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Welcome to the ITCH 2.0 software manual.

Serato ITCH is an integrated software and hardware system, designed to give music selectors and DJs new kinds of control.

Using the ITCH software you can DJ music on your computer with accurate control from a range of purpose built ITCH hardware. Simply connect your ITCH hardware to your computer, connect to your sound system and you’re in action.

NOTE Not all ITCH functionality will be available for every ITCH Controllers. (ie. 2 deck ITCH controllers will only have 2 virtual decks in ITCH, controllers such as the Numark V7 don’t have internal mixing so don’t allow for recording functions, etc.) SEE YOUR HARDWARE MANUAL FOR MORE INFORMATION.
This manual offers generic ITCH Software information. For specific ITCH hardware setup, control or troubleshooting information please see your hardware manual.

Vestax VCI-380
Vestax VCI-300
Numark NS7
Numark V7
Numark NS6
Allen & Heath Xone:DX
Pioneer DDJ-S1
Denon DN HC-5000
Novation TWITCH

Minimum System Requirements

Before software installation, please ensure your computer meets the minimum system requirements for the ITCH controller you are using. You can find the minimum specifications by clicking on your controller in the ITCH product page.

NOTE These are the minimum requirements to run ITCH. For best performance and for use in professional situations we recommend you use a higher spec computer.
SOFTWARE INSTALLATION

Installation (Mac OSX)
Before installing, we recommend you download and install the latest ITCH version from the website.
Click here to get the latest installer for Mac OSX

To install ITCH
- Browse using Finder to the location where the ITCH download was saved.
- Double click the ITCH zip file to unpack.
- Double click the .dmg file to mount the image on your system, and browse to that volume.
- Double click the file called “ITCH installer”.
- The installer screen will appear - Click Continue.
- Accept the License Agreement - click Agree and then Continue.
- Click Install for standard installation to your regular hard disc.
- ITCH will now be installed - A confirmation screen will appear when the install is complete.

Installation (PC)
Before installing, we recommend you download and install the latest ITCH version from the website.
Click here to get the latest installer for Windows

IMPORTANT Do NOT connect your ITCH controller to your PC before you are prompted to do so. The installer will prompt you to connect it at the appropriate time.

To install ITCH
- Browse using Windows Explorer to the location where the ITCH download installer was saved, unpack the ITCH .zip file and browse to the extracted contents.
- Double click the file called “ITCH_installer.exe”.
- The InstallShield Wizard screen will appear. Click Next.
- Accept the License Agreement and then click Next.
- Choose the location you want to install to and click Next.
- Complete will perform a standard installation.
- Connect your ITCH hardware.
- You will be prompted to connect your ITCH hardware to your computer. Throughout the installation:
  - If Windows warns you that any of the drivers’ certificates cannot be verified, approve them anyway.
  - If Windows warns you that the hardware installation was not successful or may not work properly, ignore it.
  - If you see any dialog boxes flash briefly on the screen before disappearing, ignore them.
These warnings are normal and are simply Windows’ reaction to the cancellation of its own hardware installer. (Serato ITCH controllers use their own installation processes.)
- Confirm the installation options and click Install.
- ITCH will now be installed, and a confirmation screen will appear when the install is complete.

NOTE A shortcut will be also be created on desktop.
GETTING STARTED

Starting the Software

Mac OS X
ITCH will be installed to your applications folder. Double click the ITCH icon in the applications folder to launch. For easy launching you can click and drag this icon to the dock.

Windows
ITCH will be installed in the following locations:
• Windows XP Start > Programs > ITCH
• Windows Vista & Windows 7 Windows Menu > All Programs > Serato > ITCH
To start ITCH on Windows simply double click on the shortcut icon on your desktop, or browse your start menu and click the ITCH.exe icon.

NOTE Connect your ITCH hardware before you open Serato ITCH. When ITCH launches it will automatically detect your ITCH hardware. Successful detection will result in you seeing this screen with “virtual decks”:

SUCCESSFUL HARDWARE DETECTION

NOTE 4 deck ITCH controllers will display 4 virtual decks.
Software Overview

The following chart provides an overview of the ITCH main screen. Each point is covered in more detail, later in the manual.

1. **Playhead** Shows playhead position on the waveform overview of the track.
2. **Library Mode** Changes Display Mode to maximize Library information.
3. **Vertical Mode** Changes Display Mode to show virtual waveforms.
4. **Horizontal Mode** Changes Display Mode to show horizontal waveforms.
5. **Stack Mode** Changes Display Mode to stack waveforms on top of each other.
6. **Day Mode** Selects Day mode colour scheme.
7. **Night mode** Selects Night mode colour scheme.
8. **Pitch** Applied pitch offset as a percentage (%) (determined by the position of the PITCH FADER).
9. **Grid Edit Mode** Enter / exit Grid Edit Mode for editing of Beatgrids.
10. **BPM Field** Displays track’s BPM. When Beatgrids are disabled in Setup screen you can click this field to “tap” out a time, from which the software will approximate and save a new BPM. If there is no BPM for the track, it will display “Tap” to prompt you to tap out a suggested tempo.
11. **Virtual Deck** Rotates during playback.
12. **Beat-Matching Display** Shows “transients” (usually the drum hits) to aid beat-matching.
13. **Tempo-Matching Display** Displays tempos of both Decks to help the mixing process.
14. **Sync** Enables or disables Sync. State for Deck displayed as blue for Beat Sync, yellow for Tempo Sync, grey Arm Beat Sync.
15. **Tool Tips** Enables or disables Tool Tip Display, which provides a dialog box with a description of a software feature when you place your mouse over it.
16. **Setup** Shows the software Setup screen.
17 **Off** When Sync is engaged, press Off to disable Sync for Deck.

18 **Auto-loop length** Displays the Auto-loop length.

18 **Loop Number** Displays the number of the currently selected loop. Clicking the “lock” icon next to it will disable any changes to the current loop. Clicking the “X” icon next to it will delete the current loop.

19 **Limiter** Illuminates when Limiter engages. **SEE HEADROOM FOR MORE INFORMATION.**

20 **Track Overview** An overview of the currently loaded track’s entire waveform.

21 **Beat Position Indicator** Shows the playhead position in the current bar when using Sync.

22 **Clock and CPU Indicator** Shows time and computer CPU processing load.

23 **Track Time Display** Displays the current position of the Audio Pointer in the track. Click to switch between Time Elapsed to Time Remaining.

24 **Search** Searches your Library for the text entered in this field.

25 **History** Displays the History Panel containing tracks that have already been played.

26 **Prepare** Displays the Prepare Panel containing tracks you have pre-selected for your set.

27 **Browse** Displays the Browse Panel, which enables you to browse for tracks by genre, BPM, etc.

28 **Files** Displays the Files Panel, which enables you to search for tracks on your hard drive.

29 **Status Bar** Displays the status of the currently selected item.

30 **Album Art Grid 2** Displays Album Art as a grid with the track information text below.

31 **Album Art Grid 1** Displays Album Art as a grid with the track information text to the right.

32 **Album Art List** Adds an album art column to the Simple List mode.

33 **Simple List** Displays Album Art as Simple List.

34 **Add Smart Crate** Adds a new Smart Crate.

35 **Add New Crate** Adds a new Crate.

36 **Album Art** Displays the cover art for the album selected.

37 **Library** Displays the songs available in your current library location.

38 **Crate** Displays the list of Crates, Sub-Crates and Smart Crates available.

39 **SP-6** Opens / closes the SP-6 Sample Player tab.

40 **Record** Opens / closes the Record tab. (Not available for the Numark V7 and Denon DN HC5000.)

41 **Waveform** Waveform of the currently loaded track.

42 **Key** Displays the track’s “key” ID3 tag (if available).

43 **Repeat Mode** Toggles Repeat Mode “On” or “Off” for the track (when Playback Mode is set to “Single”) or Crate (when Playback Mode is set to “Continuous”). Whenever a new track is loaded, this will default to “Off.”

44 **Playback Mode** Toggles between “Single” and “Continuous” Playback Modes. Single Playback Mode plays only one track, stopping when it is finished. Continuous Playback Mode will automatically play the next track in the Crate when one track ends. Whenever a new track is loaded, this setting will remain the same.

45 **Track Name** “Title” tag for the current track.

46 **Artist Name** “Artist” tag for the current track.
IMPORTING MUSIC

Adding files to the ITCH library

The easiest way to load music into your library is by using the Files button.
1 Click on the FILES button to open the files panel. The left side of this window displays various locations on your computer hard drive (and external drives if you have one). Click on these locations to navigate your computer and find your music. By default, your music will usually be found in either “Music” (Mac) or “My Music” (Windows).

2 Once you have located your music, drag the folder or files you want to import onto the purple “All...” icon. This is located to the left of your screen at the top of the crates and playlist window.

If you wish to import all of your music, just drag your whole music folder onto this icon. This will import any compatible file contained in this master folder from your hard drive into the ITCH Library.

TIP You can also import by dragging files and folders directly from Windows Explorer (PC version) or Finder (Mac version) into the ITCH library.

Load a file to either deck from the files panel will automatically add it to your library.

TIP Dragging a folder into the crates view will instantly create a crate.

SEE CRATES FOR MORE INFORMATION.

External Hard Drives

Any external hard drive connected to your computer will show in the files panel. You can add files to your library from an external drive just like you would do when importing from the internal hard drive of your computer.

If the external hard drive is not connected when you run ITCH any files added from this drive will not display in your library.

The library information for files on your external drive is stored on the external drive itself. This means if you add tracks on an external drive to your library and then plug that external drive into another machine running ITCH, the crates and tracks will automatically be visible in the other machine’s library.
Showing your iTunes library

ITCH can import your iTunes™ library allowing you to play your iTunes music and access playlists. To enable this feature go to the setup screen, open the library tab and check the show iTunes library box.

NOTE The iTunes library can now be minimized by pressing the small triangle in the blue iTunes folder icon.

How to get music from CDs into ITCH

ITCH does not have a CD ripping function. We suggest you use a 3rd party application to convert your audio CDs into a suitable file type for ITCH. We recommend 320 kbps MP3 files for a good balance of audio quality and file size. ITCH can play Audio CDs direct from your computer’s CD ROM or DVD drive, however playback performance can be impeded by the speed of the drive and computer.

NOTE We recommend ripping your CDs rather than playing from them directly.

SEE ITUNES FOR MORE INFORMATION.

Supported File Types

- .MP3
- .OGG
- .AAC
- .ALAC
- .AIF
- .WAV
- .WL.MP3
- .FLAC

Fixed and variable bit rate (VBR) files are both supported.

Tracks protected by DRM are not compatible with Serato ITCH.

SEE DRM FOR MORE INFORMATION.

About Corrupt Files

If you have a corrupt file in your library, hover your mouse mover the status icon for information on what type of corruption was found.
PREPARING YOUR FILES

Offline Player

The offline player is a useful tool for preparing crates, auditioning tracks, and setting cue and loop points. The offline player is available when ITCH hardware is not connected, and outputs through the current default audio device.

Load a track to the offline player by dragging and dropping onto the offline player or by pressing shift+left arrow. If the end of the loaded track is reached, the next track in the current playlist will automatically play next.

TIP The offline player is a useful tool for preparing Crates, auditioning tracks, creating and editing Beatgrids, and setting Cue and Loops.

Master Gain

Use the track gain knob to adjust the volume of master output of ITCH in the Offline Player.

Analyzing Files

NOTE ITCH 2.0 features improved BPM and Beatgrid detection. Users should force re-analyze your files to take advantage of these improvements.

NOTE If you have files you don’t wish to re-analyze, you can now Lock tracks. SEE LOCK TRACKS FOR MORE INFORMATION.

Analyze Files: The analyze files function processes the tracks in your library to detect file corruption, prepare the waveform overviews, and if enabled, calculate BPM values and create Beatgrids.

It is recommended that users analyze their files before playing them in ITCH.

NOTE When hardware is connected, Set Beatgrid and Set Auto BPM options are in effect. Keep these checked if you wish to have new tracks analyzed with these values when dragging files to a deck.

How To Analyze Files

To analyze your files open ITCH with your ITCH hardware disconnected. You will see the analyze files button, click this to automatically analyze all the tracks in your library.

TIP You can also drag and drop individual folders, crates and files onto the button to analyze small or specific groups of files at a time.

To force ITCH to re-analyze all files, hold ctrl while clicking on the analyze files button. Dragging a file, folder or crate which has already been analyzed onto the button will also force ITCH to re-analyze these files.
Re-Analyze Files
Previously analyzed tracks can be re-analyzed by dragging the track, selection of tracks or entire Crate to the Analyze Files button.
To force ITCH to re-analyze ALL files in your library, hold ctrl while clicking on the analyze files button.
NOTE The Analyze Files rules apply with Set Beatgrid and Set Auto BPM.
NOTE Re-Analyzing will not analyze any Locked tracks.
NOTE You should make sure both the Set Beatgrid and Set BPM boxes are checked if you wish to re-create Beatgrids.

Set Auto BPM
If this option is checked, ITCH will calculate the BPM and add the value to your file during the analyze files process.
NOTE Locked files will not have a new BPM calculated.
SEE LOCK TRACKS FOR MORE INFORMATION.
Set Auto BPM is part of the analyzing file process, it will not apply to any files that have already been analyzed unless the following:
• You force analyze a track, or group of tracks and you select a different BPM range.
• You force analyze a track, or group of tracks and the calculate BPM value differs from the current BPM.

BPM Range
The range drop down allows you to specify the BPM range of your tracks. Selecting an correct range will help to avoid half or double BPM values being calculated when using Set Auto BPM.
For example: You have a selection of house tracks, that you guess are in the 120 - 130 BPM range. Set the drop down range to 68-135 BPM, setting the lower and upper limits. That way, when ITCH runs into a 120 BPM file, it will know for sure that it is 120 BPM, and not a half value of 60 BPM (60 BPM is lower than the set threshold of 68 BPM).
NOTE If you find tracks with BPM values that are incorrect, check the BPM Range is correct in the Offline Player.

Set Beatgrid
If this option is checked, ITCH will create a Beatgrid for the file during the analyze files process.
This requires the track to have a BPM value, or the ‘Set BPM’ box is checked when analyzing.
NOTE Locked files will not have a new Beatgrid calculated.
SEE LOCK TRACKS FOR MORE INFORMATION.
Lock Beatgrids
Tracks in your library can be locked to avoid accidentally changing the BPM or Beatgrid information for the file. This provides a handy visual aid for tracks in your library you feel have correct Beatgrids and BPM values.

Find a track you wish to lock, hold CTRL and click in the empty Status column (the first column in the main Library view). A green Lock icon will be displayed in this field. Press CTRL and click again on this icon to unlock the track.

TIP You can lock several tracks at once. Highlight the track selection you want and then click in the Status column. ITCH will then prompt you if you want to edit all the tags for these tracks.

Lock Tracks
If a track displays an orange Lock Track symbol in the Status column, then the file information for the track itself cannot be changed.
You will not be able to change any of the track’s information permanently in ITCH. This includes BPM, Beatgrids, waveforms, loops, cuepoints, or other meta data information. However, you may be able to adjust information for the track when in a session, but this information will not be saved (written) to the file’s meta tags where this information is kept.
The file may be locked because you are using the wrong formatted hard drive (ie. a NTFS drive formatted on a Windows PC and trying to use this on a Mac which can only Read this information).
Or it could be the file itself is locked. To find out if a track is locked, highlight the track in ITCH, and press CTRL+R to ‘reveal’ the file location on your hard drive.
Then press either Command+I (‘Get Info’ for Mac) or ALT+Enter (‘Properties’ for Windows).
Then see if the track is Read Only, or that you have the permissions to write to the file.

Track Analyze on Deck Load
Loading a un-analyzed track to a deck will follow the Analyze Files rules. Having Set BPM, or Set Beatgrids checked in the Offline Player will also set the BPM or Beatgrids when you load a track to a virtual deck or sample slot in ITCH.
Loading a previously analyzed track to a deck will not create a Beatgrid or BPM if the track has none already.
NOTE Make sure these options are checked in the Offline Player if you wish to have this functionality when performing.
LIBRARY NAVIGATION

The library contains all the music that you have added to ITCH. By using browse and search you can easily narrow down your selection to find the track you want.

TIP You can change the size of your library text by using the keyboard shortcuts ctrl + and ctrl -.

Mouse and Keyboard Navigation
You can use the cursor keys and mouse to navigate the library. The cursor keys work as UP, DOWN, FWD and BACK.

Hardware Navigation
You can use the hardware controls to navigate the library. SEE YOUR HARDWARE MANUAL FOR MORE INFORMATION.

Searching

ITCH includes a search function to help you find tracks quickly and easily. Just enter text into the search box and ITCH will automatically find as you type.

TIP Use the keyboard shortcut CTRL + F to jump to the search box. This keyboard shortcut will also take you out of any crate or playlist that you might be in and into your main library, so you can find any track in your collection. If you then click on a crate or playlist, the search query will be cleared. To select which fields the search function will look through, click on the left hand side of the search box. The drop down menu shows which fields are currently being used. Press ESC or the X button on the right of the search box to clear the search.

Browsing
The song browser allows you to filter your song list by Genre, BPM, Artist and Album. To turn the song browser on or off, click the Browse button.

You can narrow down your search by selecting the specific genre, BPM or name of the track you’re looking for, and ITCH will show the results on the main library window. You can move between the four filters with the computer keyboard or by clicking with the mouse.

LIBRARY NAVIGATION
**Library Status Icons**

The column at the far left shows the status of each track, examples of these icons are below:

- ⚡ ITCH has detected some corruption in the MP3 file. If possible, re-encode the MP3.
- 🎵 The track has been imported from the iTunes library.
- 🎵 The track has been imported from iTunes but is corrupt.
- 😲 The track cannot be found. Most likely the file has been renamed or moved.
- 🗞 ITCH is trying to import a track from the iTunes library, but cannot find the file.
- 🗝️ The track is locked. **SEE LOCK TRACKS FOR MORE INFORMATION.**
- 🗝️ The track’s Beatgrid and BPM is locked. **SEE LOCK BEATGRIDS FOR MORE INFORMATION.**

**Prepare**

The prepare window is an area for holding tracks, much like preparing a set by lifting records partially out of your record bag. Click the prepare button in ITCH to open the prepare panel. Navigate through your library with the keyboard and use the mouse to drag tracks or crates into the prepare window or onto the prepare tab.

These tracks will be removed from the prepare panel once they have been played. All tracks in the prepare panel will be discarded when you exit ITCH.

**TIP** Use the keyboard shortcut ctrl-p to add tracks to the prepare window.

**TIP** Select the contents of the Prepare window, drag them onto the new crate button (+) to save the selection.
ORGANIZING AND MANAGING YOUR LIBRARY

Organizing Your Library

ITCH can support an unlimited number of tracks – the only limitation is the size of the hard drive of your computer. A number of features are included to help you to keep your music organized and find tracks quickly and easily.

Crates

ITCH uses digital crates for quick access to your favorite collections. There is no limit to the number of crates you can create, and any given track can be placed in multiple crates. The crate area is on the left hand side of the library.

For example, you could organize your tracks into the following crates, where any one track would be filed in more than one crate.

- Hip Hop
- French Hip Hop
- UK Hip Hop
- Instrumental Hip Hop
- Old School Hip Hop
- Hip Hop Lps

To make a new crate, click the + button. To rename a crate, double click the crate name. You can change the order of tracks within a crate by dragging them up or down.

TIP The protect library option in the setup screen applies to removing, editing and renaming crates. Check this option to prevent changes to your crates.

SEE PROTECT LIBRARY FOR MORE INFORMATION.

Subcrates

You can drag and drop crates into other crates to make subcrates. If you drag a crate to the very left of the crate panel, it will stay in the top level of the crate structure. If you drag the crate a little to the right, onto the name of another crate, it will make the crate you are dragging a sub crate of this crate.

Subcrates can be opened and collapsed, allowing you to have a large number of crates whilst making them easy to browse.
Smart Crates

Smart crates are crates which update their contents by using keywords which are matched with selected tags of your music library tracks. Smart crates can be updated automatically or at your discretion.

To create a smart crate, click the Add Smart Crate button in the bottom left corner of the main screen (blue crate icon). A popup window will open which allows you to add the rules to fill your smart crate. Press Add Rule to add a rule for the smart crate to match with. For each rule you can choose a field to match on from the drop down menu:

- Added (date)
- Album
- Artist
- BPM
- Comment
- Composer
- Filename
- Genre
- Grouping
- Key
- Label
- Remixer
- Song
- Whitelabel
- Year

You can then choose the following inclusion / exclusion criteria:

- Contains
- Is
- Does not contain
- Is not

Check the Match all of the following Rules option so that tracks must match all the set rules to be added to the crate. If this option is not checked, any track which matches any of the rules will be added to the crate.

Click Save to save your crate or Cancel to exit without saving.

Click the Edit button (next to the Add Smart Crate button) to edit the rules of an existing Smart Crate.
Copying and Managing Files
ITCH gives you the ability to copy and move files or folders between drives or to a new location on the same drive.

To copy or move your files and/or folders, open the Files panel and select, drag and drop them in the desired new location.

ITCH will then prompt you with the following options:

- **Copy**: Select this to make a copy of the selected files and folders in the new location. Your Serato library will now contain entries for both the originals and copies.
- **Move**: Select this to move the selected files and/or folders to the new location. Your Serato library and crates will now reference the files in their new location.
- **Cancel**: Cancel any changes.

**Remove original references from library** Check this option when using the copy feature to remove the original references to these files in your Serato library and replace them with the copies in the new location. The original files will still be kept in their current location, but will no longer referenced in your Serato library.

Copying and Moving Crates
You can also copy or move your Crates and Subcrates to another drive in the same way. Open the Files panel and select, drag and drop your Crates or Subcrates to the new drive. You will be presented with the same options as mentioned above.

Setting up Columns
The track information display area can be customized to display any of the columns listed below.

- Added
- Album
- Artist
- Bitrate
- BPM
- Comment
- Composer
- Filename
- Genre
- Grouping
- Key
- Label
- Length
- Location
- Remixer
- Sampling rate
- Size
- Track
- Year

Clicking on the triangle at the top right of the library will show the list so you can turn fields on and off. You can resize columns by grabbing the edge and dragging to the width you want.
**Editing ID3 Tags**

Much of the information associated with each track can be edited from within ITCH. Double click on the field within the main library to edit it. Filename, length, size, bit rate and sampling cannot be edited, this information is saved in the file itself. Note that the protect library option in setup must be unchecked to allow edits.

**SEE PROTECT LIBRARY FOR MORE INFORMATION.**

TIP Use the keyboard shortcut CTRL + E to edit text. Hold down the ctrl key and move with the arrow keys to change to a different field while staying in edit mode. When you have more than one track selected, editing tags changes all the tracks in your selection.

TIP The second column in the library is the label color for that track. Click it to bring up a color palette, and customize the virtual deck for that track.

NOTE Tracks that are read-only have a locked icon.

**Display Album Art**

MP3 files can contain album art information. Click on the album art button at the very bottom left of the screen to open a small window. This window displays the album art of the track currently selected in the library.

**Adding Album Art**

You can add album art to a file by dragging and dropping a jpeg or png file onto the track in any of the album art views, or onto the Album Art window.

**Library Auto -Backup**

ITCH will create a folder on your hard disk called Serato where it stores your library database, crate information and other information. The Serato folder is located in the My Music folder on Windows and in the Music folder on Mac. ITCH will also create a Serato folder on any external drive that you have added files from into the library.

When you first exit ITCH you will be prompted to backup your library. This creates a copy of the Serato folder on your system drive and on any connected external drives containing a Serato folder. The backup folder is called SeratoBackup. After the initial backup, you will be prompted to backup again if the last backup on that drive is older than a week or if no backup exists. ITCH will only keep ONE backup at a time, so each time you backup ITCH will overwrite the previous backup.

**NOTE** If you have a earlier version of ITCH or Scratch Live installed the library folder will be called ‘ScratchLIVE’, not ‘.Serato_.’

**RESCAN ID3 TAGS**

The Rescan ID3 tags button is found in the Files panel and re-reads file tags for the entire library. Use this function if you have edited or modified file tags in other software.

**TIP** Rescanning the tags is a handy way to identify any files that can’t be found, for example, if the files have been re-named or moved. These tracks are then shown as red in the library pane, with a question mark icon in the status column.
Relocate lost files
The relocate lost files button is located in the files panel. If you’ve moved the location of files which are already in your library, they will show up as not found and be displayed in red. Drag and drop a folder from Finder (Mac) or Explorer (Windows) onto the relocate lost files button to search it, and any sub-folders, for files currently marked as not found in your library. Doing this will update the database with their new location.

NOTE Clicking the relocate lost files button will search all attached drives for missing files and can take some time.

Serato Scratch Live Compatibility
Serato ITCH uses the same library as Serato Scratch Live. If you are an existing Scratch Live user all your music, loops and cue points will be available in ITCH. If you create a library in ITCH and then install Scratch Live the music loops and cues from ITCH will automatically be available in Scratch Live. Any changes made in either program will be written to the library so if you have existing cue and loop points, be aware of this when moving between systems.

Display Modes
ITCH gives you the option of different display modes to suit your style of performance. The Display Mode buttons are located in the top left of the Main Screen.

The available display modes are:

- Library Mode
  Maximizes your library space by minimizing the Virtual Deck information displayed. In Library Mode only the track information, Virtual Deck, mode, track overview display and meter are displayed.

TIP Use the space bar to toggle between Library Mode and your current display mode.

- Classic Vertical Mode
  The two decks are displayed on the left and right sides of the screen with vertical waveforms in the middle.

- Classic Horizontal Mode
  The two decks are displayed on the left and right sides of the screen with horizontal waveforms in the middle.

- Stack Mode
  The decks are stacked on top of each other in a horizontal fashion. Stack Mode aligns the waveforms on top of each other, while maximizing waveform space. The controls for all Decks can be shown or hidden by pressing the Show Deck Controls Button on any deck.

- 2 Deck View Mode
  2 deck horizontal mode for 4 deck controllers.

- Night Mode
  Classic dark grey color scheme for night time and indoor use.

- Day Mode
  Inverts the display colors for ease of viewing during the day.
Library Modes
There are four different library views for visual browsing using text and album art. Select your Library View by using the buttons in the bottom left area of the main screen.

The available Library Views are:

- **Simple List** Displays the track information in a text list.
- **Album Art List** Adds an album art column to the Simple List mode.
- **Album Art Grid 1** Displays the album art as a grid with the track information text to the right.
- **Album Art Grid 2** Displays the album art as a grid with the track information text below.

**NOTE** Your files must have album art added for it to be displayed.

**SEE ADDING ALBUM ART FOR MORE INFORMATION.**

**TIP** For all views you can adjust the font size by using the Font Size slider in the Library tab on the Setup screen. For all Album Art views you can adjust the album art size using the Album Art Size slider in the same area.

Virtual Deck

The virtual deck shows the speed and position of a track. When a track is loaded to the virtual deck it will change from black to white with a black stripe. As the track progresses, the virtual deck will rotate. The circular progress bar around the edge is a visual representation of the position within the track, and will begin flashing 20 seconds from the end of the track to warn you that the track is nearing its end.

Track Display

When a track is loaded, the track name, artist, length and pitched BPM are displayed in the track title bar. If any of this information is not contained in the file it will not be displayed. Displayed below this are pitch, playback, repeat and auto loop.

The time and remaining time are displayed in minutes and seconds.

The pitched BPM is the recalculated BPM value of the track relative to the position of the pitch slider on your ITCH controller.

Pitch displays the pitch value relative to the position of the pitch slider on your ITCH controller.

The Key tag for the current track is displayed.

Playback allows you to select which playback mode you want. Single means once the end of the track is reached you will hear silence. Cont means when the end of the track is reached the next track in the playlist will be loaded and playback will continue. If repeat is on, when the end of the track is reached the track will return to the start and playback will continue. Auto loop displays the current loop slot.

**SEE LOOPING FOR MORE INFORMATION.**
**Tap Tempo**

If a track has no BPM information stored and Beatgrids are disabled in the Setup screen, the tap tempo box is displayed where the BPM is usually displayed in the track title bar.

Pressing alt + space bar activates the tempo tapper for the left virtual deck (press alt + space bar a second time to activate the tempo tapper on the right virtual deck). To calculate, tap the space bar along with the beat. After you’ve tapped the first beat, you can switch to double time tapping, halftime, start of each bar etc. The range is set by the first two taps, after that you can switch to any steady rhythm you feel comfortable with – quarter notes, half note, whole notes. The esc key resets the BPM, the enter key saves the BPM to the track. You can also use the mouse if you prefer by clicking in the tap tempo box and clicking the mouse button in time.

**NOTE** You don’t need to be at Zero on the pitch slider, ITCH does the math for you.

**NOTE** If you have Enable Beatgrids option checked in the Setup screen, then alt + spacebar will enter Grid Edit mode to edit the Beatgrid.

**Track Overview Display**

This area provides a complete overview of the waveform of the track and includes a marker to show the current position within the track. This view is useful for finding transitions within the track. The waveform is colored according to the spectrum of the sound; red representing low frequency bass sounds, green representing mid frequency sounds and blue representing high frequency treble sounds. You can jump to different positions within the track by clicking on the track overview display. Grey lines behind the overview show the length of the track; a thin grey line every minute, and a thick grey line every 5 minutes.

If you have not analyzed your files the overview will be filled when you load the track onto a virtual deck.

**TIP** Analyze files before you play.

**Main Waveform Display**

This area provides a close-up view of the track, including color-coding to show the frequency of the sound; red representing low frequency bass sounds, green representing mid frequency sounds and blue representing high frequency treble sounds. You can also switch to a three-band spectrum view by holding the ctrl key and clicking on the waveform. Click and hold on the waveform to ‘scrub’ or make fine adjustments to your position within the track. The main waveform is zoomed around the current position in the track.

**TIP** Use the + and – keys to zoom in and out.

**NOTE** The waveforms scale with the pitch slide on your ITCH controller to make it easier to see when beats are aligned and in time.
**Tempo Matching Display**

The tempo matching display area provides a helpful tool for beat matching. ITCH detects the beats within the track and places a row of orange peaks (for the track on the left side) above a row of blue peaks (for the track on the right side) in the tempo matching display area. When the two tracks are matched to the same tempo, the peaks will line up. This display does not show the relative timing of the beats, only the tempos of the tracks. The peaks will still line up when the tracks are playing at the same tempo, but are out of sync.

**Beat Matching Display**

This view shows the position of beats within the track. When beat matching, this view helps align the downbeats of the two tracks. The markers are matched up when the two tracks are beat matched.

**Example Of Using The Visual Aids To Beat Match**

In this example, the track that is playing is on the left deck and the track to be mixed in is on the right deck.

1. Start the track playing on the right deck. After a few seconds, blue peaks appear in the tempo matching display.
2. Adjust the pitch of the right deck on your ITCH controller until the blue peaks sit under the orange peaks in the tempo matching display. Once they are aligned, the two tracks have the same tempo.
3. Next align the markers in the beat matching display. Watch the color of the items passing by in the main waveform display. Remember that a kick or bass drum will be red in color, and a snare drum will be green or blue.

This technique will by no means guarantee perfect mixes, but may help to speed up the process of beat matching.
MIXING

Mixing & Playback
Previously we have covered finding, loading and playing tracks. Once you have a track playing, the next step is to mix it into another track.

Finding the Next Track
First you’ll need to find the next track to mix in. Browse your library to find a suitable track.
TIP The library’s BPM column is useful for finding a track with a similar tempo to the current track.

Loading it to the Deck
Load the next track to the desired virtual deck by using the mouse or the keyboard shortcuts.
• CTRL + Left Arrow to load onto the left deck (or the current left deck layer for 4 deck controllers).
• CTRL+ Right Arrow to load onto the right deck (or the current left deck layer for 4 deck controllers).
Alternatively you can use the relevant track-load button(s) on your ITCH controller.
SEE KEYBOARD SHORTCUTS FOR MORE INFORMATION.

Playback
Press the Play button on to start track playback. Pressing again will pause the track.

Continuous Autoplay
Click the CONT button inside ITCH’s virtual deck area to enable continuous autoplay. With this setting turned on, when one track finishes playing, the next track starts automatically. Load from a crate to play through the songs in that crate, or from your library to play through your library.
NOTE Play from start must be checked in the setup screen for autoplay to work correctly.
SEE PLAY FROM START FOR MORE INFORMATION.

Adjusting Track’s Pitch / Speed
The playback speed of the track is controlled by the Pitch Slider / Dial on the ITCH hardware controller.
Moving the slider or knob will speed up or slow down the track. SEE YOUR HARDWARE MANUAL FOR MORE INFORMATION.
You can adjust the pitch range for the pitch range controls using the relative PITCH RANGE/SHIFT buttons on the ITCH controller. SEE YOUR HARDWARE MANUAL FOR MORE INFORMATION.
Getting The Tracks In Time
Moving the pitch adjust will slow the track down or speed the track up. This allows you to take two tracks that are of different tempos and mix them together in time. The pitched BPM and the pitch % are shown in the ITCH track information display.
The simplest way to adjust the speed to match the other track is to move the pitch the BPM value is the same as the track that is already playing. By repeatedly playing from the temp cue point and fine tuning the pitch slider you can get the tracks playing at exactly the same speed.
NOTE ITCH can play your music at a large range of speeds with or without key lock. SEE KEYLOCK FOR MORE INFORMATION.

Keylock
When Key Lock is on, the key or pitch of the song stays locked at what it would be if the track was playing at normal speed, regardless of the platter speed of the hardware. Key Lock has scratch detection, so that it automatically turns off when scratching for a natural scratching sound. Turn Key Lock on or off by pressing the button to the top right of the Virtual Deck.
TIP F5 and F10 will turn Key Lock on and off for the left and right decks respectively
CUE POINTS

Your ITCH hardware will determine how many cue/loop slots you have available.

NOTE Your cue points are saved to the file and recalled the next time it is loaded. They are not lost if the file is moved or renamed.

Add/Delete Cue Point

To create a cue point, press one of the CUE buttons for the deck. The button will light up to show that there is a point set. To delete a cue point hold SHIFT and press the CUE/IN button for the point you want to delete.

NOTE For some Numark NS7 and V7 users, use the DELETE key as the SHIFT key on your hardware.

Trigger Cue Point

Once a cue point is set, you can jump to it at any time by pressing the relevant CUE button on your controller. If playback is paused, triggering a cue point will play from that point for as long as the CUE button is held down, and will return to the cue point and pause when the button is released.

TIP If you press the PLAY/PAUSE button on your controller whilst you are holding down the ‘CUE’ button on your controller, playback will continue when you let both buttons go. This allows you to cue a track in from pause mode and then continue playback once you know the mix is right.

Cue Point Keyboard Shortcuts

You can also jump to cue points using keyboard shortcuts:

- 1 through 5 for the cue points on the left deck (or the current left deck layer for 4 deck controllers).
- 6 through 0 for the cue points on the right deck (or the current right deck layer for 4 deck controllers).

If you press and hold these keyboard shortcuts while the track is playing the cue point will be repeatedly triggered, producing a stuttering effect.

NOTE If ‘Playback keys use shift’ option is enabled in the Setup > Playback screen, then you will need to hold down SHIFT when pressing the relevant number keys.

TIP The rate of cue point stuttering is controlled by your operating system keyboard repeat rate settings.

Windows users: Keyboard properties are in the Control Panel.
Mac users: Keyboard and Mouse are in System Preferences.

Visual Aid: Cue Point Status

Notice that the stripe on the Virtual Deck jumps to the 12 o’clock position and changes color when you set a cue point - you are at the cue point when the stripe is one solid color and at the 12 o’clock position. As the track plays on beyond the position of the cue point, the colored stripe will shorten by a fifth for each rotation. Likewise, as you approach the cue point, the color will grow by a fifth each rotation.
**Temporary Cue**

The temp cue function allows you to set a temporary cue point in a track that is not saved to the file. This is useful for finding a point in a track and then being able to easily start again from this point as you get your mix right. While paused you can use the platter to fine tune the playhead placement to ensure your cue point is set exactly on a downbeat.

You can set a temp cue point using the ITCH keyboard hot keys.
- I = set cue point for left deck (or the current left deck layer for 4 deck controllers).
- K = set cue point for right deck (or the current left deck layer for 4 deck controllers).

**NOTE Play will have to be paused in order for a temp cue to be set.**

Once the temp cue is set, holding the relevant temp-cue button on your controller (usually ‘CUE’) whilst paused will play from the temp cue point. Releasing the button will pause playback and return to the temp cue position. This is good for stuttering in the start of a track.

If you press the PLAY/PAUSE button on your controller whilst you are holding down the ‘CUE’ button on your controller, playback will continue when you let both buttons go. This allows you to cue a track in from pause mode and then continue playback once you know the mix is right.

The ‘CUE’ button can also be pressed whilst the track is playing at any point to return to this point and put the deck in pause. To change the location of the temp cue put the deck in pause with the playhead at a different location and press the ‘CUE’ button again. The temp cue point is also useful to repeatedly start from a preset point in the track. This allows you to easily drop in a few times until you get it right.
**LOOPING**

Loop functionality is controlled and set using the relevant loop buttons/knobs on your ITCH controller. SEE YOUR HARDWARE MANUAL FOR MORE INFORMATION.

**Manual Looping**

You can create and save up to 9 manual loops per track. These loops are saved in the file, and will be present when you reload the track.

To make a loop, set the in-point by clicking the IN button, and the out-point by clicking the OUT button.

To turn the loop on or off, click the LOOP button.

If you want the playhead to jump to the start of the loop when you enable the loop, hold the control key and press the LOOP button.

To adjust the in-point of the loop, press and hold down the IN button and move the platter to expand or contract the loop start. Release the IN button to keep this change. The same applies to adjusting the out-point by holding the OUT button and adjusting the platter.

**Auto Looping**

Auto-looping allows you to create loops instantly. Auto-loops range from 1/32 to 32 bars. You can use the relevant Auto-Loop controls on your ITCH hardware to select the auto-loop range.

Pressing the Auto-Loop button will create a loop start point from the nearest beat to the playhead (within reason), and set a loop endpoint in the future. The loop is snapped to the beats in the song detected by ITCH so even if you press the button slightly out of time ITCH will still create a perfect loop for you.

Pressing auto-loop again while auto-loop is active will deactivate the loop.

Adjusting the auto-loop amount while looping is active will extend the endpoint of the current loop to the appropriate new auto-loop length.

You can also save an auto-loop to the next available free loop save slot. When using an auto-loop, a ‘save’ button is visible where the lock loop button normally is.

**NOTE** Auto-loop calculates the loop from the track’s BPM value, so make sure your tracks have been Analyzed prior to Auto-looping.

**Loop Roll**

Loop roll performs a standard auto-loop, but when the loop is turned off the playback position is returned to the position where it would be if it had not entered the loop (much like censor).

The range of values available for loop roll are 1/32 through to 32 bars. Use short loop lengths to create “stutter” type effects. The other difference between loop roll and standard auto loop is the “roll” button is momentary (ie. The loop is engaged when the button is pressed down, and disengaged when the button is released.)

To activate loop roll use the keyboard shortcuts.

• Control + alt + 1 through 5 for the left deck (or the current left deck layer for 4 deck controllers).
• Control + alt + 6 through to 0 for the right deck (or the current left deck layer for 4 deck controllers).

(i.e the same as the auto-loop controls with the additional ‘alt’ key as a modifier).

Alternatively you can use the relevant Loop Roll hardware commands on your ITCH controller. SEE YOUR HARDWARE MANUAL FOR MORE INFORMATION.
BEATGRIDS

Tracks without Beatgrids need to be Analyzed before a Beatgrid is created.

SEE ANALYZING FILES FOR MORE INFORMATION.

TIP For new tracks that haven't been analyzed you can alternatively load a track to a virtual deck and ITCH will add a Beatgrid. The 'Set Beatgrid' option will need to have been selected in the Offline Player.

NOTE Analyzing tracks may take some time. It is recommended you do this prior to a gig.

A track's Beatgrid is made up of several parts:

- Downbeat Marker
- Bar Markers
- Beat Warp Marker
- Beat Marker

All Bar Markers have a number next to them, which references the bar number, starting at 1 (the Downbeat Marker). Each bar is then divided into 4 beats, with 3 small white markers to indicate beat divisions within each bar.

**Downbeat Marker**

The Downbeat Marker is a red line and is placed on the first transient of the track (this could be a kick drum, or first bass note at the beginning of the track). The Downbeat Marker will have a 1 above it to indicate it is Bar 1.

If the BPM is accurate, then the Beatgrid will be set perfectly and you will not need an further adjustment.

If the Beatgrid markers don’t fall on the track’s beats, then you will need to Edit the Beatgrid.

SEE EDITING BEATGRIDS FOR MORE INFORMATION.

**Bar Markers**

Once the Downbeat Marker is created, the Beatgrid will then be created using the BPM value of the track to lay out a series of Bar Markers throughout the track on each bar start.

Each Bar Marker has a Bar number displayed next to the line, these indicate the start of the track’s bar number (ie. the first beat is the start of bar number 1). If the BPM value is correct, then the Beat Markers will fall on each of the track’s beats.

NOTE Any bar before the first Downbeat will be shown as negative Bar numbers.
**Beat Markers**

Between each Bar Marker is a series of small Beat Markers, showing the individual beats in each of the track's bar.

**NOTE** For some music such as house music, this may fall on each kick drum. For other music, such as hip hop or funk, these Beat Markers may not fall on top of a physical drum hit.

**Beat Warp Markers**

If there is a tempo change in a track, you can manually set a new red Beat Warp Marker.

Setting Manual Beat Warp Markers will warp the Beatgrid from this marker. This allows the Beatgrid to follow the track’s change in tempo.

Tracks with Beat Warp Markers are able to be perfectly synced to tracks with no tempo changes without the beats dropping out of time.

**Editing Beatgrids**

If the Beatgrid markers aren’t falling on top of the track’s beats, you will need to edit the Beatgrid.

**TIP** To check if the Beatgrid has been calculated correctly you can skip forwards into the track to see if the markers fall on the beats or not (after a breakdown is a good place). It is also a good idea to go to the track’s outro section and see if the markers are still falling on the beats.
**Incorrect Downbeat Marker**

![Incorrect Downbeat Marker Image]

*Incorrect Downbeat Marker*

If the Downbeat Marker is set incorrectly or you want the first beat to be in a different position (ie. if the track has a long intro), then you will need to create a new Downbeat Marker.

1. Enter Grid Edit Mode (Alt + Spacebar).
2. Press Delete to delete the Beatgrid marker (or Shift+Delete to delete multiple Markers).
3. Move the playhead above the desired location for the Downbeat.
4. Press x to set the Downbeat Marker.
5. Press Return to exit Grid Edit Mode and save the change.

![Correct Downbeat Marker Image]

*Correct Downbeat Marker*

SEE GRID EDIT SHORTCUTS FOR MORE INFORMATION.

**Adjust Incorrect Beatgrid**

![Incorrect Beatgrid Image]

*Incorrect Beatgrid*

The Beatgrid may not always be correctly estimated and the markers may not line up exactly with the track's beats.

Adjusting the Beatgrid will expand or contract the Beatgrid from your last Downbeat or Bar Marker.

If the Beatgrid Bar Markers start falling off the beats over time, then you will need to adjust the Beatgrid.

1. Enter Grid Edit mode
2. Scan into the track to see the Beatgrid going out of time.
3. Press the left or right arrow to expand or contract the Beatgrid.
4. Press Return to exit Grid Edit Mode and save the change.

![Correct Beatgrid Image]

*Correct Beatgrid*

SEE GRID EDIT SHORTCUTS FOR MORE INFORMATION.
**Slip Incorrect Beatgrid**

If your Beat Grid matches the tracks’ tempo, but the track’s Downbeat Beat Marker is incorrect or the groove or feel is sounding slightly out, you may need to slip the Beat Grid. This will move (slip) the entire Beat Grid along as it is.

If the entire Beatgrid is out (ie. both the Downbeat and Beat Warp Markers), you can Slip the entire Beatgrid which will move all markers the same amount.

SEE GRID EDIT SHORTCUTS FOR MORE INFORMATION.

**Grid Edit Shortcuts**

To edit a Beatgrid you will need to turn on Grid Edit Mode.

**NOTE** You may find it easier to make adjustments to the Beat Grid with the track not playing.

Use the following functions with your computer keyboard or mouse:

<table>
<thead>
<tr>
<th>Function</th>
<th>Keyboard</th>
<th>Mouse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enter Grid Edit Mode</td>
<td>Alt + spacebar</td>
<td>Click Grid Edit button</td>
</tr>
<tr>
<td>Exit Grid Edit Mode</td>
<td>Esc</td>
<td></td>
</tr>
<tr>
<td>Save Grid Edit changes</td>
<td>Enter</td>
<td>Click Grid Edit button</td>
</tr>
<tr>
<td>Set Beat Warp Marker</td>
<td>x</td>
<td>Alt + double click</td>
</tr>
<tr>
<td>Delete Beat Marker</td>
<td>Delete</td>
<td></td>
</tr>
<tr>
<td>Delete all Beat Markers</td>
<td>Shift+Delete</td>
<td></td>
</tr>
<tr>
<td>Adjust (Contract/Stretch)</td>
<td>Arrow keys</td>
<td>Alt + click &amp; drag a white marker</td>
</tr>
<tr>
<td>Beatgrid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fast Adjust (Contract/</td>
<td>Shift + arrow keys</td>
<td></td>
</tr>
<tr>
<td>Stretch) Beatgrid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slip Beatgrid</td>
<td>Ctrl + arrow keys</td>
<td>Alt + click &amp; drag the red Downbeat Marker</td>
</tr>
<tr>
<td>Fast Slip Beatgrid</td>
<td>Shift + ctrl + arrows</td>
<td></td>
</tr>
</tbody>
</table>

**Enter Grid Edit Mode**

Click the Grid Edit button on the Virtual deck or press Alt + Spacebar (repeated pressing toggles between the Virtual Decks). When Grid Edit Mode is on, the Grid Edit button on the Virtual Deck will flash and a green bar appears above the waveform.

**Exit Grid Edit Mode**

Press Esc to exit Grid Edit Mode without saving any changes you have made to the Beatgrid.

**Save Grid Edit Changes**

Click on the Grid Edit button or press Enter to save changes made to a Beatgrid.
**Set Beat Warp Marker**
Press X or Alt + double clicking with the mouse will place a red Beat Warp Marker at the playhead position. The Beat Warp Marker will snap to the closest transient.

**Delete Beat Marker**
To delete the closest marker to the playhead, press the Delete key or Alt + Shift + click with the mouse. To clear all Beat Markers, press Shift + Delete.
TIP After deleting all Grid Markers you may want to drag the file back onto the Analyze Files button to re-analyze the file and create a new Beatgrid, or press X to manually set the Downbeat Marker, creating a new Beatgrid.

**Adjust (Contract / Stretch) Beatgrid**
To adjust the Beat Grid so the bars align with the beats use the Left or Right arrows or Alt + mouse click and hold on a bar and drag.
TIP For all the left and right arrow key commands, you can use the up and down arrow keys instead when in vertical display mode.

**Fast Adjust (Contract / Stretch) Beatgrid**
To Fast Adjust the Beat Grid, press Shift + Left and Right Arrow.
TIP You can also tap adjust the Beat Grid on the fly by tapping the space bar in time with the track. The Beat Grid will adjust in time with the tapped beat.

**Slip Beatgrid**
To slip the Beat Grid press Ctrl + Left and Right arrow.
TIP For all the left and right arrow key commands, you can use the up and down arrow keys instead when in vertical display mode.

**Fast Slip Beatgrid**
To fast slip the Beat Grid press Shift + Ctrl + Left and Right arrow.
SMARTSYNC (USING BEATGRIDS)

NOTE Sync requires you to have Beatgrids created for your tracks, and Beatgrids enabled in the Setup screen.

SEE ENABLE BEATGRIDS FOR MORE INFORMATION.

Once you have accurate Beatgrids you can now use them to easily Sync tracks together.

NOTE Hardware with motorized platters can not Sync by more than 50% when the platters are switched on. This is due to the physical limitation of the motors. Turn the motor off if you wish to Sync by more than 50%.

Beat Position Indicator

The Beat Position Indicator is a display of where the track’s playhead within the current bar. The playhead will illuminate and move through a 4/4 count in time with the track’s tempo. This indicator will change color depending on the Sync state.

Beat Sync Mode

Press Sync to engage Beat Sync mode for the first deck.

Engaging Sync for the first deck will engage Sync mode for that deck. This deck’s tempo will become the Sync tempo for any further tracks entering Sync mode.

Press Sync on the next deck to match the tracks’ tempos together. This will snap the Beatgrids, speed and the bar position of this track to any other tracks in Sync mode. Beat Sync will maintain this snap even if the track’s Beatgrid changes (ie. you have manually set a Beat Warp Marker).

SEE BEAT WARP MARKERS FOR MORE INFORMATION.

Press Sync again to re-sync the track if it has gone out of time.

NOTE Tracks that sound out of time may have an incorrect Beatgrid or Sync may be disabled for the track.
**SMARTSYNC (USING BEATGRIDS)**

**Beat Sync and Motorized Platters (Numark NS7 and V7)**
ITCH hardware with motorized platters will experience ‘wow and flutter’ due to the motor movement. This may result in your tracks falling out of Sync with each other as the wow and flutter move the playhead position slightly forwards or backwards and mimic a user’s manual adjustments of the platter.

This can take the sync state out of the blue Beat Sync mode and put it into the yellow Tempo Sync mode.

You may need user adjustment of the platters to keep the tracks in perfect Sync.

Turn off the platter motors to avoid this issue.

**Arm Beat Sync Mode**
You can arm Sync by pausing the deck and pressing Sync.

![SYNC OFF]

*THE BEAT POSITION INDICATOR WILL ILLUMINATE GREY WHEN IN BEAT SYNC MODE IS ARMED.*

Pressing Play on the hardware will start playback and automatically Beat Sync the track to other tracks currently in Sync mode.

**Tempo Sync Mode**

![SYNC OFF]

*THE BEAT POSITION INDICATOR WILL ILLUMINATE YELLOW WHEN IN TEMPO SYNC MODE.*

Tempo Sync mode is when the deck tempo will match decks in Sync mode, but the track’s position in the Bar will not be locked as with Beat Sync.

Adjusting the platter or playhead while a track has Sync engaged will disable Beat Sync and put you into Tempo Sync.

This allows you to keep tracks at the same tempo but drop the track when desired.

Adjusting the platter will create an offset, this offset will be maintained, even if the track’s Beatgrid changes (i.e. a Beat Warp Marker is placed and the track’s tempo changes). This will allow the track to warp around tempo changes without losing Tempo Sync.

**SEE BEAT WARP MARKERS FOR MORE INFORMATION.**

You can adjust the position of tracks in the bar, manipulate the platter, scratch or juggle the track while still keeping the tracks’ tempo matching. i.e. If you drop a track out by exactly 2 beats behind a track on another deck in Sync, then the yellow Sync state will continue to stay at the same tempo as the other Sync track.

**Disengage Sync**
Press SHIFT+SYNC on the hardware to disable Sync for the deck.

You can also click the OFF button to the right of the Sync button.

**NOTE** For some Numark NS7 and V7 users, use the DELETE key as the SHIFT key on your hardware.
Relative Pitch & Pitch Control

When a deck is in Sync, altering the pitch of any one deck, will affect the pitch of all other synced decks. Disengaging Sync on a deck keeps the pitch in relative pitch mode. Relative pitch will react to slider position movements up or down, but not reflect the absolute position on the hardware slider itself.

To reset the pitch slider to absolute pitch you can either:

- Load the track again once Sync has been disabled.
- Turn Sync off and click the Pitch display on that virtual deck. If the pitch on your iTCH controller is at 0% then the track will return to it’s original BPM, if it’s not then move the pitch to 0% to return it to the original value.

NOTE You can hold SHIFT to disable the pitch slider temporarily - you can then move the pitch up or down, re-positioning it back to any position to suit your needs.

TIP To reset a track to it’s original BPM simply turn Sync off for that deck and click the REL PITCH display and it will return it to absolute pitch. Move the pitch fader to 0% on your hardware and the BPM will be at it’s original value.

Sync On Track Load

If Sync is enabled for a virtual deck, all tracks loaded to the deck will have Sync automatically applied on track load.

Turning off Sync for a virtual deck will result in Sync not automatically being applied on subsequent track loads.

Loading Tracks With No Beatgrid

Loading a track with no Beatgrid will disable Sync for that deck and instead use Simple Sync.

A Beatgrid will be created for un-analyzed tracks if ‘Set Auto BPM’ and ‘Set Beatgrid’ are enabled in the Offline Player.

SEE SET AUTO BPM AND SET BEATGRID FOR MORE INFORMATION.

Once a Beatgrid has been created you can then press Sync to engage Beat Sync.

If ‘Set Beatgrid’ is not enabled in the Offline Player, then only a BPM value will be created and only Simple Sync will be available for that track.

SEE SIMPLE SYNC FOR MORE INFORMATION.

If a track has previously been analyzed, but has no Beatgrid, then iTCH will not create a new Beatgrid for that track.

TIP Manually add a Beatgrid for tracks to enable Sync functionality for that deck.

SEE BEATGRIDS FOR MORE INFORMATION.
SIMPLE SYNC (NO BEATGRIDS)

Selecting Simple Sync
If you are using a two-deck ITCH controller, you are given the option of being able to use Simple Sync in addition to SmartSync. You can select which type of Sync you want to use in the Playback tab of the ITCH setup screen.

SEE SMARTSYNC FOR MORE INFORMATION.

Simple Sync

Pressing Sync will match the both the BPM values and transients of your tracks together. If you have dropped your next track in but it’s not quite in time, by pressing sync you can perform an automatic beat sync. Beat sync works by snapping the two closest transients together and matching the BPM.

You can click the OFF button to the right of the Sync panel to turn this off (or press Shift + Sync on your ITCH controller). This will cause the pitch to revert to the tracks absolute pitch as reflected on your hardware pitch slider controls.

When you engage Sync on a deck, that deck becomes the Slave Deck while the deck it has been synced to becomes the Master Deck. The synced BPM value will be taken from the Master Deck.

TIP You can use Simple Sync as a way to auto-tempo your tracks. Load a song, press Sync so the BPMs are the same and then drop the track in yourself.

Relative Pitch & Pitch Control
Pitch slider/dial adjustments on hardware of a deck in Sync will alter the tempo for all tracks in Sync. When a deck is in sync, altering the pitch will affect the pitch of all synced decks. This is known as relative pitch.

Disengaging sync on a deck cause the pitch to return to its absolute pitch level as represented on the hardware slider.
The SP-6 Sample Player allows you to play up to six sources of audio, in addition to the tracks playing on the Virtual Decks. Any audio file in your ITCH library can be loaded to any one of the six slots, allowing playback of short samples, audio loops, sound effects, or full length tracks.

NOTE The SP-6 is only operational when ITCH hardware is plugged in, but not operational in the offline player mode.

NOTE To enable or disable the SP-6 plugin, go to the ITCH Setup > Plugins screen and check or un-check the SP-6 option.

**SP-6 Overview**

Click on the SP-6 button to access the sample player window. In the top right corner of the SP-6 there is a button that opens the Display Menu.

Clicking on this drops down a menu with the list of available controls.

- **Overview** Displays the overview of each track.
- **Mode** Chooses the play mode: Trigger / Hold / On- Off / Sync Repeat modes.
- **Play from** Choose which position (start / cue point / loop) to begin playback for the loaded track.
- **Pitch** Pitch Slider / Bend / Nudge / Keylock controls.
- **Level meter** Displays the volume level for the sample slot.
- **Level** Individual sample slot level and Gain controls.
- **Output Select** Assigns individual slot outputs to each of the ITCH hardware channels, the master ITCH output or the master SP-6 output.

This enables you to set up the sample player with the appropriate controls that suit your workflow.

**Loading Music To The SP-6**

To load a track to the SP-6, drag and drop the desired file from your library into one of the sample slots. To eject a track, click the eject button to the right of the title display.

**TIP** You can load tracks to the SP-6 with the keyboard shortcuts: ctrl + alt + z, x, c, v, b, n for sample slots 1, 2, 3, 4, 5, 6 (respectively).

**TIP** Select and drag six tracks from your library onto the first sample player slot to simultaneously load six tracks across all six slots.
Playing Samples
You can trigger your samples from both your ITCH hardware and with your mouse or keyboard.

Playing samples from your ITCH hardware
To trigger a sample from your hardware you will need to enable the ‘SP-6 Hardware Trigger Mode’. This is a button found to the left of the SP-6 drop-down menu box in the SP-6 tab. Turning this on allows you to trigger your sample slots with the Cue Point buttons on your ITCH controller.

To trigger a sample slot press SHIFT + the respective cue button. For example if you want to trigger the sample that is in the second slot from the left, you would press Shift + CUE 2 on your ITCH controller.
When the SP-6 Hardware Trigger Mode is on, there will be a blue box around the SP-6 Sample Player.
NOTE If you are using the Novation TWITCH controller, you won’t see this ‘SP-6 Hardware Trigger Mode’ button. Instead you will simply need to press SHIFT + HOT CUES on your TWITCH controller to turn on SP-6 Hardware Trigger Mode. Press HOT CUES again to disable it in order to use the cue points again.
NOTE With this option enabled you can still trigger samples with your mouse and keyboard, as shown below.

Playing samples with your mouse or keyboard
Pressing the play button on each slot will play the loaded audio.
TIP Use the shortcut keys
• z (slot 1)
• x (slot 2)
• c (slot 3)
• v (slot 4)
• b (slot 5)
• n (slot 6)
to trigger each sample respectively.
NOTE If you have ‘Playback Keys Use Shift’ turned on in the Playback tab of the Setup screen, you will need to press SHIFT + the respective sample slot short key (above).
Play Modes
Each slot has four different play modes.

Trigger mode - When play is pressed, the audio plays through until the end of the track. Pressing repetitively will trigger the audio from the beginning of the track (or whichever position is selected in the Play From Selector). To stop the audio, hold the alt key while either clicking the play button, or pressing the corresponding shortcut key (e.g., alt - z for slot 1).

Hold Mode - The sample will only play while you press and hold the play button or the corresponding shortcut key. Upon release of the play button, the audio stops immediately. This mode most closely resembles the function of the “note off” mode found on many popular samplers.

On / Off Mode - When play is pressed, the audio plays through until the end of the track. Pressing play again stops the audio.

SYNC Play Mode – When play is pressed, the audio plays through until the end of the track, and will Sync with all other tracks on decks or sample slots that currently have Sync activated.

NOTE Sync Play requires the track to have an accurate Beatgrid. Loading an un-analyzed track to a Sample slot with no Beatgrid will disable Sync but instead offer Simple Sync functionality for tracks with a correct BPM value. The Beat Position Indicator will be displayed as a solid yellow bar. Sync Play Mode will be available if a track is analyzed and a Beatgrid has been created.

Playing Loops
The SP-6 Player allows you to play loops and repeat samples to create a continuous track in a sample slot.

Each slot has a Loop button. When activated, this will repeat the loaded audio file until the sample is stopped.

Short audio “loop” samples can be turned into a continuous track using this Loop Mode function. Ensure there is a clean cut at the start and end of the sample’s bar.

Loop Mode can also play any stored ITCH loop if the file contains any. Select the stored Loop slot from the ‘Play From’ Selector.

SEE PLAY FROM SELECTOR FOR MORE INFORMATION.

TIP To adjust loop information for a track, load it to a virtual deck, make your adjustments, then load it back into the sample player. SEE SP-6 INSTANT DOUBLES FOR MORE INFORMATION.

NOTE For Loops to Beat Sync correctly they will need to have an accurate Beatgrid. Tracks with only BPM value will Simple Sync only, and may drift out over time.

NOTE For a Loop to Sync correctly it will need to be a divisible length of 1 bar (i.e. you can use 1, 2, 3, 4 etc bar length Loops, but not 1/2, 1/4 bar length Loops).
**SP-6 Instant Doubles**
You can instant double from the Virtual Decks down to the SP-6, from the SP-6 up to the Virtual Decks and also between the sample slots themselves. This means the position, track gain, and speed/Sync will match when you drag a track from one location into another.

This allows you to beat match tracks with your on the Virtual Decks, and then “instant double” the track down to a slot, freeing up the Virtual Decks to continue your mix with other tracks.

Click and drag an already playing track from a Virtual Deck or sample slot and drop it on another sample slot to begin instant doubling.

**SP-6 Pitch Controls**
There are individual Pitch Slider, Bend, Nudge, and Keylock controls for each sample slot.

![Pitch Slider](image)

The BPM is also displayed next to the pitch slider. If no BPM is present in the tracks ID3 tag, the pitch of the track is displayed as a percentage.

Click and drag the pitch slider to make regular pitch adjustments. Hold the shift key and move the pitch slider to make fine pitch adjustments.

Click on the + and – buttons to bend the pitch of the track into time (making temporary pitch adjustments). Hold the CTRL key and click the + and – buttons to make pitch adjustments to nudge the track, this adjusts the pitch permanently.

**NOTE** For some Numark NS7 and V7 users, use the DELETE key as the SHIFT key on your hardware.

**SP-6 ‘Play From’ Selector**
Use the “Play From” selector to choose where the track will play from. You can choose to play a track from the start of the file, any one of the cue points, or any one of the loop in points.

![Play From Selector](image)

When this is set to play from start, or play from a cue point, the track will play from this position.

If a loop is selected in the Play From Selector, the track will repeat the loop until disengaged.

**SEE PLAYING LOOPS FOR MORE INFORMATION.**

The number of options will be dependent on the number of cue points and loops already set in your track. i.e. if the track loaded has no cue points and loops set, then only “start” will be available as a “Play From” option.

**TIP** To set or adjust cue and loop information for a track, load it to a Virtual Deck, make your adjustments, then load it back into the sample slot.

**SP-6 Track Overviews**
Displays an overview of the track loaded to each sample slot. The waveform, play head position, cue points and any armed loops will all be visible.
SP-6 Slot Volumes
Each individual sample slot has a separate volume slider and gain control.

Volume Sliders - Use the volume slider to mix and make temporary adjustments to the volume of the sample you are playing. You can use these sliders like you use the line faders or up faders on your DJ mixer, fading from full volume right through to completely silent.

Gain Knobs - In addition to the volume slider there is an additional gain knob for each slot. These allow you to fine tune the maximum gain volume of the loaded sample. The gain adjustment will also be written to the track’s ID3 tag, meaning that it will be the same every time you load it to the sample slot or to a virtual deck.

Individual Output Selectors
By default each sample slot will be set to Master, mirroring the SP-6 Master Output setting. You can however use the individual output selector buttons to override the master output setting.

Click the preferred output channel to unlink the sample slot from the master sample player output selection, allowing you to choose the individual channel output for each slot. These output routings will be saved when you close down ITCH, so the next time you launch ITCH, your preferred settings will remain the same.

- SP-6 outputs through the SP-6 Master Output
- 1 outputs through Channel 1 (This will appear as L if you have a two deck ITCH controller)
- 2 outputs through Channel 2 (This will appear as R if you have a two deck ITCH controller)
- 3 outputs through Channel 3 (if available on your ITCH hardware)
- 4 outputs through Channel 4 (if available on your ITCH hardware)
- M outputs through the MASTER output of the ITCH hardware.

SP-6 Mute Buttons
Use the mute buttons to mute the audio output for each of the SP-6’s sample slots. Click the mute button to silence the audio output, click the mute button again to turn the audio back on.

You can also ctrl-click on the mute buttons to mute the outputs momentarily, meaning that the audio will only be muted for as long as you hold your mouse click.
SP-6 Master Output Selector

Use the master output selector button to choose where you wish to have the SP-6 output audio to.

- 1 outputs through Channel 1 (This will appear as L if you have a two deck ITCH controller)
- 2 outputs through Channel 2 (This will appear as R if you have a two deck ITCH controller)
- 3 outputs through Channel 3 (if available on your ITCH hardware)
- 4 outputs through Channel 4 (if available on your ITCH hardware)
- M outputs through the MASTER output of the ITCH hardware.

There is also a master sample player Gain knob to adjust the overall SP-6 volume.

SP-6 Sample Banks

The SP-6 has four separate sample banks, labeled A, B, C and D. To switch between the different banks click on the A, B, C or D buttons.

Each bank will save the individual sample and sample slot settings you last used, allowing you to prepare banks for easy recall at a later stage. Sample Bank A will load as the default.

NOTE Switching between Sample Banks will stop any audio being played in the current Sample Bank.
Pressing the HISTORY button in ITCH opens History panel. This is a complete log of all the tracks you have played (in sessions) and allows you to export your ITCH session information as a data file.

Each session is cataloged by date and time. Using the drop down arrow, you can navigate to and view detailed information of any previous sessions. There are columns for the period (i.e. date of session), name of track and artist name.

In addition, these other categories listed below will give you more detailed information about your sessions.

- **Start Time** - When viewing a track row, the start time of the track is displayed. When viewing a session row, the start time of the session is displayed with the date (in real time value).
- **End Time** - When viewing a track row, the end time of the track is displayed. When viewing a session row, the end time of the session is displayed with the date (in real time value).
- **Playtime** - When viewing a track row, the total played time of the track is displayed (e.g. 00:03:00). When viewing a session row, the total elapsed time of the session is displayed with date (e.g. 10/09/08 01:38:16).
- **Deck** - The virtual deck the track was played on will be displayed under the deck column. In the track row, either left or right is displayed. The offline player will be listed as offline.
- **Notes** - Use this field to list particular information about your tracks and each session (i.e., note how you transitioned from one track to another).
- **Start Session / End Session** - To start or end a session, click the corresponding button.
- **Insert Track** - If you wish to add information for tracks not played in ITCH into your session (e.g., if you played one of your favorite vinyl or cd), select the track you want to insert after and click the insert track button. Double click the inserted track fields and edit your information accordingly. (Note that when exporting an m3u playlist [see exporting below] inserted tracks will not be present.)
- **Export** - You can export each session as a data file using the export button. Select a session, then choose your preferred file format, and click export. There are three possible export formats.
  - **Serato Playlists** – See Serato Playlists for more information.
  - **txt** - to create a simple text file with your session information contained within.
  - **csv** - to create a file for use in spreadsheet software.
  - **m3u** - to create a playlist file, which can be imported into media players. Note that an m3u does not contain audio itself, it only points to the location of your audio files. (Inserted tracks within sessions will not be included in an m3u playlist.)

**TIP** To make a new ITCH crate containing your session information, select a session and drag it to the + plus crate button. (This will automatically name the crate with the session date).

### Delete History Session
To delete a history session, highlight the session, then press ctrl + del.
Listing Behavior

Only the tracks you actually play are listed in history. This is done using an A-B algorithm, meaning a track on deck A is only listed once the track on deck B has been changed or ejected.

You can choose to show tracks which you have auditioned, but not actually played, by checking the show unplayed tracks box. The session will then also list these tracks in grey, along with actual played tracks.

Alternatively, you can mark or unmark tracks as played manually. Select a track (or a group of tracks) and click the mark played / mark unplayed button. This may be useful if you play a track off regular vinyl or CD - (breaking the A-B algorithm).

Tracks that you have played are marked as green in your library. Click on the button marked clear to reset the list of recently played tracks and turn the color of your library back to white.

NOTE 4 Deck ITCH controllers will display decks 3 and 4 in the History panel.

Serato Playlists

The Serato Playlists plugin allows you to upload your history sessions to your serato.com profile for viewing, sharing and editing. You can upload your playlist once your session is complete, or by using the Live Playlists feature to update your play lists online in real time!

To enable this plugin, go to the Plugins tab on the Setup screen and check the Enable Serato Playlists Plugin option. Open the History panel and you will now have access to the Serato Playlists options.

Uploading Serato Playlists

Once you have finished your session, or to upload a previous history session, select the desired session in the History panel. Click the Format dropdown box, select Serato Playlists and click the Export button. You will receive the following warning:

Warning: This feature will submit play data from your History to your online Serato Playlist and may affect sound card performance while sending.

Do you wish to continue?

☐ Don’t ask me again

If you choose “Yes” you will then be taken to serato.com where you can review your playlist before choosing to post it online. Once posted, you have the option to edit the playlist and track information.

NOTE We recommend that you turn off any wireless networking devices when using ITCH. If you export your playlist online whilst playing you may experience USB dropouts. If so, you may wish to avoid using this function.

Live Playlists

Serato Playlists has the Live Playlists option to allow you to display what you are playing online in real time on your serato.com profile.

To enable the Live Playlists feature go to the Plugins tab on the Setup screen and check the Enable Live Playlists option. Once enabled, the Start Live Playlist button is now displayed in the History panel. Click this to start and stop your Live Playlist session.

NOTE Live Playlists requires you to be connected to the internet while playing, which may result in USB dropouts. If so, you may wish to avoid using this function.
 RECORDING

NOTE For Numark V7 and Denon DN HC5000 users, as the audio is mixed externally the Recording functionality is not available. ITC can capture recordings of your mix output, mic, or aux input channel(s). Click Record tab to open the Recording plugin in ITC. This is located in the plugin strip above the music library.

<table>
<thead>
<tr>
<th>RECORDING PANEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOTE Recording sources vary between controllers. For recording the microphone select MIC. For recording the Auxillary input select AUX. You may also be able to record individual channels. NOTE You can select the file format and bit depth for your recording in the playback tab of the setup screen. SEE RECORDING OPTIONS FOR MORE INFORMATION.</td>
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</tbody>
</table>

Record Audio
To record audio:
• Select the Recording source to record from the drop down menu. (For recording the master output signal select MIX. This records post faders and EQ, pre master gain).
• The recording meter shows the signal level that will be recorded to disk. Adjust the recording level using the gain control.
• Click the REC button to start recording.
• The record icon flashes while recording and the display shows the elapsed recording time.
• When you are finished mixing click the flashing red REC icon to stop recording.
• To save the recording to disk, type a filename into the text field, and click SAVE.
• The recording is automatically placed in a crate named “Recording”. If the crate does not already exist, it will be created automatically.
• To start a new recording without saving, simply click the record button again.

Recordings can be loaded onto the decks, renamed, and managed like other files in the ITC Library.

Recordings Save Location
Recordings are saved to your hard drive, and are available to be used as you would any other audio file on your computer.
Recordings are saved in the following hard drive locations on your computer.
MyDocuments > MyMusic > _Serato_ > Recording (PC)
Users > Music > _Serato_ > Recording (Mac)
ADDITIONAL SETUP

Setup Screen
The setup screen allows you to customize elements of ITCH to how you want them to work. Click the associated tabs to switch between groups of options; Hardware, Playback, Library, Display, Mixer and Plugins.

NOTE The Mixer option is not available for the Numark NS7 and the Denon DN HC5000.
NOTE Options will vary slightly depending on your controller.

Hardware

Software Version
The ITCH software version is displayed in the bottom left corner of the setup screen.
Also located here is the Check For Updates button.

<table>
<thead>
<tr>
<th>Version</th>
<th>XXXXX</th>
</tr>
</thead>
<tbody>
<tr>
<td>0x00010003</td>
<td>0xcf291f</td>
</tr>
</tbody>
</table>

The check for updates button will launch your web browser and take you to www.serato.com to tell you if there are updates available for your version of the ITCH software.

NOTE You must be connected to the Internet for check for updates to work.

Firmware
When you have an ITCH controller connected, you will see whether or not a firmware update is available or not. If an update is available click the ‘Update Firmware’ button to install it - make sure you leave your hardware connected until the update has successfully finished.

USB Buffer Size (Latency)
ITCH processes audio data in small chunks. When smaller chunks are used, the movement of the platter is translated into audio more often, which results in a lower overall system latency. However, this requires more processing power and therefore a higher CPU load, so lower buffer size settings require a more powerful computer to produce uninterrupted audio. If you want tighter control, you should try decreasing this setting, on the other hand, if you experience audio dropouts, you need to increase this setting (or use a more powerful computer).

Platter Speed
You can change the response speed of the platters between 33RPM and 45PM.

NOTE Setting this to 45RPM will use more processing power and could increase the chance for audio dropouts on lower end machines.
PLAYBACK

General

Playback Keys use Shift
With this option on, all cue point, loop, and general playback keys on the computer keyboard require shift or caps lock to function.

Lock Playing Deck
When this option is checked, you can only load a track to a deck if it is paused.

Hi-fi Resampler
This significantly reduces digital distortion at very slow or very fast playback speeds, increasing the CPU load slightly. This option is on by default.

Use Auto Gain
When checked, you can set the maximum amount of gain a track will have during playback. If a loaded track's gain is lower than this setting, its gain will be automatically boosted (its loudest point will match the auto gain level).

VCI-300 cue/play uses shift (VCI-300 only)
When this option is checked you must have the shift key pressed for the playback keys to trigger. This applies to all keyboard shortcuts.
TIP You can also turn on Caps Lock instead of using Shift.

Enable Beatgrids
When this option is enabled, Beatgrids, Beat Sync and Tempo Sync are available. Disable this option if you don’t wish to use Beatgrids, Beat Sync or Tempo Sync. If this option is disabled, pressing Sync will use Simple Sync instead.

SEE SIMPLE SYNC FOR MORE INFORMATION.

On Song Load

Play From Start
Positions the playhead at the start of each track when loaded. If this setting is not enabled, freshly loaded tracks will continue to play from the point the last track was at. This option is on by default. This option is overridden by instant doubles and play from first cue point options.

NOTE When play from start is selected on the setup screen, the deck will try to skip any silence at the start of the track, and play from the start of the audio.

NOTE If you have Beatgrids enabled, the Downbeat Marker will be considered to be the start of the track.

Instant Doubles
Instant Doubles allows you to quickly match the playhead position of the same file on both decks.

When enabled, load a track to one virtual deck (or sample slot) that is already loaded on the other virtual deck (it must be the same file), the playhead will jump to the position of the track playing. This copies the Keylock state, Sync state and Looping settings copied.

NOTE This setting overrides the play from start and play from first cue point options.
Play from First Cue Point
Enable this option to start all tracks from the first cue point when loaded.
NOTE This setting overrides the play from start option. If the track has no cue points set it will play from the start.

Braking
This controls how fast the track stops when the deck is paused. Counter-clockwise, the stop is immediate. Clockwise rotation increases the stopping time from a finger grab all the way to a slow turntable power-down.

Recording
Recording Bit Depth
Select the recording bit depth as either 16 Bit or 24 Bit.

Recording File Format
Select the file format you wish the recording to be saved as (AIFF or WAV).
**Library**

**Song Library Options**

**Show iTunes Library**

Check the “read iTunes library” option to show your iTunes library and playlists in the ITCH library.

You can collapse your iTunes playlists by clicking on the blue folder icon.

Uncheck “read iTunes library” to remove iTunes playlists and iTunes songs from your ITCH library.

To add your iTunes music to your ITCH library permanently, drag and drop tracks from the iTunes playlists onto the word “All” (on the far left hand side of the ITCH screen), or into individual ITCH crates.

Any files moved to “All”, an existing crate, or a new crate will now remain in ITCH even when “read iTunes library” option is unchecked. Once a file has been permanently added to ITCH, the iTunes logo will disappear.

We recommend unchecking this option after you have added your music into the ITCH library.

**NOTES**

- If your iTunes library contains a large number of tracks it may take some time for ITCH to read it.
- Any changes made in ITCH to the file information of tracks in your iTunes library will not appear in iTunes until after you play the track.
- ITCH cannot play files that have been protected by Digital Rights Management systems, such as those previously sold through the Apple iTunes Music Store. iTunes Plus files are DRM-free.
- iTunes is available for Mac and PC. To get more information, visit [www.apple.com](http://www.apple.com).

**Protect Library**

Uncheck this setting to remove tracks and crates from your library. Enable to lock your library and prevent accidental track or crate deletion. Enabling this setting will also lock all file tags and crate names, so that no text can be changed.

**Custom Crate Columns**

Check this option to set custom column views for each crate and playlist. When the option is off (default), all crates will share the same column configuration as the ‘All...’ crate.

**Center on Selected Song**

With this option on, scrolling up and down in your library holds the selected track in the middle of the library panel.

**Show All File Types**

Enable this option to show all files when importing tracks into your library. If this option is not selected, only files that ITCH can play will be displayed.

**Include Subcrate Tracks**

Displays the tracks from any subcrates in their parent crate. With this off browsing in a crate will not show tracks that are in any subcrates of that crate.

**Font Size**

Adjust this slider to increase and decrease the font size for the main library and crates area.

**TIP** You can also use the keyboard shortcuts ctrl + and ctrl – to increase and decrease the font size.

**Album Art Size**

Adjust this slider to set the maximum album art size for any of the album art display modes. The artwork will still get larger if required to fit the track and will still scale with the library zoom keyboard shortcut.
DISPLAY

**User Interface Settings**

**Maximum Screen Updates**
This slider allows you to lower ITCH’s screen refresh rate and potentially use less CPU. Users with slower computers or those running a recording program at the same time might like to do this if they are having performance issues. The default setting is 60 Hz, or refreshed 60 times per second. This setting applies to the entire ITCH user interface; the Virtual Decks, the Waveforms, the library, and the setup screen.

**Waveform Orientation**

**Left Vertical Waveforms**
Display the main waveforms vertically on the left side of the screen when in Classic Vertical Display Mode.

**Right Vertical Waveforms**
Display the main waveforms vertically on the right side of the screen when in Classic Vertical Display Mode.

**Central Vertical Waveforms**
Display the main waveforms vertically on the centre of the screen when in Classic Vertical Display Mode.
MIXER

(NOT AVAILABLE FOR NUMARK V7 AND DENON DN-HC5000)

Crossfader
Use the dropdown menu to configure the crossfader. There are three options.
- Normal Standard crossfader style.
- Reverse Crossfader is reversed.
- Disabled Crossfader is disabled.

EQ
Gives you the option to select either 6DB or 12DB of gain for your equalizers.

Output
Allows you to set the audio output to Mono or Stereo.

Headroom
Select how much headroom your device has before the internal limiter engages.
Less headroom results in louder output, but has a higher chance of the limiter engaging, especially when more than one audio channels are in the mix. With the initial headroom setting of 0dB you can apply 3dB of gain per deck before you hit the limiter.

Cue
Overdrive
Increase the setting on this knob to give the gain of the headphones an extra boost. To prevent hearing damage, be careful not to set this level too high.
NOTE Adding overdrive can reduce audio quality so is only recommended if you are encountering problems with your headphone level.

Cue Mix
Mix between hearing the cue or the master in your headphones.

Faders
U/F Curve
Adjusts the upfader curve. Turn the dial to the left for a tighter “cut” and to the right for a more gradual fade.

C/F Curve
Adjusts the crossfader curve. Turn the dial to the left for a tighter “cut” and to the right for a more gradual fade.
NOTE Fader options may not be available for all ITCH hardware.
PLUGINS

SP-6
Use the check box to enable and disable the SP-6 Sample Player plugin. The SP-6 is enabled by default.

Serato Playlists
Use the check boxes to enable and disable the Serato Playlists plugin and the Live Playlists feature. These are disabled by default.
**Whitelabel Audio Files**

Whitelabel audio files are a unique file format (file extension .wl.mp3) developed by Serato. They are specially prepared for use in ITCH - with files pre-analyzed, tagged with song and artist info, BPM and album art where possible.

Whitelabel audio files play as high quality 320kbps stereo audio in ITCH with an ITCH controller attached. Without an ITCH controller connected, or when playing these files through other mp3 software and devices, they will play as low quality 32kbps mono audio.

Whitelabel audio files are promotional releases from records labels available to ITCH DJs for free from Whitelabel.net.

**Whitelabel .net**

The Serato Whitelabel Delivery Network is a unique system that allows record labels to digitally deliver promotional releases directly to DJs. To download Whitelabel audio files and to sign up to receive updates on the latest promotional releases, visit whitelabel.net.

**Locked whitelabel .net Files**

Due to some labels’ licensing requirements, certain Whitelabel audio files will require email and password verification to unlock them. If you have legitimately downloaded these tracks yourself, entering the email and password you use for Whitelabel.net will unlock the files for playback within ITCH. If you are still having problems unlocking these files, please contact Serato support: serato.com/support.

**Whitelabel .net System Requirements**

Whitelabel.net is tested to work on these browsers:

- Internet Explorer 6 and above (7 and above highly recommended)
- Firefox 3 and above
- Safari 3 and above

You will also need Flash installed and have Javascript enabled to be able to preview and download tracks.

**NOTE** Running Whitelabel audio files through Mixed In Key can cause the files to only play at 32kps in ITCH (even with an ITCH controller attached). At this time we advise you not to use Mixed In Key with Whitelabel audio files.
SHORTCUTS

Keyboard Shortcuts
These actions can be accessed directly from the computer keyboard.

NOTE Playback, cue and speed controls use Shift or Caps Lock. You can turn this off in the setup screen.

SEE PLAYBACK KEYS USE SHIFT FOR MORE INFORMATION.

<table>
<thead>
<tr>
<th>KEY</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ctrl - L</td>
<td>Locate the current track. This will highlight the track you most recently loaded. Pressing ctrl - L again will alternate between the tracks recently loaded on both decks.</td>
</tr>
<tr>
<td>ctrl - R</td>
<td>Reveal - the highlighted song is opened in a file browser.</td>
</tr>
<tr>
<td>ctrl - F</td>
<td>Find - moves the cursor to the search box.</td>
</tr>
<tr>
<td>ctrl - A</td>
<td>Select all.</td>
</tr>
<tr>
<td>ctrl - C</td>
<td>Copy text in edit mode.</td>
</tr>
<tr>
<td>ctrl - E</td>
<td>Edit text.</td>
</tr>
<tr>
<td>ctrl - V</td>
<td>Paste text in edit mode.</td>
</tr>
<tr>
<td>ctrl - X</td>
<td>Cut text in edit mode.</td>
</tr>
<tr>
<td>ctrl - Z</td>
<td>Undo last track load.</td>
</tr>
<tr>
<td>ctrl - P</td>
<td>Add tracks to the prepare window.</td>
</tr>
<tr>
<td>ctrl - O</td>
<td>Open the track in your default MP3/WAV/OGG/AIF player.</td>
</tr>
<tr>
<td>- or +</td>
<td>Zoom the main waveform display.</td>
</tr>
<tr>
<td>ctrl - or +</td>
<td>Zoom the library text size.</td>
</tr>
<tr>
<td>tab</td>
<td>Alternate cursor focus between library, crates and any open panels.</td>
</tr>
<tr>
<td>ctrl - del</td>
<td>Remove track from library, remove track from crate, delete crate (does not delete the file).</td>
</tr>
<tr>
<td>ctrl - del  -</td>
<td></td>
</tr>
<tr>
<td>backspace</td>
<td></td>
</tr>
<tr>
<td>alt - del</td>
<td>Remove track from crate and from library.</td>
</tr>
<tr>
<td>alt - del</td>
<td></td>
</tr>
<tr>
<td>backspace</td>
<td></td>
</tr>
<tr>
<td>ctrl - shift -</td>
<td>Delete the file from your library and send to the recycle bin. (Note to iTunes users: files in your</td>
</tr>
<tr>
<td>del</td>
<td>iTunes library cannot be deleted this way). esc Clear search string if searching, or exit ITCH.</td>
</tr>
<tr>
<td>and ctrl - shift -</td>
<td></td>
</tr>
<tr>
<td>backspace</td>
<td></td>
</tr>
</tbody>
</table>

SAMPLE PLAYER

<table>
<thead>
<tr>
<th>KEY</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z</td>
<td>Play sample slot 1.</td>
</tr>
<tr>
<td>X</td>
<td>Play sample slot 2.</td>
</tr>
<tr>
<td>C</td>
<td>Play sample slot 3.</td>
</tr>
<tr>
<td>V</td>
<td>Play sample slot 4.</td>
</tr>
<tr>
<td>B</td>
<td>Play sample slot 5.</td>
</tr>
<tr>
<td>N</td>
<td>Play sample slot 6.</td>
</tr>
<tr>
<td>ctrl - alt - Z</td>
<td>Load to sample slot 1.</td>
</tr>
<tr>
<td>ctrl - alt - X</td>
<td>Load to sample slot 2.</td>
</tr>
<tr>
<td>ctrl - alt - C</td>
<td>Load to sample slot 3.</td>
</tr>
<tr>
<td>ctrl - alt - V</td>
<td>Load to sample slot 4.</td>
</tr>
</tbody>
</table>
# Shortcuts

<table>
<thead>
<tr>
<th>Operation</th>
<th>Key Combinations</th>
<th>Operation</th>
<th>Key Combinations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Load to sample slot 5.</td>
<td><code>ctrl - alt - B</code></td>
<td>Load to sample slot 6.</td>
<td><code>ctrl - alt - N</code></td>
</tr>
<tr>
<td><strong>Left Deck</strong></td>
<td></td>
<td><strong>Right Deck</strong></td>
<td></td>
</tr>
<tr>
<td><code>ctrl &lt;</code></td>
<td>Load the highlighted song to a deck.</td>
<td><code>ctrl &gt;</code></td>
<td></td>
</tr>
<tr>
<td><code>ctrl - shift &lt;</code></td>
<td>Load the track currently on one deck onto the other deck as well.</td>
<td><code>ctrl - shift &gt;</code></td>
<td></td>
</tr>
<tr>
<td><code>shift - alt &lt;</code></td>
<td>Unload the track from a deck.</td>
<td><code>shift - alt &gt;</code></td>
<td></td>
</tr>
<tr>
<td><code>ctrl - , (comma)</code></td>
<td>Place a cue point.</td>
<td><code>ctrl - . (period)</code></td>
<td></td>
</tr>
<tr>
<td><code>1, 2, 3, 4, 5</code></td>
<td>Jump to cue points in track.</td>
<td>6, 7, 8, 9, 0</td>
<td></td>
</tr>
<tr>
<td><code>F5</code></td>
<td>Keylock on/off.</td>
<td><code>F10</code></td>
<td></td>
</tr>
<tr>
<td><code>W</code></td>
<td>Play/pause.</td>
<td><code>S</code></td>
<td></td>
</tr>
<tr>
<td><code>T</code></td>
<td>Pitch bend down.</td>
<td><code>G</code></td>
<td></td>
</tr>
<tr>
<td><code>Y</code></td>
<td>Pitch bend up.</td>
<td><code>H</code></td>
<td></td>
</tr>
<tr>
<td><code>U</code></td>
<td>Censor.</td>
<td><code>J</code></td>
<td></td>
</tr>
<tr>
<td><code>I</code></td>
<td>Set/trigger temporary cue point.</td>
<td><code>K</code></td>
<td></td>
</tr>
<tr>
<td><code>O</code></td>
<td>Set/adjust loop in-point.</td>
<td><code>L</code></td>
<td></td>
</tr>
<tr>
<td><code>P</code></td>
<td>Set/adjust loop out-point.</td>
<td><code>:</code></td>
<td></td>
</tr>
<tr>
<td><code>[</code></td>
<td>Loop on/off.</td>
<td><code>apos</code></td>
<td></td>
</tr>
<tr>
<td><code>alt - 1, 2, 3, 4, 5</code></td>
<td>Autoloop on/off.</td>
<td><code>alt - 6, 7, 8, 9, 0</code></td>
<td></td>
</tr>
<tr>
<td><code>ctrl - alt - 1, 2, 3, 4, 5</code></td>
<td>Loop roll.</td>
<td><code>ctrl - alt - 6, 7, 8, 9, 0</code></td>
<td></td>
</tr>
<tr>
<td><code>alt - Space Bar</code></td>
<td>Activate the tempo tapper.</td>
<td><code>alt - Space Bar (x2)</code></td>
<td></td>
</tr>
</tbody>
</table>
TROUBLESHOOTING

The following suggestions may help you if you are experiencing poor performance with ITCH:

- Check for updates using the check for updates button in the setup screen or by visiting: www.serato.com/itch
- Close all other open programs.
- Disable wireless networking devices.
- Disable Bluetooth devices.
- Disable antivirus software.
- Disable screen savers.
- Disable sleep mode.
- Increase the USB buffer size.
- Connect the ITCH controller directly to a USB port on your computer, not via a USB hub.
- Try all USB ports, some work better than others.
- Unplug other USB devices.
- Run your laptop connected to power supply.
- For more troubleshooting help visit www.serato.com
- For more on how to optimize your computer see:
  - Vestax VCI-380
  - Vestax VCI-300
  - Numark NS7
  - Numark V7
  - Numark NS6
  - Allen & Heath Xone:DX
  - Pioneer DDJ-S1
  - Denon DN HC-5000
  - Novation TWEITCH