to pause playback.  Press the space bar again to continue playback.

## Fast Forward Button



Click the Fast Forward button or press the "f" key to advance the song **by one measure.**  Hold the button down to advance the song more quickly.

## Rewind Button



Hold to rewind (r)

Click the Rewind button or press the "r" key to rewind the song **by one measure.**  Hold the button down to rewind more quickly.

## Next Rehearsal Marker Button



Next Rehearsal Mark (n)

Clic the Next Rehearsal button or press the "n" key to advance the song to the next rehearsal marker.  **Note:** Holding the button down will **not** advance more quickly.

## Previous Rehearsal Marker Button



Previous Rehearsal Mark (p)

Click the Previous Rehearsal Marker button or press the "p" key to rewind the song to the previous rehearsal marker.  **Note:** Holding the button down will **not** rewind more quickly.`

# B. The Loop Menu

The Loop Menu allows you to set loop points anywhere in a song. You can set loop points to loop an entire song, loop between rehearsal markers, or create your own custom loops.

*Important Note:* *The default setting for looping is usually set to off.*

## The Loop Settings Button



Toggle Loop Settings (t)
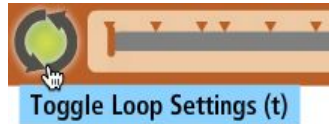
Click on the Loop Settings button or press the "t" key to bring up the Loop Settings menu. The Loop Settings menu includes a button that turns looping on and off and a list of all rehearsal markers in a song. The list in the "from" and "to" rehearsal markers is identical except for the first and last rehearsal markers.
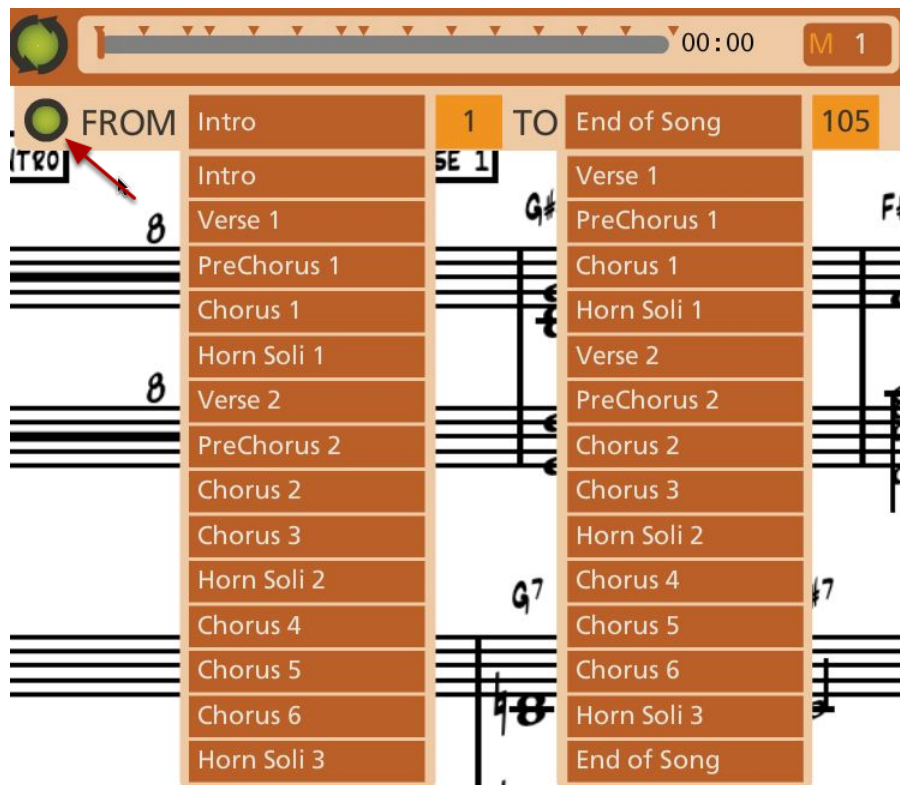
## Turning on Looping
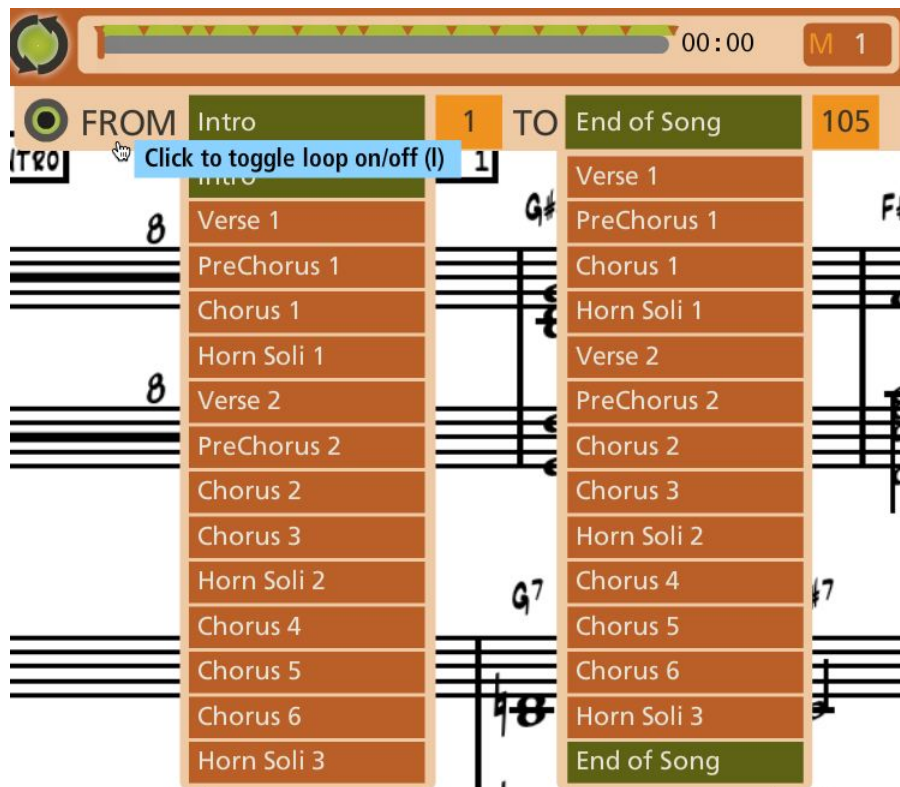


Click on the Loop On/Off button next to the word "From" or press the "I" key to toggle looping on and off. The first time you turn on looping, the default is set is to loop the entire song, as shown in the above picture. You can create loops using rehearsal markers or create a custom loop using the measure number fields.

## Creating Loops Using Rehearsal Markers



There are two ways to create loops using the rehearsal markers; with the computer's mouse and using keyboard shortcuts.

To create a rehearsal marker loop using the computer's mouse:

1. Select the rehearsal marker in the "From" list that marks the beginning of the loop. The top box in the rehearsal marker list displays the selected rehearsal marker, including its associated measure number.

2. Select the rehearsal marker in the "To" list that marks the end of the loop. The top box in the rehearsal marker list displays the selected rehearsal marker, including its associated measure number.

In the following example, the loop starts at PreChorus 1 (m. 17) and ends at Horn Soli 1 (m. 29).

The loop also displays in the timeline, as a green or shaded section of the timeline. See the next section "The Navigation Timeline" for more information about using the timeline.

You can also use your computer keyboard to create loops using rehearsal markers:

1. Press "t" to open the Loop Settings menu, and then press "l" to turn on looping.
2. Use the up/down arrows to  scroll to a rehearsal marker in the "From" list, and then press return or enter to select a rehearsal marker. The top box in the menu/list updates to display the selected rehearsal marker.
3. Use the "right" arrow to move to the "To" list.
4. Use the  up or down arrows to  scroll to a rehearsal marker from the "To" list, and then press return or enter to select a rehearsal marker. The top box in the menu/list updates to display the selected rehearsal marker.

***Important Tip:***  *Using the keyboard for looping allows you to change loops or turn them off on the fly.  For example, if you want to loop a phrase only 3 times and then continue on with the rest of the song, all you need to do is press the "l" key when you're finished looping and the song will continue!*

## Creating a Custom Loop
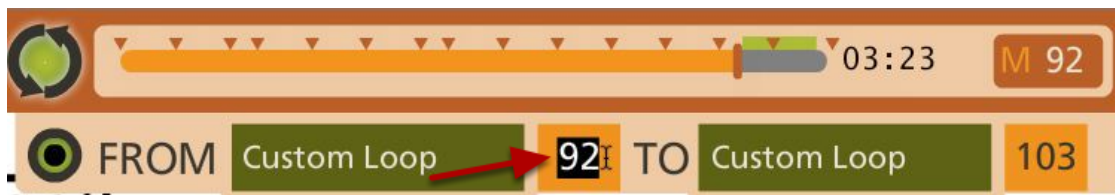


To create a custom loop:

1. Double-click on the loop measure number for the From menu/list, and type in the measure number that marks the beginning of the loop.

The top box in the rehearsal marker list displays "Custom Loop," unless the measure number is also a rehearsal marker.

2. Double-click on the loop measure number for the To menu/list, and type in the measure number that marks the beginning of the loop.

The top box in the rehearsal marker list displays "Custom Loop," unless the measure number is also a rehearsal marker.

# C. The Navigation Timeline

## Improved Navigation



As previously mentioned, above the loop settings menu is the new navigation timeline. The timeline has several features:

1. It serves as a visual representation of the loop settings. When looping is turned on, a green bar above the timeline will appear showing the loop points.
2. You can use it to navigate anywhere in the song just by clicking on the timeline.
3. By clicking on one of the triangles, you can navigate directly to a rehearsal marker.
4. By clicking just below the grey bar, you can navigate to any place via a timer. Also by clicking and dragging the navigation slider, you can see the timing information and "scrub" the audio forwards or backwards.

## Example #1
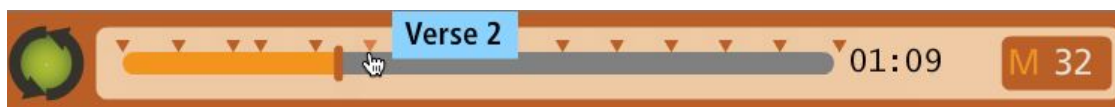


*Clicking on the triangle navigates directly to a rehearsal marker.*

## Example #2



*Clicking and dragging on the navigation slider will show you timing information and you can "scrub" the audio.*

## The Time Display and Measure Counter



The time display shows the total song length in minutes and seconds. The display can either count up (default setting) or down to 0. If you want the time display to count down rather than up, just click on display number. Click again, if you want to change it back.

The measure counter is the indicator of the measure currently playing. It is a static display and can't be changed by the user. If you want to start at a particular measure number, use the loop settings.

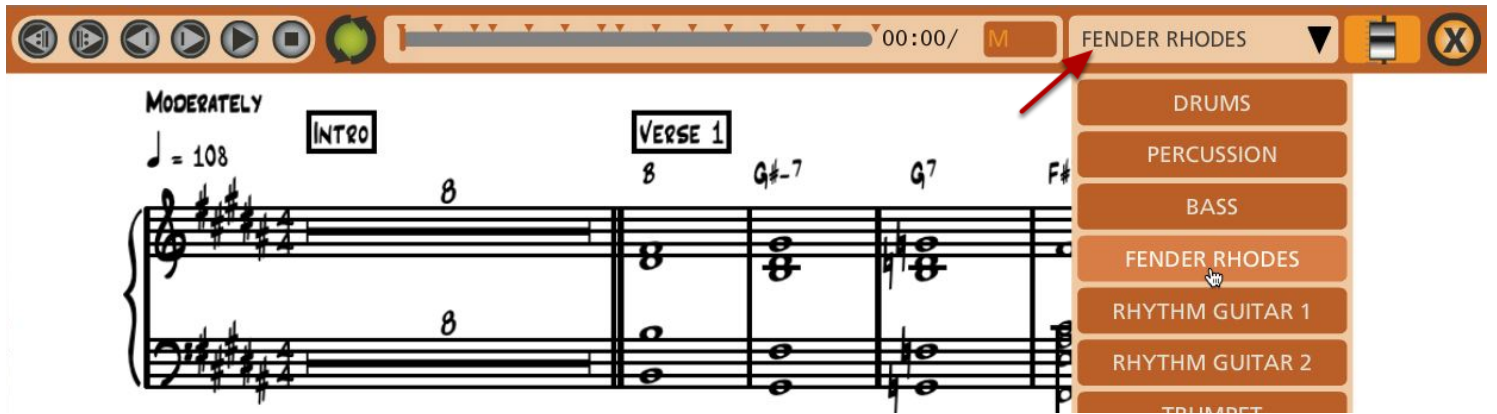# D. The Instrument Selection Menu



The Instrument menu shows the list of instruments in the song with available notation. Clicking on the instrument name on the Navigation Bar or pressing the "b" key will bring up the Instrument menu.  You should see the list of instruments available in notation below.  To view the instrument's notation, click on the name of the instrument or use the up/down arrows and press return.

## Instrument Selection View

## Example #1



*When you select a new instrument, the name should now appear on the top level of the Navigation bar.*

# E. The Mixer



Toggle Mixer (m)

The Mixer window is activated by clicking on the fader icon in the Navigation bar or by pressing the "m" key on the keyboard.  The mixer opens up over the notation window.

## The Mixer at a Glance



The Mixer window has five different areas that need explanation. Each track or channel strip share these same features (except for #5):

1.  Track Name.  The track names usually (but not always) correspond with the instruments in Instrument Selection menu. They will often be abbreviated.
2.  Pan Knobs.  Turn these knobs to the left or right to change the orientation of the track in the stereo field.  When you turn the Pan knob, you'll see a corresponding number change beneath the knob.  The default is "C" or center.
3.  Mute/Solo Buttons.  The mute button silences the audio on the track while the solo button will mute all tracks not soloed.  You can solo or mute tracks in any combination.
4.  Track Volume Sliders.  These sliders raise or lower the volume of the individual track. When you move a slider up or down, you'll see a corresponding number change at the bottom of the window.
5.  Reset Mixer Button.  When you click this button, it will set all solo, mute, track pan and volume changes back to their default positions.

## Track Names
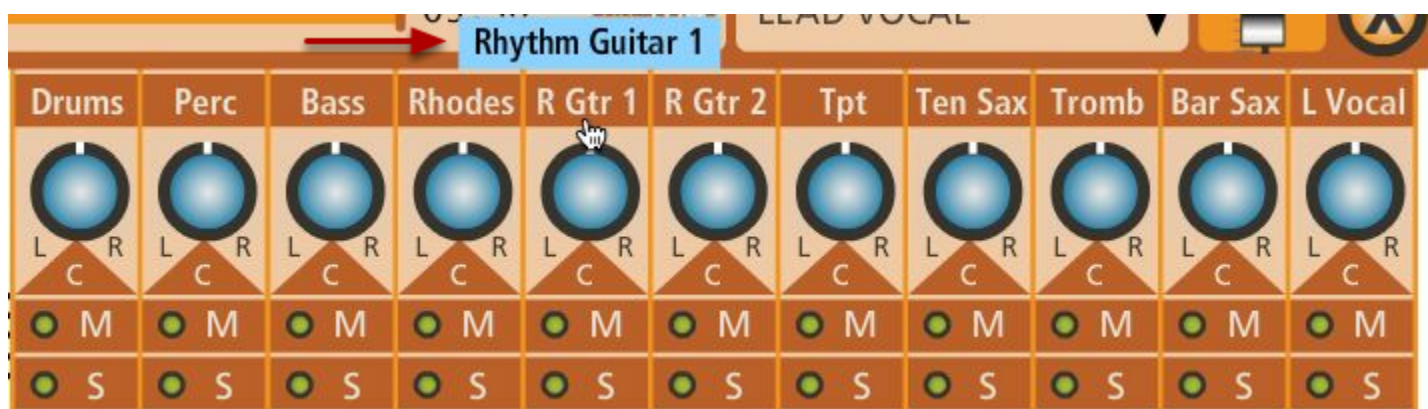


*Important Tip:*  *When a track name is abbreviated, see the full name by hovering over it with the cursor.*

## Pan Knobs



Like traditional mixers, these pan knobs change the position of the audio in the stereo field.  When you turn the knob, you will see a letter with a number;  "R" means right of center and "L" means left of center. "C" as mentioned above, means center and is usually the default position.

***Important Tip:*** *If you change a pan setting and want to return it back to its default position, click on the corresponding number and it will reset. That's much easier than turning the knob back to center.*

## Mute and Solo Buttons
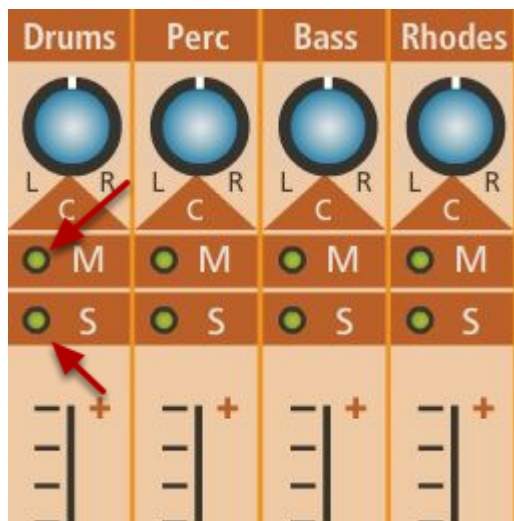


The mute and solo buttons work like an on/off toggle switch. When you want to mute or solo a track, just click on the button. When you want to undo the mute or solo, just click on the button again. You'll know if a track is muted or soloed by a change in the button's status.

***Important Tip:*** *The two images below show the difference in mute and solo status. The first image shows a track that's muted and the second image shows a track that is* soloed*. Notice when you solo a track, all of the mute buttons are greyed out. This means that all tracks are now muted except for the* soloed *track(s).*

*If you already have muted tracks and then solo a different track, when you unsolo, the muted tracks will stay muted.*

## Track Volume Faders



Click to reset
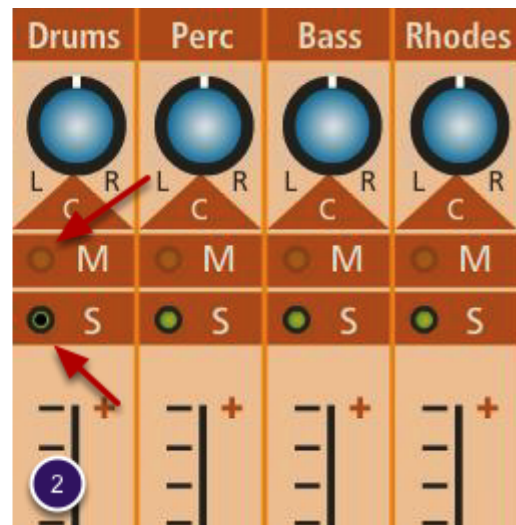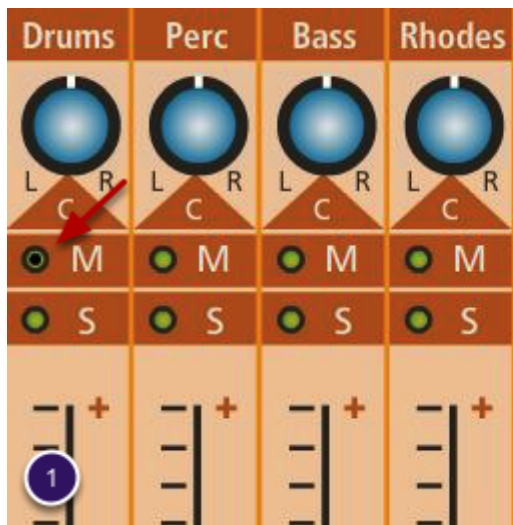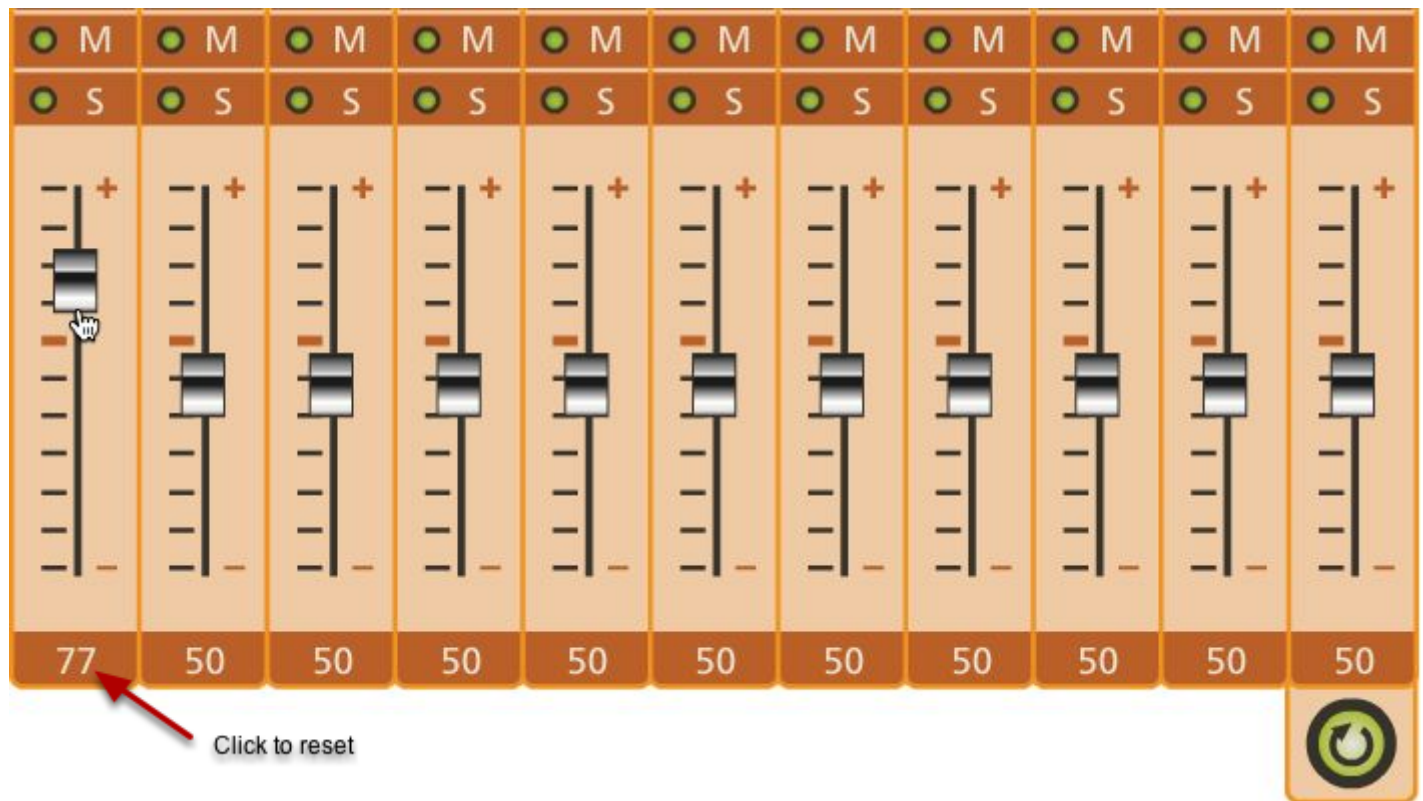
As mentioned above, the track volume sliders raise or lower the volume of each individual track. You can change the volume by clicking and dragging the slider up or down. You can also change it quickly by clicking anywhere on the track volume's grid.  As you move the slider, the corresponding volume number will change.

*Important Tip:*  *If you change a volume setting and want to return it back to its default position, click on the number and it will reset.*

## The Mixer Reset Button
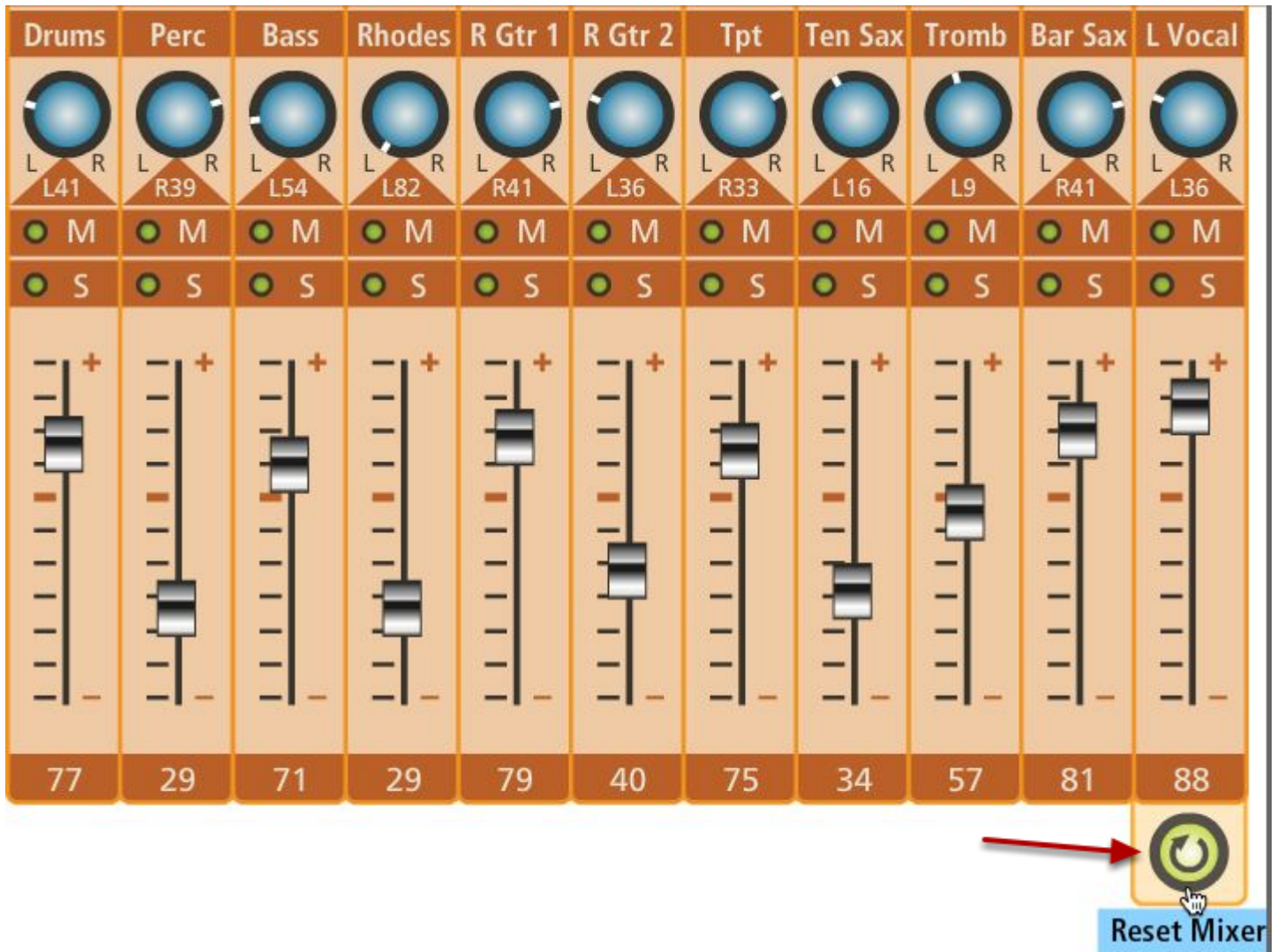


For your convenience, we've added a "Reset Mixer" button to quickly reset all solo, mute, track pan and volume changes back to their default positions.

*Important Tip:*  *Unfortunately there is no "undo button" so make sure you really want to change everything back before you press the button.*

**Ah…a nice reset mixer.**

| Drums | Perc | Bass | Rhodes | R Gtr 1 | R Gtr 2 | Tpt | Ten Sax | Tromb | Bar Sax | L Vocal |
|-------|------|------|--------|---------|---------|-----|---------|-------|---------|---------|
| L C R | L C R | L C R | L C R | L C R | L C R | L C R | L C R | L C R | L C R | L C R |
| ○ M | ○ M | ○ M | ○ M | ○ M | ○ M | ○ M | ○ M | ○ M | ○ M | ○ M |
| ○ S | ○ S | ○ S | ○ S | ○ S | ○ S | ○ S | ○ S | ○ S | ○ S | ○ S |
| 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |

Reset Mixer

# F. Close All Menus

## Closing Open Menus



Once you learn all of those cool keyboard shortcuts, you'll likely have one or more menus open at once. To quickly close them, just click on the "X" icon in the far right corner of the Navigation bar, or better yet, press the "escape" key on your keyboard.



*Important Tip:* *The keyboard shortcut to close one or more menus is the* ***"escape"*** *key. It's a very handy feature.*

# III. The Notation Window

# Larger Notation Window

The Notation window displays the notation for the selected instrument. See Section/Chapter II. D Instrument Selection Menu for more information on selecting an instrument.
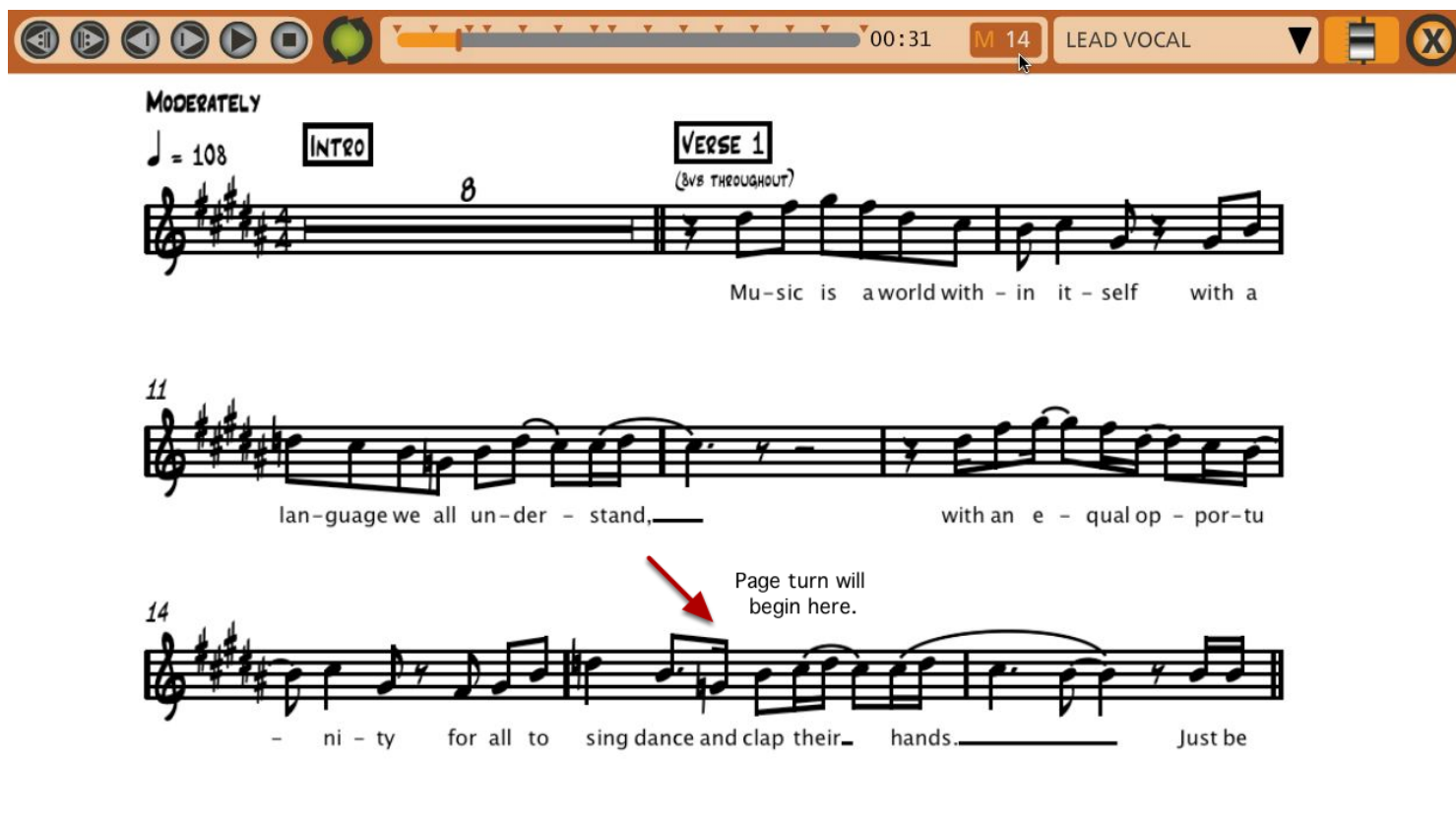
There are two important changes in Notation Mixer v.2: a larger notation window and a smoother process for revealing new lines of music.

Thanks to the new interface design, there is more screen real estate to view notation.  Single staff instruments can now show 3 to 4 staves of notation, while grand staff and instruments using tab can show two staves.

## New Lines of Music

In addition, we changed the way a new line of music is revealed which allows you to look ahead without the page scrolling or jumping.  Here's how it works:

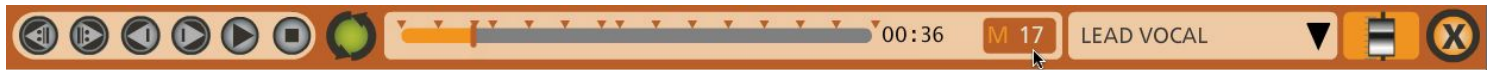The example below shows the first page of a Lead Vocal part.



Around a measure and a half before the end of the third line (measure 15 in this example), a shaded line will come down revealing the new lines of music.  This will allow the musician to look ahead to the new music but still show the current measure on the screen.

## The Page Turn Begins at Measure 15



Once the last measure of the first page is finished, the shaded line will move all the way down and disappear, revealing the new page.

## A New Page is Revealed



Using this viewing method allows the music to remain stationary. The only thing that needs to move is your eyes.

# IV. The Information/Global Settings Bar

# A. The Information Menu

Another new feature is the Information menu.  With copyright and other song information, fun facts*, performance tips*, musician credits*, and instructions for exercises and activities*, the additional information under this menu helps to make the Notation Mixer an even more useful instructional tool.

***Important Tip:***  *Some of the information sections will be empty at the time of launch.  We hope to fill in as much information as possible over the coming months.*



To access the Information menu, click on the "i icon" in the lower left corner or press "i" key.  Mouse over or use the up and down arrow keys to view the information in each sections. The Information Menu sections include:

1.  Instructions.  Directions on how to use the Notation Mixer for particular exercises and activities in the Study and Practice rooms.
2.  Performance Tips.  Instructive tips about playing a particular part or exercise.
3.  Copyright.  The copyright information for each PULSE created song.
4.  About This Song.  Information relevant to the song including composers and the year the song was composed.
5.  Credits. The musicians who performed and/or produced the song or exercise.
6.  Fun Facts.  Interesting information about the song.

# B. Song Information

| ⓘ Sir Duke | As performed by Stevie Wonder |
|---|---|
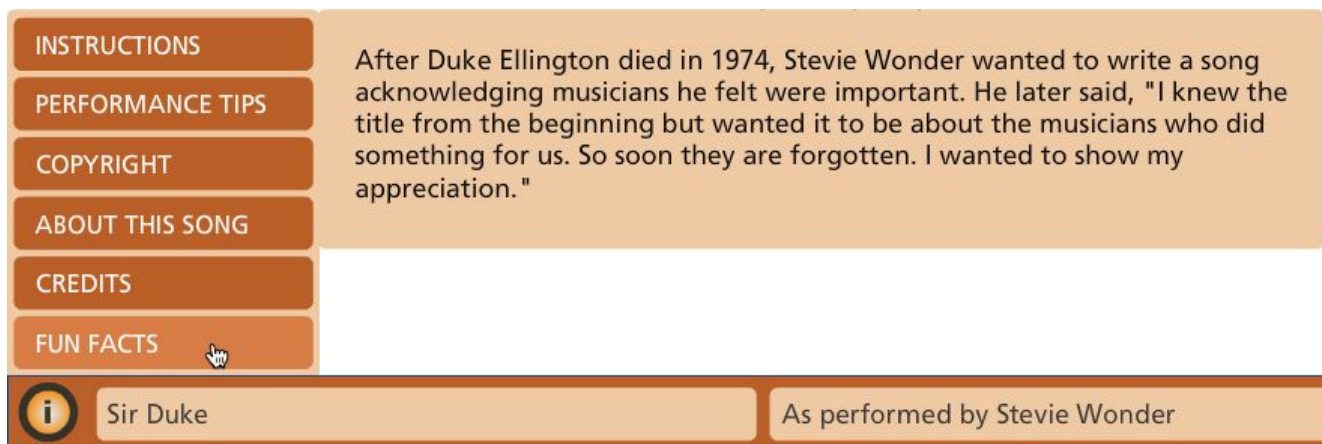
The song information in the Information/Global Settings bar includes the name of the song or exercise, and performer or composer information (ex. the original performer or composer).

# C. Master Volume Fader



The Master Volume fader operates just like the track volume faders in the Mixer window except that it controls the overall volume of the song.  To access it, click on the speaker icon or press "q". A single fader will appear.  To raise or lower the overall volume click and drag the slider up or down.

*Important Tip*:  *Like the Track Volume faders, the Master Volume fader has a mute button that allows you to quickly and conveniently silence your audio without stopping the song.*

*Also, if you've made changes to the overall volume, you can reset it to the default position by clicking on the corresponding number at the bottom of the fader (Image 1).  The second image shows that when "mute" is on, the speaker icon is greyed out and the white level marker on the icon is on the bottom.*
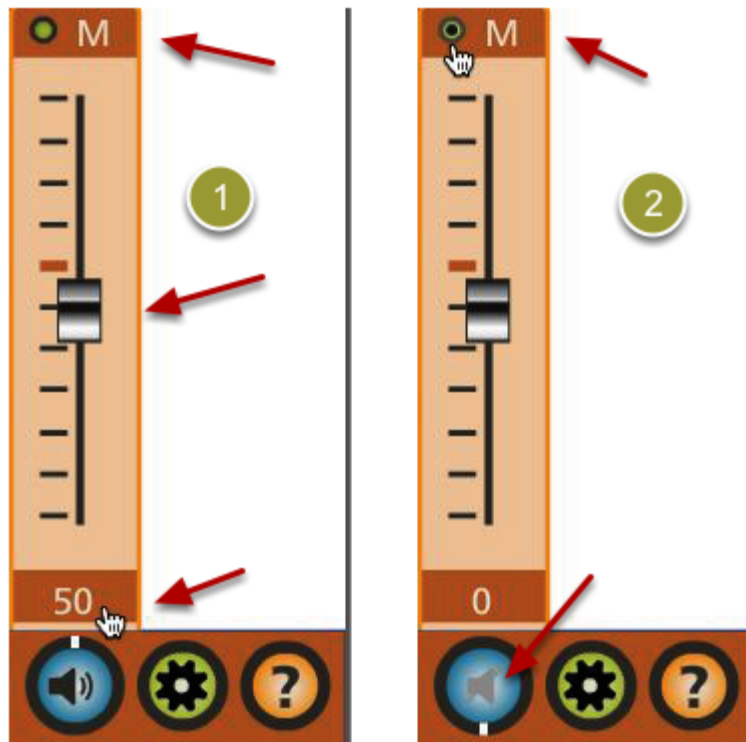
# D. The Global Settings Menu



The Global Settings menu includes three new features: a count off, a click track and a visual cue to make playing and following the music easier. These features can also be used as teaching tools, especially for beginners.

To access the Global Settings menu:

Click the Show/Hide Global Settings icon, or press "x" on the computer keyboard.

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**Global Settings Menu**

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The Global Settings menu includes three new features. Every new PULSE song or exercise now comes with a count off, a click track and a visual cue to make playing and following the music easier. These can also be used as teaching tools, especially for beginners.

When you first open a song, the Count off is on by default but the Click Track and Visual Cue are off. To turn them on (or off), click on the Show/Hide Settings icon or press "x" on your keyboard to open the menu. Next click on the setting (they will change shades as you mouse over them). For your convenience, we've also added keyboard shortcuts to turn these on or off. These come in handy when you're playing or teaching. The shortcuts are:

1. Count off - O
2. Click Track - C
3. Visual Cue - V

## Count off and Click Track
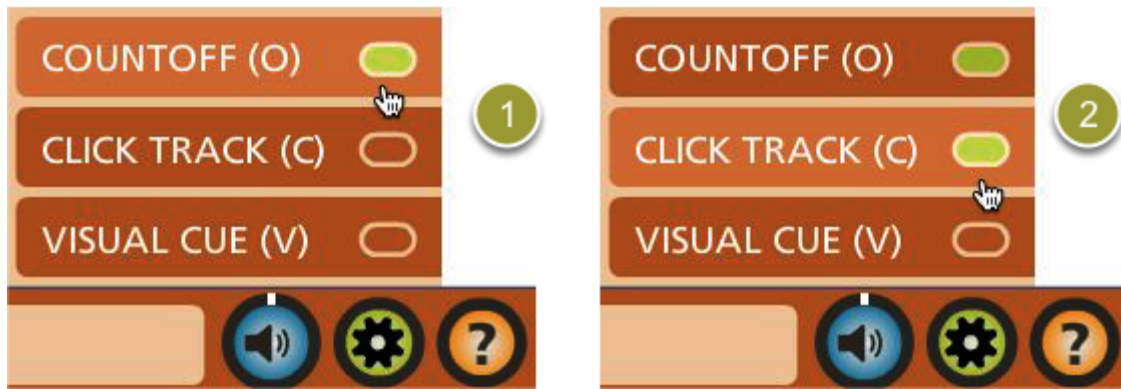


A song's count off' varies between one and two measures depending on tempo, meter and whether or not there is a pick up measure.  For example, most songs in 4/4 meter with no pickup bar will have a two bar count off (eight beats).  However, if a song in 4/4 has a two beat pickup, the count off will only have six beats, allowing for the pick up to make up the other two beats.  Occasionally a song with a very slow tempo will only have a one bar count off.

*Important Tip:  Currently, the count off only works for the beginning of songs and does not work with looping.  Click tracks however, are functional in looping.*

The click track plays along with the song and is in sync with the visual cue and the overall mix.  One thing you may notice is that on some songs, the click track may not always be precise from start to finish.  That's because many of our songs were recorded without the use of a click track and sometimes tempos will vary a bit.  We don't think that's a bad thing.  Most of the click tracks were tailored to the recorded performance.

*Hidden Feature:  Do you want to solo the click track and use it as a metronome?  You can do this by turning it on and then muting the Master Volume fader.  All audio will be muted except for the click track.*

## The Visual Cue
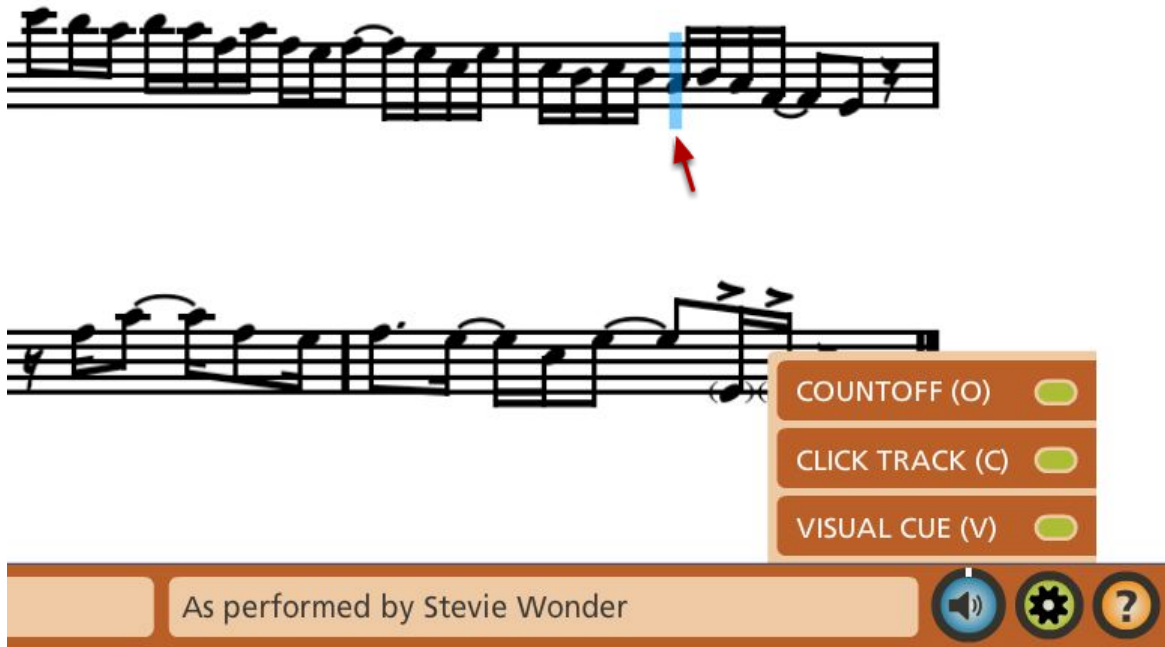


The Visual Cue (our version of the "bouncing ball") is a visual representation of every beat of every measure of a song.  Its movement depends on the time signature and is in sync with the click track and audio.  This can be a great teaching tool especially to help beginning students follow along with the music.
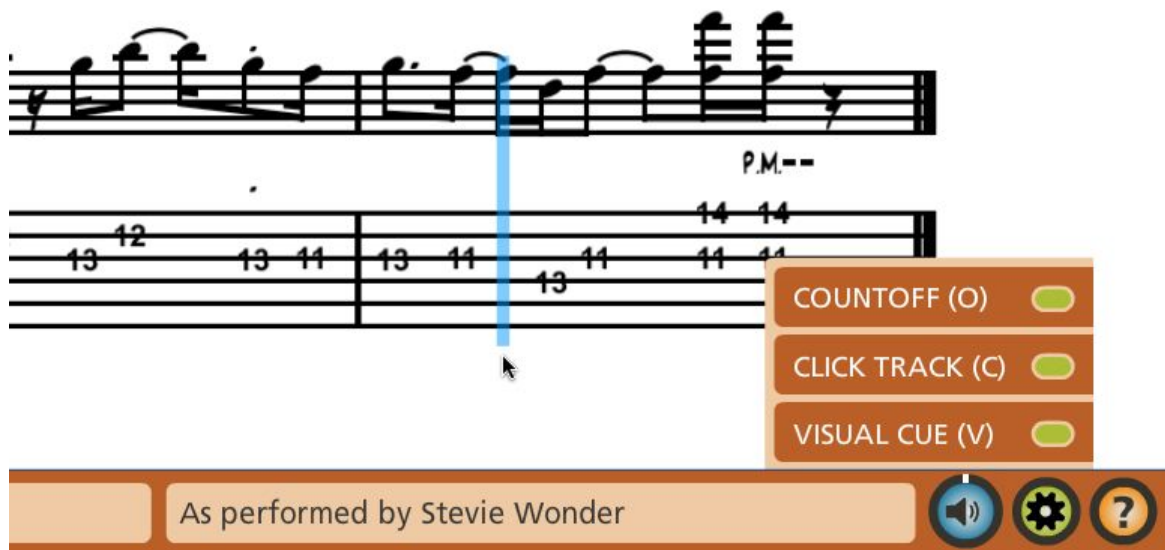


*The image above shows the Visual Cue on grand staff notation.*

# Help
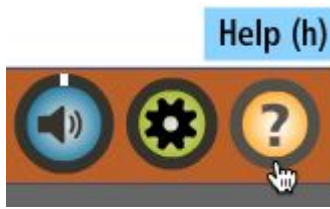


You can view or download supporting Notation Mixer documentationincluding this user guidefrom the Help page.

To access the Help page:

Click on the Help icon or press the "h" key on the computer keyboard.

# V. Additional Help

# Complete List of Keyboard Shortcuts

Below is a complete list of the keyboard shortcuts.   On the Loop Settings menu, Instrument menu and Information menu, you can use the arrow keys to scroll through the options/selections/items.

## Transport

- Stop - S
- Play/Pause - Space Bar
- Fast Forward (By Measure) - F
- Rewind (By Measure) - R
- Next Rehearsal Mark - N
- Previous Rehearsal Mark - P

## Looping

- Loop Settings Menu - T
- Loop On/Off - L

## Menus

- Instrument Menu - B
- Mixer Window - M
- Information Menu - I

## Global Settings

- Close All Menus - Escape
- Master Volume - Q
- Show/Hide Global Settings - X
- Countoff On/Off - O
- Click Track On/Off - C
- Visual Cue On/Off - V
- Help - H

# Credits

# Special Thanks

Here is a list of the fine folks that made the Notation Mixer possible.  It was truly a team effort.

## Technical and Design Support

Steve Estrella - Lead Programmer
Tom Aldrich
Devon Patel
Scott Pressler, ONE80 Visual - Interface Design

## Design Support

Erin Genett
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## Development Support

Nicolas Mindreau
Ricky Valadez
Jason Stokes
Robert Castellano
Frida Obidjah

## Management Support

Sharon Lynch
Jay Barnes
Dan Newsom
David Mash

## Testing and Feedback

Colleen Fabian
Nazli Green
James Staub
Zack Zuckowski
C.J.. Carr
Jeannie Greeley
Nicole Bedard
Sue Lindsay
Marian Wilson
Mary Boland

**User Support**

City Music National

**And special thanks to:**

Berklee College of Music


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We hope you enjoy using the Notation Mixer.  If you have any questions, feedback, or features you'd like to see in the future please let us know through our berkleepulse.net user forums or email us at pulsehelp@berklee.edu


Enjoy!

John Bigus
Associate Director: Instructional Media and Notation Mixer Project Leader