NATIVE INSTRUMENTS

THE FUTURE OF SOUND

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Hardware version: TRAKTOR KONTROL S4 MK3

Special thanks to the Beta Test Team, who were invaluable not just in tracking down bugs, but in making this a better product.

2. WELCOME TO TRAKTOR KONTROL S4

Thank you for choosing TRAKTOR KONTROL S4 — it is because of customers like you that we can continue developing groundbreaking music software and hardware. TRAKTOR KONTROL S4 is a fully integrated hardware and software DJ performance system. The all-in-one TRAK-TOR KONTROL S4 controller offers you an ergonomic DJ mixer, a built-in 24-bit/96 kHz audio interface, and a high-resolution control surface, perfectly tailored for TRAKTOR PRO 3.

This documentation provides you with all the information you need to get started mixing, syncing and looping. If you are already familiar with TRAKTOR, this guide will also help you use the more advanced features of TRAKTOR KONTROL S4.

2.1. Document Conventions

This document uses particular formatting to point out special facts and to warn you of potential issues. The icons introducing the following notes let you see what kind of information can be expected:

The speech bubble icon indicates a useful tip that may help you to solve a task more efficiently.

The exclamation mark icon highlights important information that is essential for the given context.

The warning icon warns you of serious issues and potential risks that require your full attention.

Furthermore, the following formatting is used:

- Paths to locations on your hard disk or other storage devices are printed in *italics*.
- Important names and concepts are printed in **bold**.
- Square brackets are used to reference keys on a computer's keyboard, e.g., Press [Shift] + [Enter].

Pet Names for Software and Hardware

Throughout the documentation, we will refer to the TRAKTOR KONTROL S4 hardware controller as **TRAKTOR KONTROL S4**, **S4 controller**, or simply **S4**.

Likewise, the TRAKTOR software may be referred to as **TRAKTOR**.

2.2. Documentation Resources

Native Instruments provides many information sources regarding TRAKTOR KONTROL S4. The main resources to get you started are:

- **TRAKTOR KONTROL S4 Manual**: This manual guides you through the hardware and software setup process to get the TRAKTOR KONTROL S4 system up and running. Additionally, it gives you a practical approach for using your TRAKTOR KONTROL S4 by providing task-based tutorials.
- **TRAKTOR PRO 3 Manual**: For in-depth information on all features provided by the TRAKTOR software, refer to the TRAKTOR PRO 3 manual.

2.3. In this Document

What you are reading now is the TRAKTOR KONTROL S4 Manual. This manual is structured as follows:

- Concepts quickly introduces you to the TRAKTOR KONTROL S4 user interface and its main areas, both hardware and software.
- Setting up TRAKTOR KONTROL S4 guides you through the process of setting up your TRAKTOR KONTROL S4 system and importing your music into TRAKTOR.
- TRAKTOR KONTROL S4 Overview is an extensive reference of all hardware control elements to be found on your TRAKTOR KONTROL S4 hardware controller. Whenever you are unsure about the functionality of a particular control element, you will find all the necessary information here.
- Mixing Your First Tracks is a quickstart tutorial introducing you to the main steps of mixing your first tracks using the SYNC function.
- Tutorials contains a collection of short tutorials, showing you how to work with the individual areas of the controller.
- Preferences explains how to open the Preferences in TRAKTOR and introduces the options to customize the TRAKTOR KONTROL S4 for specific needs.
- Integrating External Devices shows you how to integrate TRAKTOR KONTROL S4 with your studio or live setup, in various configurations.
- S4 as Default Audio Interface describes how to use the audio interface of the TRAKTOR KONTROL S4 as the default audio device of your computer.
- Specification gives you the technical specifications of the TRAKTOR KONTROL S4 controller.

3. CONCEPTS

In this section you are briefly introduced to the main concepts of the TRAKTOR KONTROL S4 and some basic concepts of the TRAKTOR software.

3.1. S4 and TRAKTOR Control Concept

This overview introduces you to the concept of how TRAKTOR KONTROL S4 controls the TRAK-TOR software.

S4 and TRAKTOR control concept.

(**1**) **Decks**: TRAKTOR KONTROL S4 provides you with four virtual Decks. The Decks are where tracks, Samples and live input are played back. The Decks can be seen as the virtual equivalent to the good old vinyl or CD decks — with a bunch of additional, powerful features and the flexibility of a computer-based system. The two Decks on your S4 hardware controller allow you to control the four software Decks (labeled A, B, C and D) available in TRAKTOR: The left Deck on your S4 can control Decks A and C in the software. The right Deck on your S4 can control Decks B and D in the software.

(**2**) **Mixer**: Sitting in the middle of your TRAKTOR KONTROL S4 controller and in the middle of TRAKTOR's window, the Mixer receives audio signals coming from the four Decks, on its four channels. There is one channel for each Deck. As with any DJ mixer, the Mixer's purpose is to adjust the relative level of each channel, to control the channels' frequency content, and possibly adding effects before sending the overall result to the MASTER output.

(**3**) **FX Units**: The signals coming from the Decks can be further processed by two FX Units loca-ted at the top of your hardware and software interface. The FX Units give you access to a collec-tion of high-quality effects included in TRAKTOR. The left FX Unit 1 on your S4 can control the left FX Unit 1 in the software. The right FX Unit 2 on your S4 can control the right FX Unit 2 in the software.

3.2. Haptic Drive Modes

The Jog Wheels on the S4 can be operated in three different modes, called HAPTIC DRIVE MODEs. Each HAPTIC DRIVE MODE provides you with different control functions for the Jog Wheels.

JOG The **JOG** mode lets you control the playback of your tracks by spinning the Jog Wheel. Depending on the playback state or if you touch the top plate or the outer rim, the behavior differs accordingly. In **JOG** mode you can use the Jog Wheel for tempo bending and nudging, to cue beats and scratch tracks, as well as seeking within tracks. Furthermore, you can adjust the tension for the Jog Wheel using the JOG button as well as in the Preferences. Furthermore, you can enable a tick felt as haptic feedback in the Jog Wheel in the Preferences. For more information, refer to Using Jog Wheels in Jog Mode

TT As with the JOG mode, the **TT** mode (turntable mode) lets you control the playback of your tracks. The difference is, the Jog Wheels rotate during playback, enabling you to control your tracks as you would on conventional turntables. In **TT** mode you can use the Jog Wheel for tempo bending and nudging, to cue beats and scratch tracks, as well as seeking within tracks. Furthermore, you can adjust the base rotation speed using 33.3 revolutions or 45 revolutions per minute. For more information, refer to Using Jog Wheels in Turntable Mode

GRID The **GRID** mode lets you correct faulty Beatgrids for tracks directly on the S4 using the Jog Wheels and the CUE channel on the fly. For more information, refer to Correcting Beatgrids

3.3. Pad Modes

The Pads on a Deck can be operated in three different Pad modes. Depending on selected Pad Mode the functions differ accordingly:

- **HOTCUES Mode**: In HOTCUES mode, the pads' function is to store and trigger Cue Points and Loops in tracks and STEM Files, as Hotcues. On Decks A and B the button lights up blue whereas on Decks C and D it lights up orange. HOTCUE mode is the default for Track Decks and Stem Decks. For more Information on using HOTCUES mode, refer to Working with Cue Points, and Working with Loops.

> ⚠ HOTCUES mode is not available for Remix Decks. When a Remix Deck is focused, the HOTCUE button is disabled.

- **SAMPLES Mode**: SAMPLES mode lets you control the Samples on the Remix Deck. It gives you direct access to the first Samples in the Sample Slots, reflected by the upper row of Pads. When the Deck is focused on a Remix Deck, the SAMPLES mode is enabled by default. When Switching the Deck focus to a Track Deck or STEMS Deck, you can enable the SAMPLES mode as well. This way you can control the Track Deck or Stem Deck together with the Remix Deck, without switching the Deck Focus. For more Information on using SAMPLES mode, refer to Working with Remix Decks.

- **STEMS Mode**: In STEMS Mode you have access to the individual STEM controls. Using the Pads you can adjust the individual STEM channel volume levels, filters. STEMS Mode is available only for STEM Decks. On Decks A and B the button lights up blue whereas on Decks C and D it lights up orange. For more Information on using STEMS mode, refer to Working with STEM Decks.

3.4. Automatic Track Synchronization

This section introduces the principles of the automatic synchronization features offered by TRAKTOR.

One of the key features of TRAKTOR is the automatic synchronization of tracks. After loading tracks into the Decks, you can synchronize the track tempos with the **SYNC** function. The tempo of the synced track then adjsuts the tempo of the Tempo Master, e.g., the playing track. For this to work, TRAKTOR uses the tempo and beat information from the Beatgrids of tracks. Samples and time-evolving effects sync to the current Tempo Master automatically.

3.4.1. Beatgrid

TRAKTOR analyzes the tracks by providing reliable tempo information for syncing. This analysis determines the tempo (BPM) as well as the position of the beats; the result is the Beatgrid. There is a specific Beatgrid for each of your tracks.

3.4.2. Tempo Master and Master Clock

The **Tempo Master** represents the reference tempo to which the Decks synchronize. When enabling the **SYNC** function on a Deck, TRAKTOR synchronizes the track to the Tempo Master. The Tempo Master can either be a Deck or TRAKTOR's **Master Clock**. When the Master Clock is the Tempo Master, it then represents the global tempo reference to which all Decks can sync. The Tempo Master does not have to be the same throughout your mix, but there can only be one Tempo Master.

3.4.3. Automatic Tempo Master Assignment

TRAKTOR assigns the new Tempo Master automatically using the **AUTO** mode in the Master Control panel. When mixing tracks using the SYNC function, the synced Deck automatically becomes the new Tempo Master, as soon as the track of the current Tempo Master Deck ends or is stopped manually. This continues as long as there is no other track synced to the Tempo Master. Then the Master Clock automatically becomes the new Tempo Master as soon the current track stops playing. The MASTER button then lights up in the Master Control panel.

The **AUTO** mode is activated by default.

3.5. About the Track Collection

The Track Collection represents all the music you use in TRAKTOR. With the Track Collection you can organize, tag, and prepare your tracks for being played as part of your mix.

A benefit of the Track Collection is that reads the metadata of the tracks, like track title, artist name, tempo, genre, key etc. It also stores TRAKTOR-specific information about your tracks.

3.6. Snap Mode and Quantize Mode

Snap mode and Quantize mode are important tools that can help you when working with Cue Points and Loops, and for jumping in the track:

- **SNAP** mode ensures that any Loop or Cue Point you set in a track will snap to the closest beat.
- **QUANTIZE** mode ensures that you remain in sync and on , whenever you jump to a Loop, a Cue Point, or any position in the track.

Examples for using and not using Snap Mode

Depending on what you want to do, you can enable or disable SNAP mode and QUANTIZE mode at any time. Here are a few examples:

- Enable SNAP mode if you want to set a Loop starting directly on a beat.
- Disable SNAP mode if you want to set a Cue Point at the beginning of vocals that do not necessarily start on the beat.
- Enable QUANTIZE mode if want to mix in a synced track and want the downbeats of both tracks to perfectly match.
- Disable QUANTIZE mode if you want to trigger tracks or Samples any time you press play or trigger Hotcue buttons.

Enabling/Disabling Quantize Mode

When Quantize mode is enabled, the **QUANT** (**Snap**) button lights up brightly. When Quantize mode is disabled, the **QUANT** (**Snap**) button lights up dimly.

To enable or disable Quantize mode:

- Press the **QUANT** (**Snap**) button.

Enabling/Disabling Snap Mode

To enable or disable SNAP mode:

1. Press and hold **SHIFT** to access the secondary functions of your S4.
   When SNAP mode is disabled, the button lights up dimly. When SNAP mode is enabled, the button lights up brightly.
2. While holding **SHIFT** + press the **QUANT** (**Snap**) button to enable or disable SNAP Mode, respectively.

4. SETTING UP TRAKTOR KONTROL S4

By this section, you should have already installed TRAKTOR PRO 3 software using NATIVE AC-CESS, in order to configure S4 for its first use. If this is not the case, follow the instructions under this link Registering and Installing a Native Instruments Product using NATIVE ACCESS.

This section describes how to set up the TRAKTOR KONTROL S4. When all devices are connected your setup will look like the following illustration:
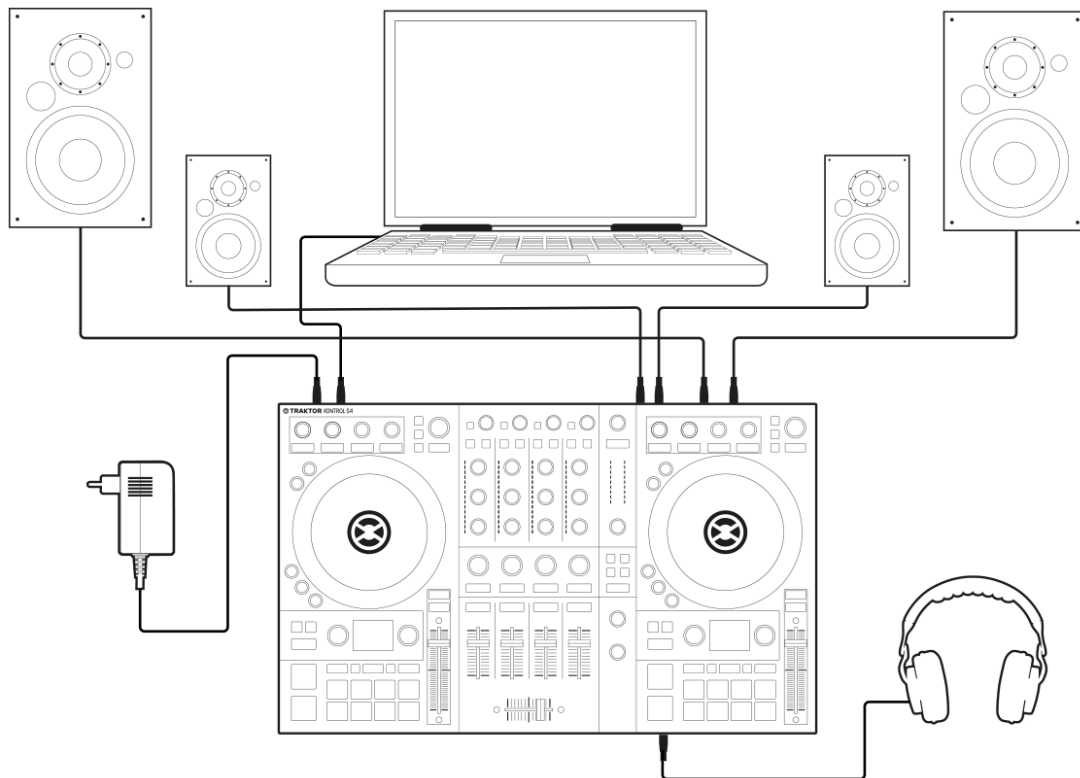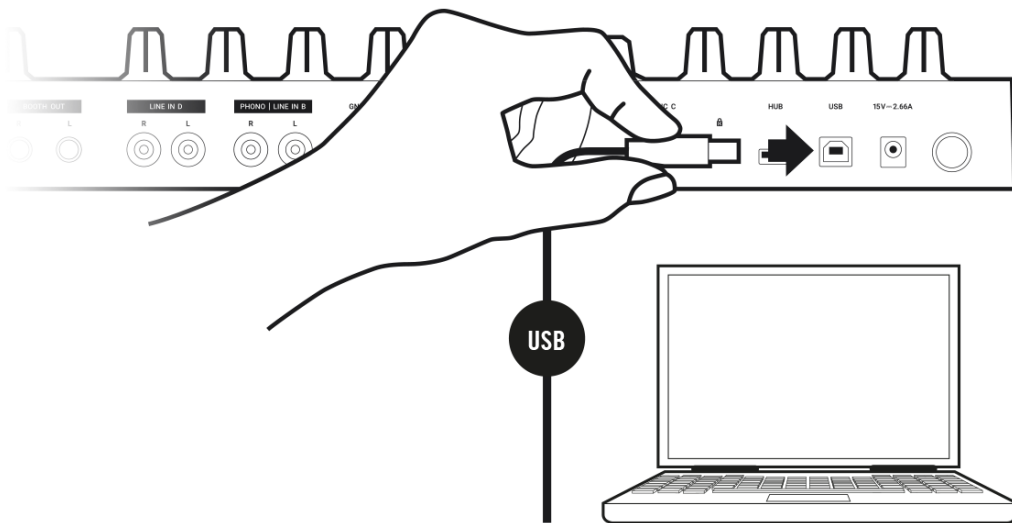

TRAKTOR KONTROL S4 setup.

4.1. Connecting to the Computer

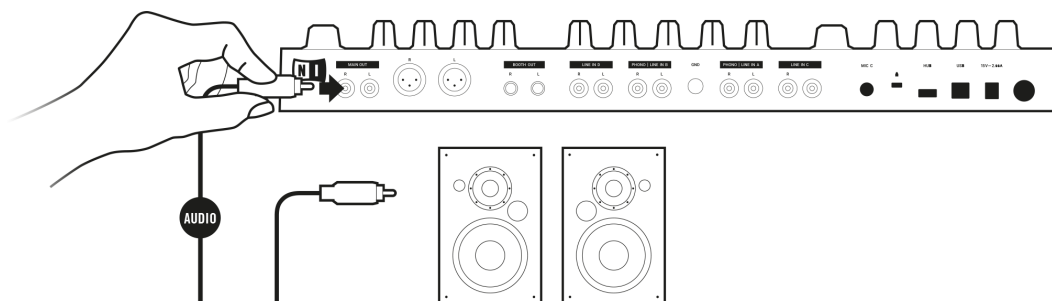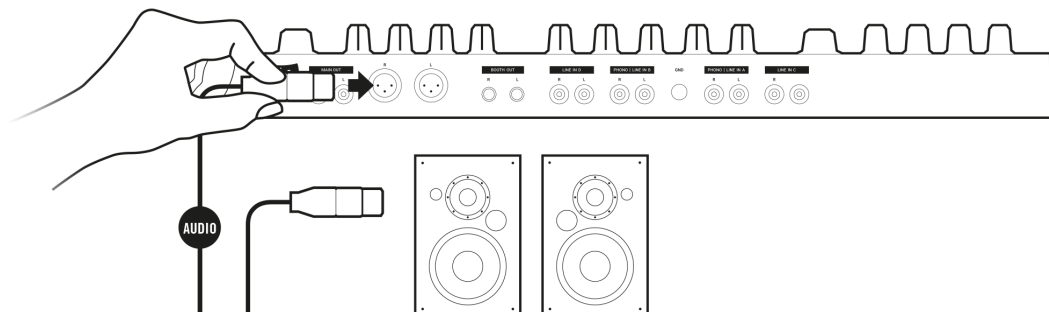To connect the TRAKTOR KONTROL S4 to your computer:

1. Connect the device end (square plug) of the included USB cable to the USB socket on the rear panel of your S4.
2. Connect the computer end (flat rectangle plug) of the USB cable to an available USB 2.0 port (or later) on your computer.

4.2. Connecting an Amplification System

To connect your power amplifier system to the TRAKTOR KONTROL S4:

- Connect the **MAIN OUT** XLR or RCA outputs on the rear panel of the TRAKTOR KONTROL S4 to the inputs of your amplification system using the appropriate cables.

4.3. Connecting Monitors for DJ Booth

To connect your monitor speakers or a second power amplifier for the DJ booth to the TRAKTOR KONTROL S4:
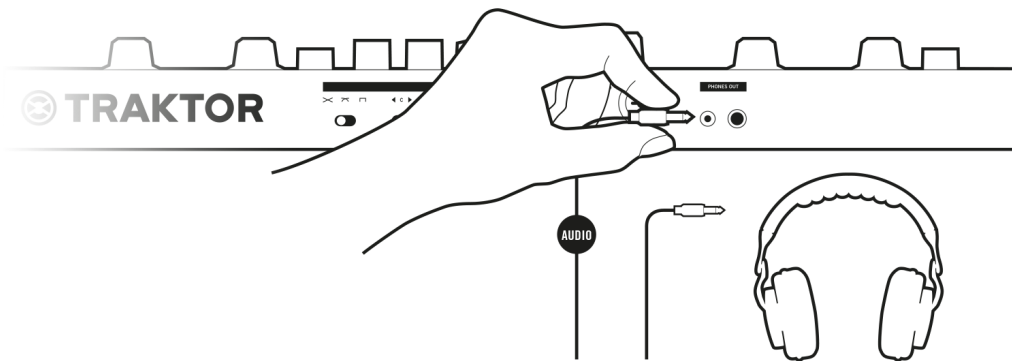
- Connect the **BOOTH OUT** RCA outputs on the rear panel of the TRAKTOR KONTROL S4 to the inputs of your monitoring system using appropriate cables.
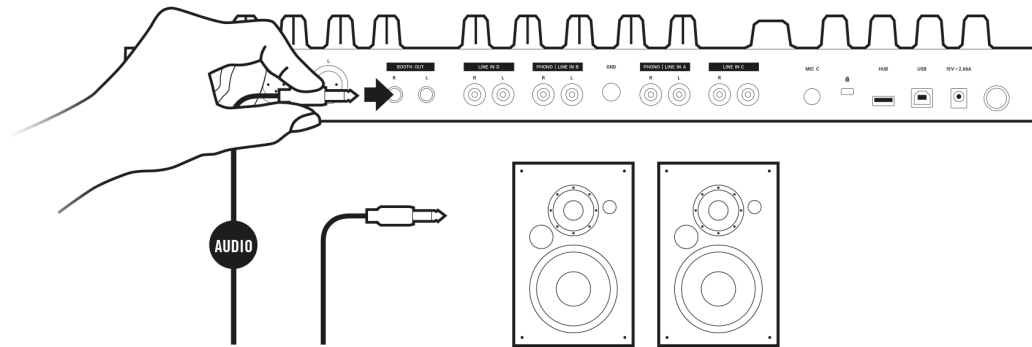
4.4. Connecting Headphones

To connect headphones to the TRAKTOR KONTROL S4:

- Connect your headphones to the **PHONES OUT** socket on the front panel of the TRAKTOR KONTROL S4 using a 1/4" or a 1/8" connector.

4.5. Connecting to the Power Supply

To connect the Power supply to the TRAKTOR KONTROL S4:

1. Connect the device end of the Power supply cable to the Power socket on the rear panel of your S4.
2. Connect the Power Supply unit to a power outlet.
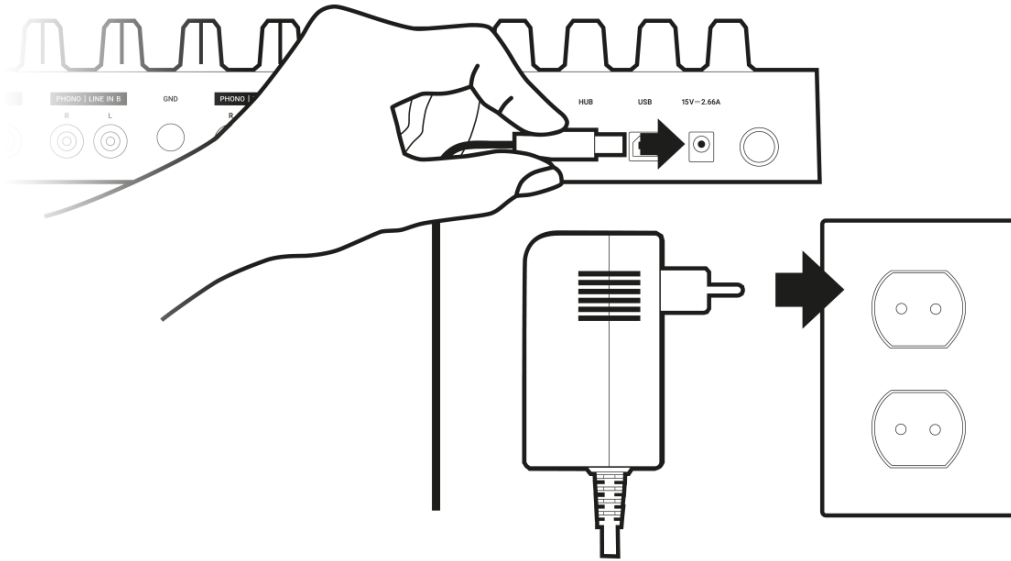
4.6. Final Preparation

After successfully setting up the TRAKTOR KONTROL S4 system, you can switch on the devices. We recommended that you follow the order in the instructions below:

Switching on Devices and Starting TRAKTOR

1. On your S4, turn down the volume controls to minimum position by using the **MASTER** knob, the **BOOTH** knob and the **VOL** knob for the headphones volume.
2. Switch on the amplification system (active speakers or power amplifier with passive speakers).
3. Switch on your computer.
4. Switch on your S4.
5. Start TRAKTOR by double-clicking the Traktor application icon on your desktop.
   The TRAKTOR software opens.

## Importing Data from Your Previous TRAKTOR Version

When you start TRAKTOR for the first time, TRAKTOR will ask if you want to import your previous data by copying the existing user content to a new folder in your user folder. Your previous data will not be altered if you copy it to the new default folder.

If you want to import data from your previous TRAKTOR installation:

- Click **Yes** to confirm.
  The data is imported.

Switching Mixer FX and Tempo Fader Range to Default Settings

TRAKTOR recognizes the S4 is connected to the computer, and asks you to switch Mixer FX selection and the Tempo fader range to default setting:
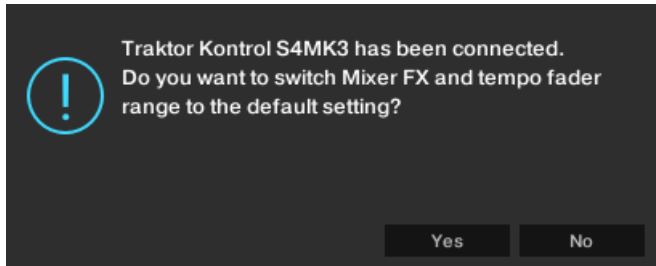
TRAKTOR alert for switching Mixer FX and Tempo fader range to default settings.

• Click **Yes**.
   The Mixer FX and the Tempo fader range are set to default settings.

Configuring TRAKTOR using the Setup Wizard

1. The **WELCOME** page asks you to connect any controllers and devices to your comput-
   er. Click **Next** to proceed.
2. On the **DECK LAYOUT** page select the Deck setup to control with your S4, e.g., **2 Track
   Decks + 2 Remix Decks**.
3. Click **Next** to proceed.
   The **SUMMARY** Page shows you the configuration of TRAKTOR.
4. Click **Finish** to confirm your configuration.
   The TRAKTOR window now appears in the Essential Layout.
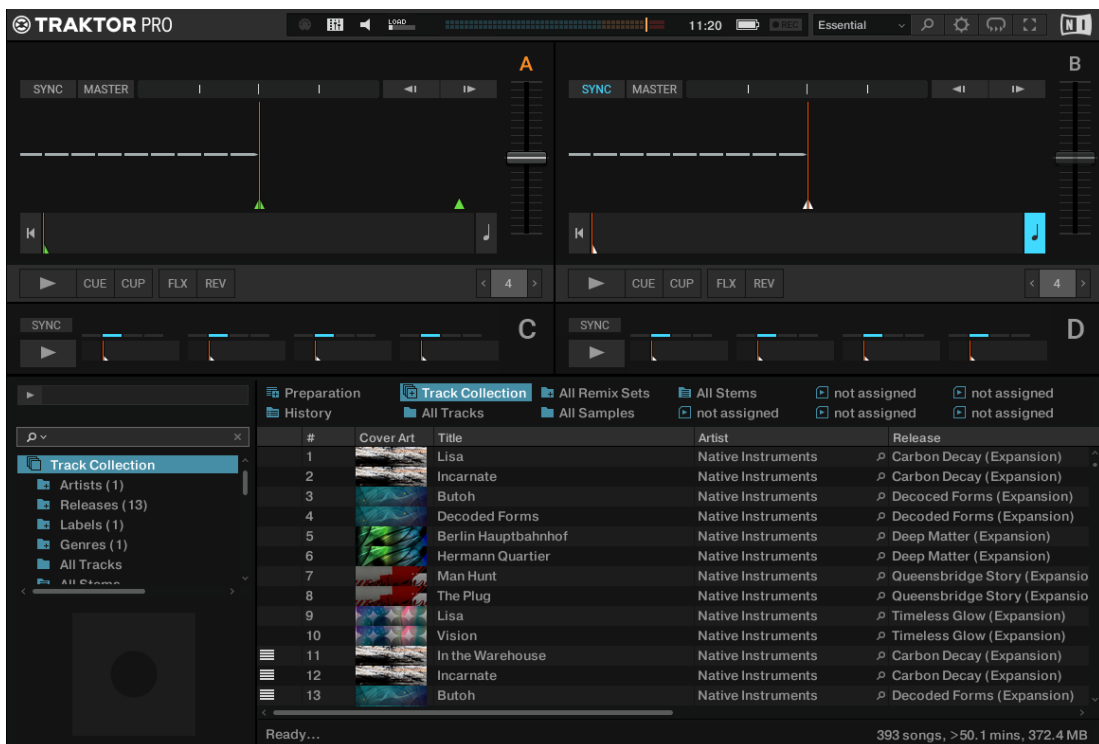
5. TRAKTOR KONTROL S4 OVERVIEW

This section introduces you the TRAKTOR KONTROL S4 and all its control elements and connectors.

TRAKTOR KONTROL S4 Overview.

(**1**) **Decks**: TRAKTOR KONTROL S4 provides you with two physical Decks. The Decks are where tracks, STEM Files, and Samples are controlled. The left Deck on your S4 controls Deck A and C in the software. The right Deck on your S4 controls Deck B and D in the software. For more information on the Deck control elements, refer to Decks.

(**2**) **Mixer**: The Mixer receives the audio signals coming from TRAKTOR Decks A, B, C, and D. The Mixer is then used to adjust the relative level of each channel in order to control the channels' frequency content. It can also add is also used to send Effects from the FX Units or the Mixer FX, and to send the overall result to the audience via the Master output. For more information on the Mixer control elements, refer to Mixer.

(**3**) **FX Units**: The FX Units 1 and 2 directly control the FX Units 1 and 2 in the software. The FX Units can be inserted directly into any Mixer channel to modulate the audio signals. For more information, refer to FX Unit.

5.1. Decks

TRAKTOR KONTROL S4 provides you with two physical Decks to control the TRAKTOR Decks. Each Deck provides you with the following control elements:

S4 Deck.

(**1**) **Browse controls**:Allow you to scroll through the Track Collection to find and load tracks, as well as previewing tracks and preparing playlists. For more information, refer to Browse Controls.

(**2**) **Jog Wheel**: Gives you advanced hands-on control of the track transport and allows you to perform as you would on a conventional DJ turntable or CD player. The outer LED ring gives you visual feedback on the playback status. For more information, refer to Using Jog Wheels in Jog Mode and Using Jog Wheels in Turntable Mode.

(**3**) **MASTER** (**Reset**) button: Assigns the Deck to Tempo Master. Using the **SHIFT** button, it resets the relative Tempo fader position in the software. For more information, refer to Adjusting Tempo and Automatic Track Synchronization.

(**4**) **SYNC** (**Lock**): Syncs the Deck to the Tempo Master. Using **SHIFT** + **SYNC Lock** locks the current tempo for the Deck. For more information, refer to Adjusting Tempo and Locking Key for Tracks.

(**5**) **TEMPO fader**: Adjusts the tempo of the Deck. The TEMPO Fader can be operated in Absolute Mode and in Relative Mode.If the Deck is synced to the Tempo Master, the Tempo Fader has no effect. When the Deck is playing at original track tempo, the LED lights up blue independently from the current TEMPO fader position. When the Deck tempo is faster or slower than the original tempo, the LED is unlit. When the tempo is locked for the Deck, the LED lights up red. For more information, refer to Adjusting Tempo.

(**6**) **Pad section**: The Pads can be used to store and trigger Cue Points and Loops, as well as to Samples, and to control STEM Files. The individual function depends on the selected Pad mode as well as on the selected Deck Type. For more information, refer to Pad Section.

(**7**) **Play/Pause**: Starts/stops the playback of the Deck. The button brightly lights up green during playback. For more information, refer to Using Transport Controls.

(**8**) **CUE**: Sets a Cue Point and jumps to it. For more information, refer to Using Transport Controls.

(**9**) **SHIFT**: The **SHIFT** button is a modifier to access secondary functions of control elements.

(**10**) **DECK SELECT buttons**: Allow you to switch between TRAKTOR Decks A and C on the left Deck, and between TRAKTOR Decks B and C on the right Deck. For more information, refer to Switching Deck Focus.

(**11**) **JOG button**: Enables **JOG** mode (Jog Wheel mode) for the Jog Wheel. For more information, refer to Using Jog Wheels in Jog Mode.

(**12**) **TT button**: Enables **TT** mode (turntable mode) for the Jog Wheel. For more information, refer to Using Jog Wheels in Turntable Mode.

(**13**) **GRID button**: Enables **GRID** mode to manually correct the Beatgrid for the current track using the Jog Wheel. For more information, refer to Correcting Beatgrids.

(**14**) **MOVE encoder**: Allows you to jump within the track. When Looping is enabled the **MOVE** Encoder allows you to move the Loop forwards and backwards in the track. Furthermore, it adjusts volume parameters for Samples and STEM parts using **SHIFT**. For more information, refer to Using Transport Controls and Working with Loops.

(**15**) **Multicolor Display**: The multicolor display gives visual feedback about playback times and the Loop settings, and also provides track details such as artist name and track name. For more information, refer to Display Elements for Tracks and STEM Files and Display Elements on a Remix Deck.

(**16**) **LOOP encoder**: Allows you to enable/disable Looping as well as changing the Loop size. Furthermore, it adjusts filter effect parameters for Samples and STEM parts using **SHIFT**. For more information, refer to Working with Loops.

(**17**) **REV button**: Lets the track play reversely in conjunction with Flux mode. When pressing the **REV** button, this automatically enables Flux mode as long as the **REV** button remains depressed. For more information, refer to Using Flux and Reverse Modes.

(**18**) **FLX button**: Enables Flux Mode. For more information, refer to Using Flux and Reverse Modes.

(**19**) **FX Unit**: Each Deck features one FX Unit which can be assigned to any Mixer channel. FX Unit 1 is located on the left Deck, and FX Unit 2 on the right Deck. The FX Units allow you to control the effect parameters in the FX Units in the TRAKTOR software. For more information, refer to FX Unit.

5.1.1. Browse Controls

The Browse controls let you browse the Track Collection to find and load tracks as well as preview tracks and prepare playlists.
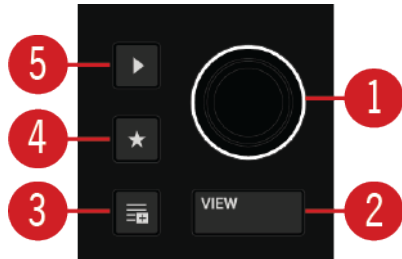
Browse controls.

(**1**) **Browse encoder**: Navigates through the Track Collection for selecting and loading music content or scans within the track when previewing a track on the Preview Player. In SAMPLES mode it selects another Sample in the Sample Slot. For more information, refer to Browsing and Loading and Previewing Tracks in the Browser.

(**2**) **VIEW button**: Maximizes the Browser view in the TRAKTOR software. For more information, refer to Browsing and Loading

(**3**) **Preparation List button**: Assigns a track to the Preparation List. For more information, refer to Adding Tracks to the Preparation List.

(**4**) **Star button**: When this button is held the Browse encoder then selects favorites. For more information, refer to Browsing and Loading

(**5**) **Preview Player**: Loads a track into the Preview Player in TRAKTOR's Browser and plays it back. For more information, refer to Previewing Tracks in the Browser.

5.1.2. Pad Section
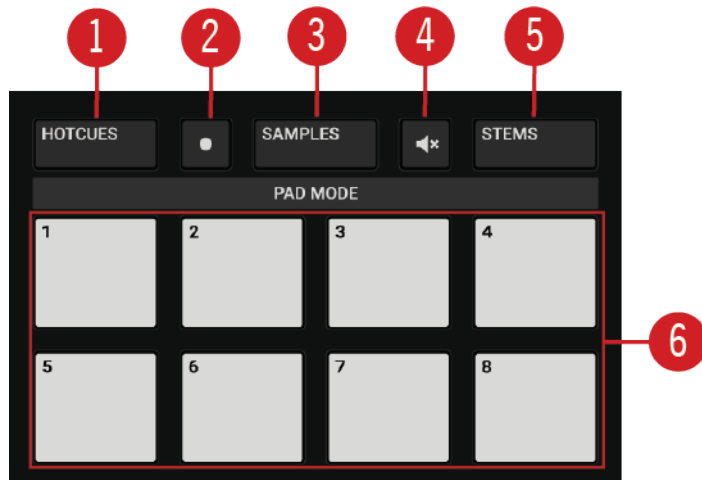
Pad section.

(**1**) **HOTCUES button**: Enables **HOTCUE** mode for the Pads. In this mode, the Pads store and trigger **HOTCUE** markers in a track. On Decks **A** and **B** the button lights up blue whereas on Decks **C** and **D** it lights up orange. **HOTCUE** mode is the default for Track Decks and Stem Decks. For more information, refer to Working with Cue Points and Working with Loops.

> ⚠ **HOTCUE** mode is not available for Remix Decks. When a Remix Deck is focused, the HOTCUE button is disabled.

(**2**) **Record button**: Enables Pattern Recorder on the Remix Deck. With the Pattern Recorder you can record sequences to be played by the Samples. For more information, refer to Using Pattern Recorder.

(**3**) **SAMPLES button**: Enables **SAMPLES** mode. The SAMPLES mode can only be enabled when the underlying Deck is configured as Remix Deck. Otherwise the SAMPLES button remains unlit. For more information, refer to Working with Remix Decks.

(**4**) **Mute button**: Mutes or un-mutes Samples or STEM Parts. For more information, refer to Working with Remix Decks and Working with STEM Decks.

(**5**) **STEMS button**: Accesses the STEM controls on a STEM Deck. Using the Pads, the volumes of the individual Stem tracks in the Stem File can be adjusted and muted. The STEMS button is active only on STEM Decks. For more information, refer to Working with STEM Decks.

(**6**) **PADs**: Depending on the current Pad mode, the eight Pads have individual functions:

- When in **HOTCUES** Mode the Pads store and trigger Cue Points and Loops for Track Decks and STEM Decks.
- When in **SAMPLES** Mode the Pads control the first four SAMPLE Slots of Remix Decks.
- When in **STEMS** Mode the Pads control the volumes of the individual Stem tracks and also mute them.

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5.1.3. Display Elements for Tracks and STEM Files

When the HOTCUES mode or the STEMS mode is enabled, the display contains the following elements:
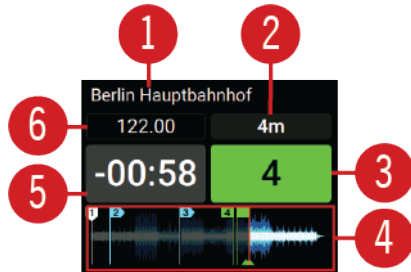
Display elements for tracks and STEM Files.

(**1**) **Track title**: Displays the title of the loaded track.

(**2**) **Key value**: Displays the current key value of the track.

(**3**) **Loop indicator**: Displays the selected Loop size. When a Loop is enabled the Loop indicator is highlighted in green.

(**4**) **Waveform**: Displays the Waveform of the track and shows stored Cue Points as white and blue markers, and stored Loops in green markers. The moving red marker represents the current playhead position.

(**5**) **Remaining Track time**: Displays the time remaining until the track ends.

(**6**) **Current Track Tempo**: Displays the current tempo for the track.

5.1.4. Display Elements on a Remix Deck

When the Deck is a Remix Deck or the SAMPLES mode is enabled, the display contains the following elements:
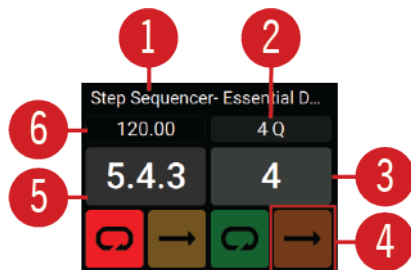
Display elements on a Remix Deck.

(**1**) **Remix Set title**: Displays the title of the loaded Remix Set.

(**2**) **Quantize value**: Displays the Quantize value of the Remix Deck track. If Quantize mode is enabled the field is highlighted in blue.

(**3**) **Loop indicator**: Displays the selected Loop size. When a Loop is enabled the Loop indicator is highlighted in green.

(**4**) **Play Type indicator**: Indicates if the Sample will trigger as a Loop or as a One-shot Sample.

(**5**) **Beat Counter**: Represents the current internal Beat Count position of the Remix Deck. Synchronization and Quantize functions are based on this value.

(**6**) **Remix Deck Tempo**: Displays the current tempo of the Remix Deck.

For more information, refer to Working with Remix Decks.

5.2. Mixer

Sitting in the middle of the TRAKTOR KONTROL S4 controller, the Mixer receives the audio signals coming from Decks. There is one channel for each Deck. The Mixer's purpose is to adjust the relative level of each channel, to control the channels' frequency content, possibly feeding them into the FX Units before sending the overall result to the Master output — and in the end, to generate the mix that is sent to your audience. The Mixer also provides you with a crossfader, which allows you to make seamless transitions between various channels.
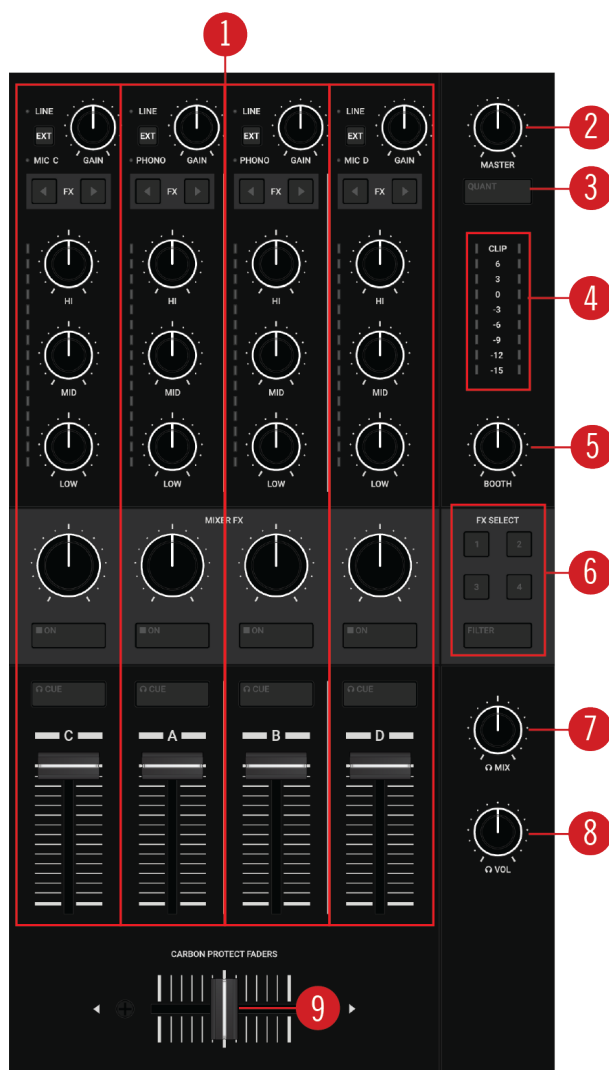
Mixer.

(**1**) **Mixer Channel A** ,**B**, **C**, **D**: Audio Signals coming from TRAKTOR's Decks are fed into the Mixer Channels. The Mixer Channels allow you to adjust the audio signals' volumes and to manipulate the sound. Any Mixer Channel can be individually assigned to FX Units. For more information, refer to Mixer Channel.

(**2**) **MASTER knob**: Adjusts the volume of the MASTER output signal for the audience. For more information, refer to Adjusting Levels.

(**3**) **QUANT** (**Snap**) **button**: Allows you to enable/disable Quantize mode and Snap mode. For more information, refer to Snap Mode and Quantize Mode.

(**4**) **Master Level Meter**: Gives you visual feedback on the current Master Output volume level. The blue LEDs indicate the signal below Headroom area, and the Red LED indicates the signal is clipping. The yellow LEDs indicate the signal is currently in the Headroom area above 0 dB and below +6 dB before it starts clipping.

(**5**) **BOOTH knob**: Adjusts the Volume of the Booth Output Signal for the DJ Monitors. For more information, refer to Adjusting Levels.

(**6**) **MIXER FX SELECT buttons**: Select the MIXER FX to be controlled by the individual MIXER FX controls in the Mixer channels. For more information, refer to Working with Mixer FX.

(**7**) **MIX knob**: Adjusts the signal mix between MASTER Output Signal and the CUE Channel in the headphones. For more information, refer to Using Cue Channel.

(**8**) **VOL knob**: Adjusts the level for the CUE channel. For more information, refer to Using Cue Channel.

(**9**) **Crossfader**: Controls the mix between the Mixer channels' signals assigned to its left and right side. At each crossfader's end, the opposite signals are totally cut. Moving the crossfader gradually fades in and fades out the relevant audio signal in the master output. At the center position, both audio signals are fully audible. For more information, refer to Assigning Mixer Channels to the Crossfader.

5.2.1. Mixer Channel

Any of the four Mixer Channels contain the same control elements but integrate different external sources. Whereas Mixer Channels A and B are equipped with an aditional PHONO pre-amplifier for connecting Turntables, Mixer Channels C an D integrate microphones instead.
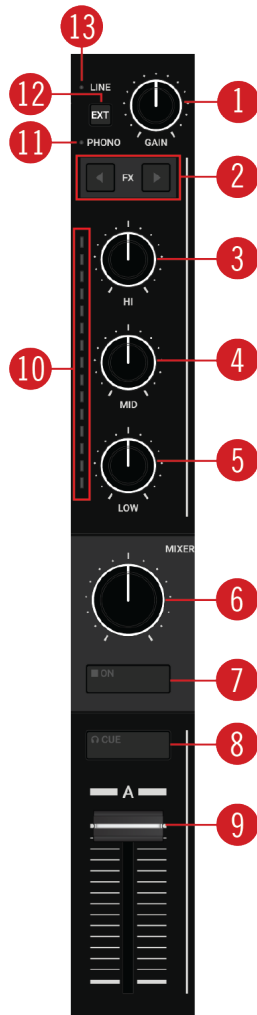
Mixer channel.

(**1**) **GAIN knob**: Adjusts the input level for the incoming signal of the corresponding Deck, before it passes the channel fader. For more information, refer to Adjusting Levels.

(**2**) **FX Assign buttons**: These buttons individually assign the FX Units to the Mixer channel. For more information, refer to Working with FX Units.

(**3**) **HI knob**: Emphasizes or attenuates the high frequency band of the audio signal. For more information, refer to Using the Equalizer.

(**4**) **MID knob**: Emphasizes or attenuates the middle frequency band of the audio signal. For more information, refer to Using the Equalizer.

(**5**) **LOW knob**: Emphasizes or attenuates the low frequency band of the audio signal. For more information, refer to Using the Equalizer.

(**6**) **MIXER FX Amount knob**: The MIXER FX Amount knob controls the amount/ratio of the MIX-ER FX to be applied to the audio signal. In center position the MIXER FX is disabled. For more information, refer to Working with Mixer FX.

(**7**) **MIXER FX ON button**: Enables or disables the MIXER FX for the individual Mixer channel. For more information, refer to Working with Mixer FX.

(**8**) **CUE button**: Routes the audio signal of the Mixer channel into the CUE channel. For more information, refer to Using Cue Channel.

(**9**) **Channel fader**: Adjusts the Mixer channel's level before the audio signal is sent to the cross-fader and **MASTER** volume knob. For more information, refer to Adjusting Levels.

(**10**) **Channel Level Meter**: The Channel Level Meter gives you visual feedback on the current channel volume. The blue LEDs indicate the signal is below Headroom area, The red LED indicates the signal is clipping. The yellow LEDs indicate the signal is currently in the Headroom area above 0 dB and below +6 dB before it starts to clip.

(**11**) **MIC C** or **D** / **PHONO** LED: On Mixer channel **A** and **B**, the **PHONO** LED lights up if the external input for the Mixer channel is set to receive a phono level signal from a turntable. On Mixer channel **C** and **D**, the **MIC** LED lights up if the external input for the Mixer channel is set to receive a microphone signal. For more information, refer to Integrating External Devices.

(**12**) **EXT button**: Selects the source of the incoming signal. For more information, refer to Integrating External Devices.

- On Mixer channel **A** and **B**, either line, Live Input (external), or Phono.
- On Mixer channel **C** and **D**, either line, Live Input (external), or microphone.

(**13**) **LINE LED**: Indicates if the external input for the Mixer channel is set to receive a line level signal, e.g., from a CD player. For more information, refer to Integrating External Devices.

5.3. FX Unit

The FX Units 1 and 2 on your S4 allow you to control the effect parameters selected in the FX Units in the TRAKTOR software. The FX Units can be assigned to any Mixer channel.
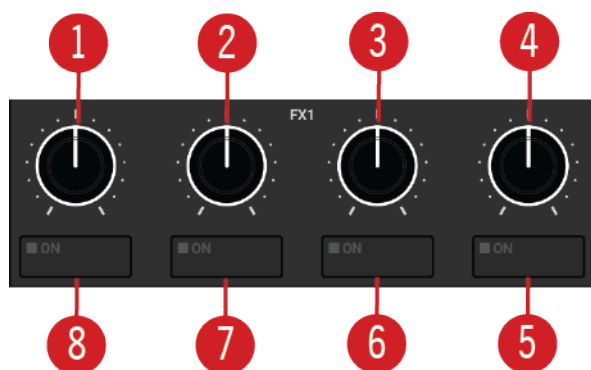
FX Unit 1 controls.

(**1**) - (**4**) **FX knob 1** - **4**: Adjusts the individual effect parameter selected in the FX Unit in the TRAKTOR software.

(**5**) - (**8**) **FX ON button 1** - **4**: Enables or disables the individual effect parameter selected in the FX Unit in the TRAKTOR software.

For more information on using FX Units, refer to Working with FX Units.

5.4. Front Panel View

The front panel hosts controls for making crossfader assignments, and sockets for connecting headphones and a microphone.
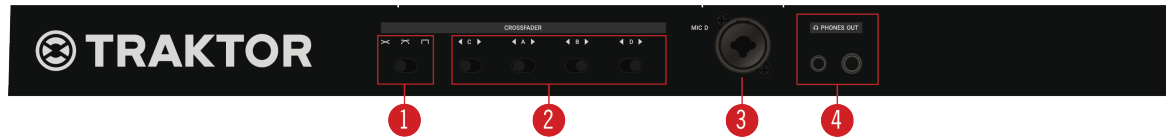
Front panel.

(**1**) **Crossfader Curve selector**: Selects the curve which lets the audio signals fade in and out when moving the crossfader from one side to the other. For more information, refer to Assigning Mixer Channels to the Crossfader.

(**2**) **Crossfader Assignment selectors C**, **A**, **B**, **D**: Assigns the individual Mixer channels to either the left or right crossfader side, or unassigns them when set to center position. For more information, refer to Assigning Mixer Channels to the Crossfader.

(**3**) **MIC D**: Connects a microphone to Mixer Channel D using an XLR cable. For more information on adding microphones, refer to Integrating Microphone.

(**4**) **PHONES OUT 1/8"** and **1/4"**: Connect one or two pairs of headphones. When two pairs of headphones are connected, the maximum headphone volume level is decreased.

5.5. Rear Panel

The rear panel hosts all sockets for connecting the device to the computer, for powering it up, and for connecting external devices.

Rear panel.

(**1**) **MAIN OUT RCA R** / **L**: Connects the S4 to a power amplifier using unbalanced RCA cables.

(**2**) **MAIN OUT XLR R** / **L**: Connects the S4 to a power amplifier using balanced XLR cables.

(**3**) **BOOTH OUT 1/4" R** / **L**: Connects the S4 to a power amplifier for the DJ booth using balanced 1/4" cables.

(**4**) **LINE IN D RCA R** / **L**: Connects a line level audio source, e.g., a CD player to Mixer channel D using RCA cables.

(**5**) **PHONO / LINE IN B RCA R** / **L**: Connects a phono level device, e.g., a turntable or a line level audio source, e.g., a CD player to Mixer channel B using RCA cables.

(**6**) **GND**: The **GND** (ground) screw connects the ground wire of turntables to prevent buzzing in the audio signal.

(**7**) **PHONO / LINE IN A RCA R** / **L**: Connects a phono level device, e.g., a turntable or a line level audio source, e.g., a CD player to Mixer channel A using RCA cables.

(**8**) **LINE IN C RCA R** / **L**: Connects a line level audio source, e.g., a CD player to Mixer channel C using RCA cables.

(**9**) **MIC C**: Connects a microphone to Mixer channel C using a 1/4" connector.

(**10**) **Kensington Lock slot**: Connects a Kensignton Lock to the S4 to help prevent against theft.

(**11**) **USB HUB**: Connects a USB device, e.g., another TRAKTOR controller or a USB-Hub.

(**12**) **USB socket**: Connects your S4 to the computer using the supplied USB cable.

(**13**) **PSU socket**: Connects the supplied Native Instruments Power Supply to the S4.

(**14**) **Power switch**: Switches the S4 on or off.

6. MIXING YOUR FIRST TRACKS

In this section you will learn to mix your first two tracks, using Deck A and Deck B, with the **SYNC** function. For this method, you will not need to use the Jog Wheels or your headphones.

At first you will prepare the Mixer by adjusting the control elements for mixing, from Deck A to B. Then you will load the first track into Deck A, and begin to perform step by step.

6.1. Prerequisites

1. Assign the Mixer channel A to the left crossfader position.
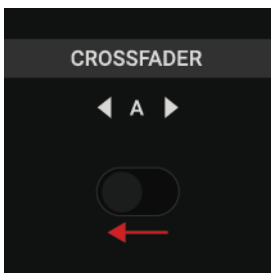
2. Assign the Mixer channel B to the right crossfader position.
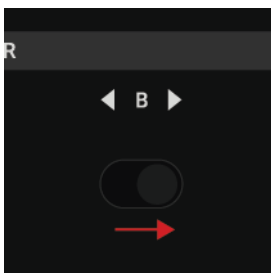
3. Set the crossfader to the left-most position.
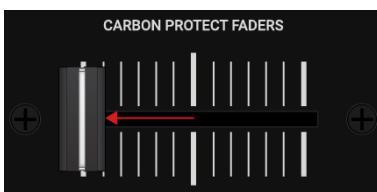
4. Set channel fader A and channel fader B to maximum position.
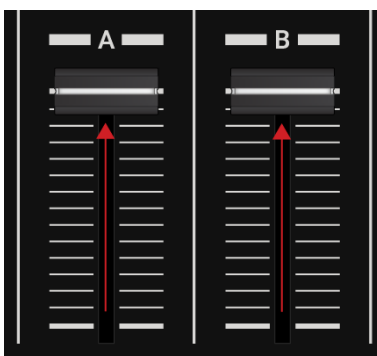
5. Set the **MASTER** knob to center position.
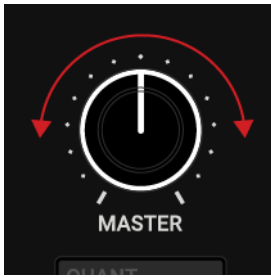
6.   Set the **BOOTH** knob to center position.

7.   Set the volume of your audio system or active speakers to minimum level.

6.2. Loading the First Track into Deck A

1.   Set the left S4 Deck's focus to Deck **A** by pressing the **DECK SELECT** button **A**.
   The **DECK SELECT** button **A** and the Deck LEDs light up blue.

2.   Press the **VIEW** button to open the Browser view in the software.
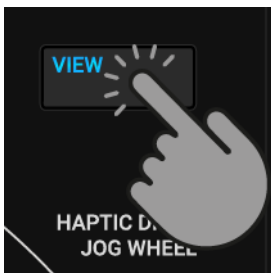
3.   Turn the Browse encoder to select one of your tracks, or a demo track, e.g., **Berlin Haupt-bahnhof** by Native Instruments.
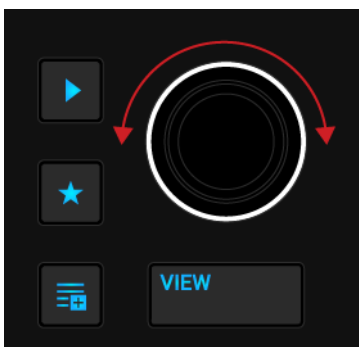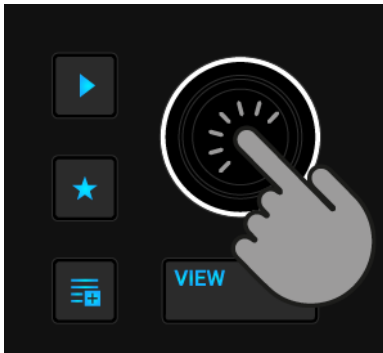

4.   Press the Browse encoder to load the track into the Deck.

TRAKTOR now analyzes the track to determine its tempo, and to create the Beatgrid and the Waveform.

5. Press the **VIEW** button again to close the Browser View.
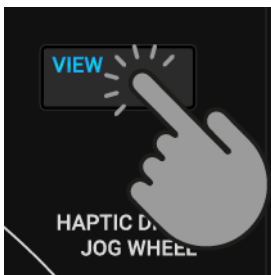
6.3. Starting Playback of Deck A

To start playback on Deck A:

1. Press the Play/Pause button on the left S4 Deck.
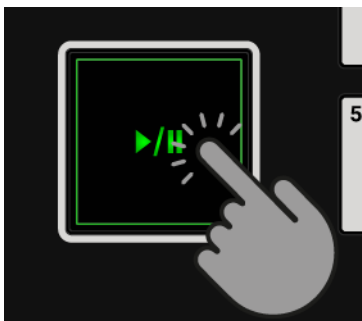
The Waveform starts moving and the Channel Level Meter LEDs in the left Mixer channel **A** illuminate.

2. Slowly increase the volume of your audio system or active speakers to a moderate listening level.
   You now hear the audio of the track in your speakers.

6.4. Loading the Second Track into Deck B

The next track you want to mix must have a similar tempo like the playing track.

1. Set the right S4 Deck's focus to Deck **B** by pressing the DECK SELECT **B** button.
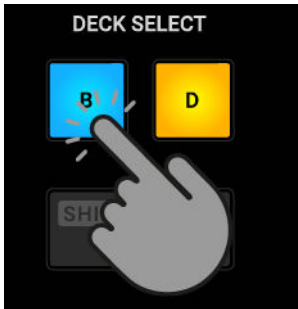
    The **DECK SELECT** button **B** and the Deck LEDs light up blue.

2. Press the **VIEW** button to open the Browse View in the software.
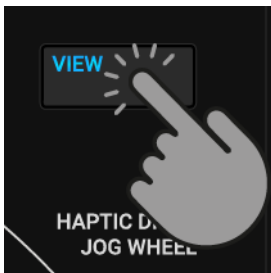
3. Turn the Browse encoder to select one of your tracks, or a demo track, e.g., **Lisa** by Native Instruments.
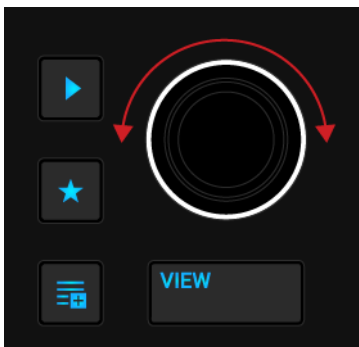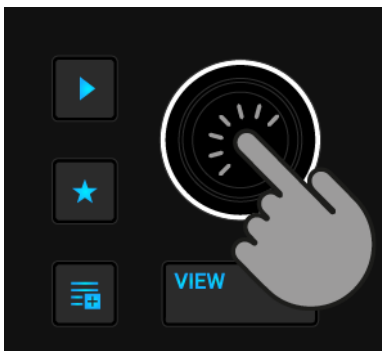
4. Press the Browse encoder to load the track into the Deck.

    TRAKTOR now analyzes the Track to determine its tempo, and to create the Beatgrid and the Waveform.

5. Press the **VIEW** button again to close the Browser View.
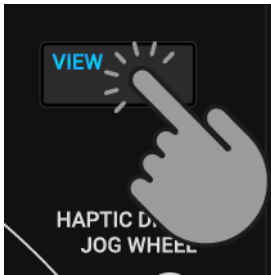
6.5. Syncing the Track Tempos

In order to sync the tempos of both tracks:

• Press the **SYNC** (**Lock**) button on the right S4 Deck.
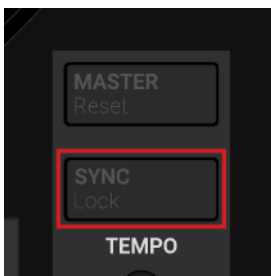
The tempos of both tracks are now synced, indicated by the equal tempo value in the software's Deck Header. The **SYNC** (**Lock**) button lights up on the right S4 Deck.

6.6. Starting Playback of the Second Track

When the track in Deck A is almost over:

• Press the Play/Pause button on the right S4 Deck to start playback of the track in Deck **B**.
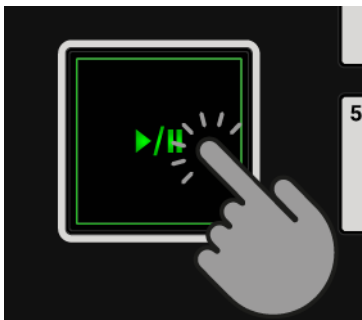
The Waveform starts moving and the Channel Volume Meter LEDs in Mixer channel **B** illuminate. The tracks in Deck **A** and Deck **B** play in sync.

6.7. Mixing in the Audio Signal

You can now mix the audio signal of Mixer channel **B** into the Master signal:

1. Move the crossfader slowly towards center position and hold for a moment.
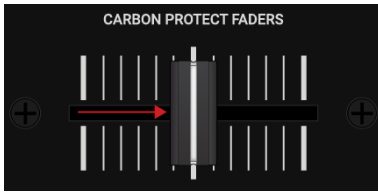
The audio signal of the track in Mixer channel **B** fades into the Master signal.

2. While the track in Deck **A** reaches its end, slowly move the crossfader towards the right-most position.
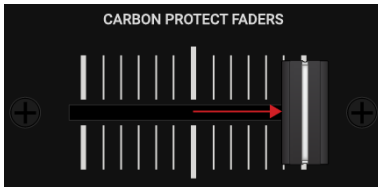
The audio signal of Mixer channel **A** slowly fades out of the Master signal. Only Mixer channel **B** is now audible.

When the playback of Deck **A** ends, Deck **B** automatically becomes the Tempo Master and is ready to transition to the next track.

7. TUTORIALS

The tutorials in this section introduces you the several functions and features of the S4. The following list provides you with an overview of the tutorials including cross-references:

- **Browsing and Loading Tracks**: By having your music imported in TRAKTOR, you can use the Browse controls on the S4 to find tracks for your mix. When loading a track into a Deck, TRAKTOR starts to analyze the track, calculating its exact tempo and key information. From this analysis, TRAKTOR creates the Beatgrid and the Waveform. This information is then stored for the track in the Track Collection. For more information, refer to Browsing and Loading.

- **Controlling Track Playback**: The S4 lets you control the playback of your tracks using transport controls and the Jog Wheels which can be operated several modes. For more information, refer to Controlling Playback, Using Jog Wheels in Jog Mode, and Using Jog Wheels in Turntable Mode.

- **Adjusting the Crossfader**: You can determine which Mixer channel is to be routed to the crossfader and set the crossfader curve accordingly. For more information, refer to Assigning Mixer Channels to the Crossfader.

- **Switching Decks Focus**: Each S4 Deck controls two TRAKTOR Decks. The Deck Select buttons determine which of the Decks is in focus. For more information, refer to Switching Deck Focus.

- **Adjusting Levels** and **Using the Equalizer**: The Mixer lets you adjust volumes of your tracks and tweak the frequency bands of the audio signals using the equalizer. For more information, refer to Adjusting Levels and Using the Equalizer.

- **Adjusting Tempo**: You can use the TEMPO faders on each Deck to adjust the tempo manually. The TEMPO faders can be operated in two modes. For more information, refer to Adjusting Tempo.

- **Locking Key of Tracks**: When adjusting the tempo of a track, the pitch of the key changes accordingly. Using Keylock you can adjust the tempo without altering the current pitch or vice-versa. For more information, refer to Locking Key for Tracks.

- **Working with Mixer FX**: You can modulate the sound of your tracks using Mixer FX and the FX Units. For more information, refer to Working with Mixer FX, and Working with FX Units.

- **Working with Cue Points and Loops**: By triggering stored Hotcues from the Pads, you are able to jump to specific sections within the track. For more information, refer to Working with Cue Points. To extend the playback of tracks or to loop a specific part in a track, you can make use of the S4's looping functions. For more information, refer to Working with Loops.

- **Snap Mode and Quantize Mode**: In order to precisely place Cue Points, Loops and jumps within tracks without loosing the sync, use Snap mode and Quantize mode. For more information, refer to Snap Mode and Quantize Mode.

- **Using Flux and Reverse mode**: Flux mode and Reverse mode allow you to create a parallel playhead when performing with Hotcues and Loops. The parallel playhead ensures you don't lose the original track playhead position in the track. For more information, refer to Using Flux and Reverse Modes.

- **Previewing Tracks**: The Preview Player in the Browser lets you conveniently preview tracks without loading them into the Deck. The Headphones CUE channel and its controls on the Mixer enables you also to preview your tracks and your sound adjustments before you transition to

the next track. For more information, refer Previewing Tracks in the Browser, and Using Cue Channel.

- **Working with the Preparation List**: The Preparation List in TRAKTOR's Browser lets you to prepare for your next mix. The S4 has a dedicated control so you can easily add tracks to the list. For more information, refer to Adding Tracks to the Preparation List.

- **Working with Remix Decks**: The Remix Decks allow you to playback Samples and add them to your mix. Furthermore, you can enable the Pattern Recorder for recording sequences to be played by the Samples. For more information, refer to Working with Remix Decks.

- **Working with STEM Decks**: The STEM Decks let you playback STEM Files which include four individual STEM Parts for musical elements. The STEM Deck gives you the control over the STEM Parts. For more information, refer to Working with STEM Decks.

- **Correcting Beatgrids of Tracks**: If the SYNC function is enabled but the tracks playing are not synced, it is likely that the Beatgrids of the tracks are not calculated correctly. The S4 allows you correct Beatgrids manually. For more information, refer to Correcting Beatgrids.

7.1. Browsing and Loading

The S4 lets you conveniently browse for your music in the Track Collection in TRAKTOR. Using the Browse controls on the Decks, you can quickly open the Browser view, navigate in the Track List, and select Favorite folders and Playlists for loading your desired tracks.

Maximizing and Minimizing Browser View

Using the Browse controls you can instantly browse for your music in TRAKTOR. However, you can maximize Browser view in TRAKTOR for a better overview:
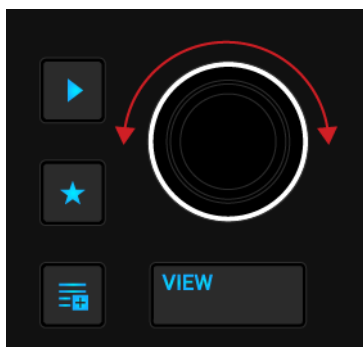
1. Press the **VIEW** button.
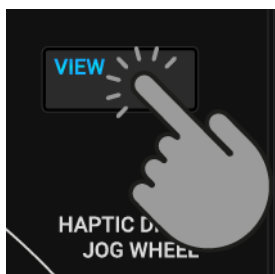
   The TRAKTOR Layout switches to Browser view.
2. Press the **VIEW** button again to close the Browser view in TRAKTOR.
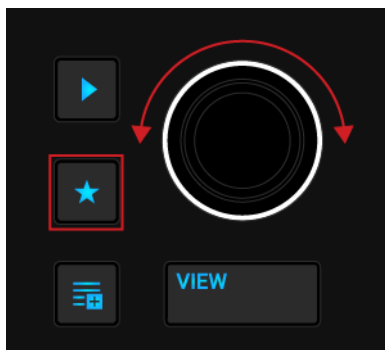
Finding a Track

On the Deck you want load a track:

1. Turn the Browse encoder to scroll through the Track List for selecting a track.

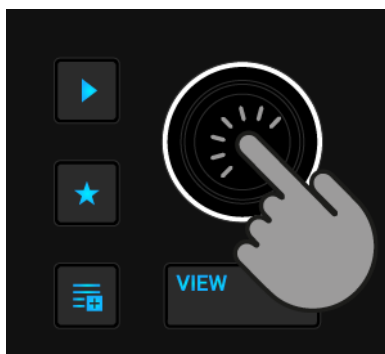2. Press and hold the **Star** button + turn the Browse encoder to select another favorite folder.

The Track List shows the content according to the selected folder.

Loading the Track into the Deck

To load the selected track into the Deck:

• Press the Browse encoder.

The track is loaded into the Deck. Depending on the loaded track, the Deck Type switches accordingly.

If the track is loaded into the Deck for the first time, TRAKTOR starts to analyze the track to determine its tempo, and then calculate the Beatgrid and Waveform. The moment of the analysis can be switched to another context in the Preferences.

7.2. Controlling Playback

The Transport Controls and the Jog Wheels on the S4 let you control the playback of tracks. This section describes the several interactions you can perform to control the playing track, as well as previewing tracks for the next transition in the CUE channel.

7.2.1. Using Transport Controls

The Transport Controls and the Jog Wheels on the S4 let you control the playback behavior of tracks. This section describes the several interactions you can perform to control the playing track, as well as previewing tracks for the next transition in the CUE channel.

Starting/Pausing Playback

To start the playback of the loaded track:

- Press the Play/Pause button.
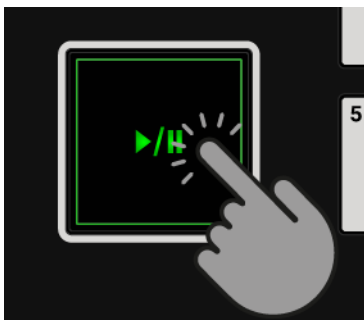
To pause the playback:

- Press the Play/Pause button again.

Cueing the Track using the Cue Button

The **CUE** button has several functions:

- When pressing and holding the **CUE** button, the playback continues from the position of the floating Cue Point as long as the **CUE** button remains depressed.
- When releasing the **CUE** button, the playback position jumps back to the Cue Point and playback stops immediately.
- When pressing and holding the **CUE** button + pressing the Play/Pause button, the playback continues as normal.

7.2.2. Using Jog Wheels in Jog Mode

In this you are provided with the several interactions you can perform with the Jog Wheels when used in **JOG** mode.

Enabling Jog Mode

To enable JOG mode:

- Press the **JOG** button on the Deck.

The **JOG** button brightly lights up in the color of the focused Deck.

Tempo Bending and Nudging

During you can use the Jog Wheel to Bend or nudge the tempo temporarily. This is used to manually correct the sync of tracks.

To nudge the Deck tempo:

- Touch the Jog Wheel's outer rim and spin it clockwise to temporarily raise the Deck tempo. When you stop spinning the rim, the Deck returns to its original tempo.
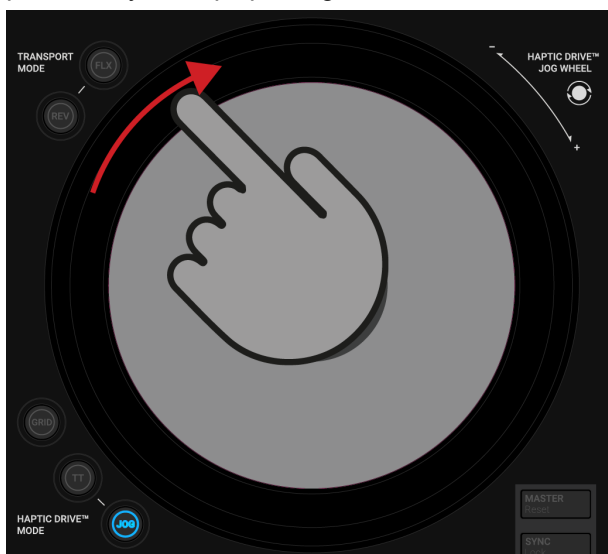

To bend the Deck tempo:

- Touch the Jog Wheel's outer rim and spin it counter-clockwise to temporarily lower the Deck tempo. When you stop spinning the rim, the Deck returns to its original tempo.
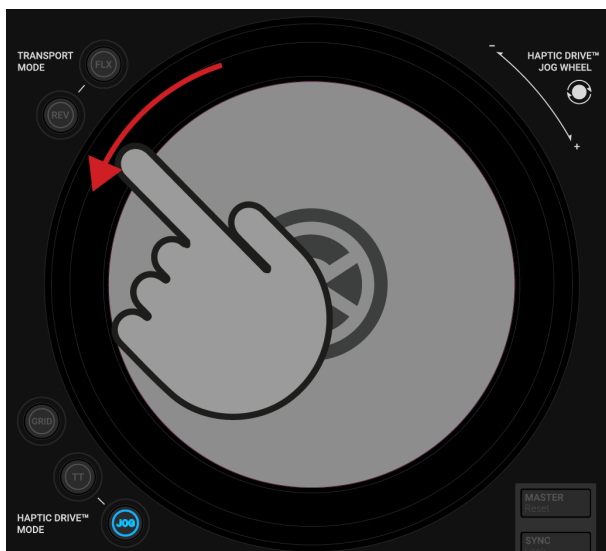
> By setting the option Preferences, you will then feel ticks in the Jog Wheel when spinning it using its outer rim, during playback in **JOG** mode. For more information, refer to Preferences

Cueing and Scratching

During Deck playback you can hold the playback using the Jog Wheel for cueing a beat or for scratching:

1. Touch and hold the top plate of the Jog Wheel.
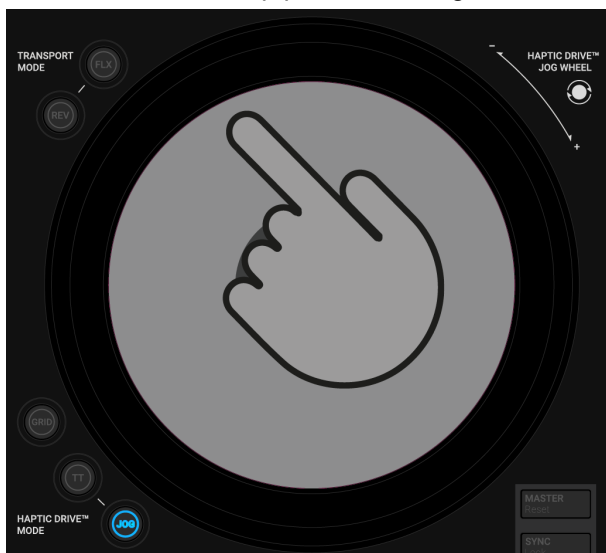
   The playback holds. When you release the top plate, the Deck returns to its previous playback state (playing or paused).

2. While holding the top plate, spin the Jog Wheel clockwise or counter-clockwise for cueing a beat.
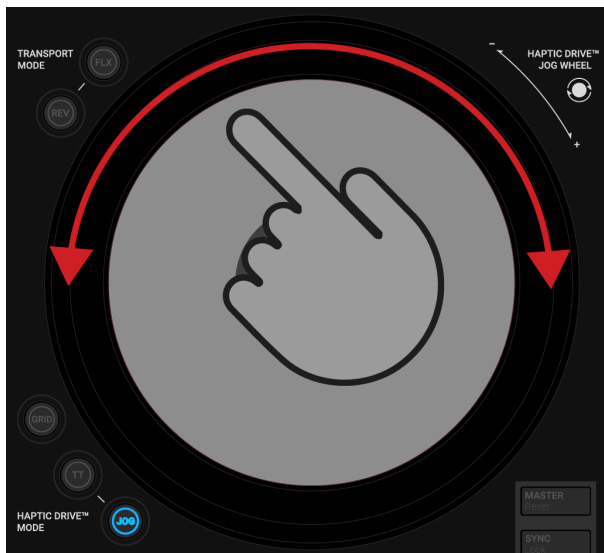
3.   While holding the top plate, quickly spin the Jog wheel back and for a scratch performance.

> 💬 By enabling the option **Enable** Preferences, you will then feel a haptic feedback in the Jog Wheel when Cue Points and Loop markers using the top plate. For more information, refer to Preferences

Fast Seeking

Independently from the playback state, you can use the Jog Wheel for seeking in the track:

1.   Press and hold **SHIFT** to access the secondary S4 functions.
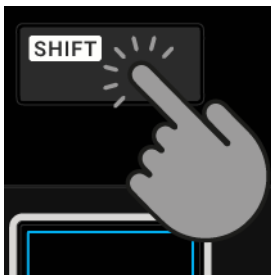
2.   While the Jog Wheel clockwise or to fast seek within the track.
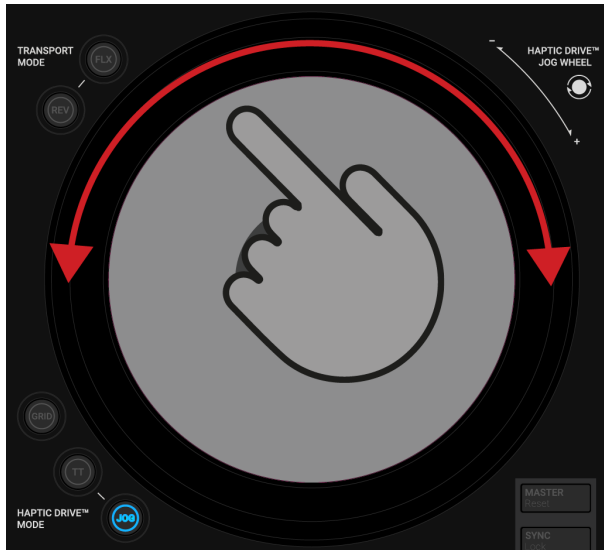
Adjusting the Jog Wheel Spinning Tension

The tension for the Jog Wheel when spinning can be adjusted:

1. Press and hold the **JOG** button + turn the Jog Wheel clockwise to raise the tension.
   The tension of the Jog Wheel raises.
2. Press and hold the **JOG** button + turn the Jog Wheel counter-clockwise to loosen the tension.
   The tension of the Jog Wheel becomes loose.
3. Release the **JOG** button at the desired tension.

You can adjust the tension also in the Preferences.

7.2.3. Using Jog Wheels in Turntable Mode

In **TT** mode (Turntable mode) the Jog Wheels behave like conventional DJ turntables. When the **TT** mode is enabled, the Jog Wheel will rotate during Deck playback.

This section introduces you the several interactions you can perform with the Jog Wheels when used in Turntable mode.

In the Preferences you can adjust the Base speed for the Jog wheels. For more information, refer to Preferences.

Enabling Turntable Mode

To enable Turntable mode:

• Press the **TT** button on the Deck.
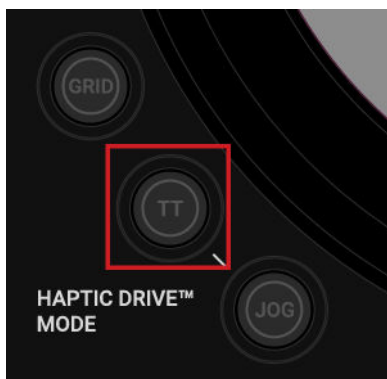
The **TT** button brightly lights up in the color of the focused Deck.

Tempo Bending and Nudging

During Deck playback you can use the Jog Wheel to temporarily bend or to nudge the Deck tempo. This is used when syncing tracks manually.

To nudge the Deck tempo:

- Touch the Jog Wheel's outer rim and spin it clockwise to temporarily raise the Deck tempo. When you stop spinning the rim, the Jog Wheel and the Deck returns to original tempo.
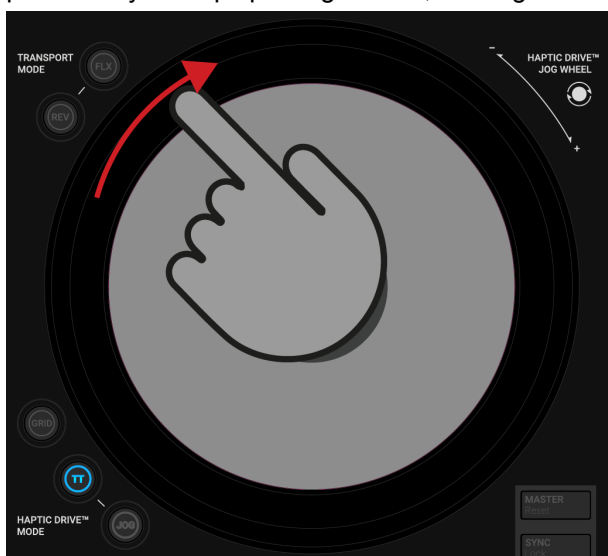
To bend the Deck tempo:

- Slightly touch the Jog Wheel's outer rim to temporarily lower the rotation tempo and the Deck tempo. When you stop touching the rim, the Jog Wheel and the Deck return to original tempo.

Cueing, Seeking and Scratching

During Deck playback you can hold the playback using the Jog Wheel for cueing a beat or scratching:

1. Touch and hold the top plate of the Jog Wheel.

The Jog Wheel stops to rotate and and the playback holds.

2. While holding the top plate, spin the jog wheel clockwise or counter-clockwise to cue a beat or when seeking in the track.

3. While holding the top plate, quickly spin the Jog Wheel back and fourth for scratching the track.

   When you release the top plate, the Jog Wheel continues to rotate and the Deck playback continues.

> By enabling the option **Enable Haptic Hotcues** in the Preferences, you will then feel a haptic feedback in the Jog Wheel when cuing Cue Points and Loop markers using the top plate. For more information, refer to Preferences.

7.3. Assigning Mixer Channels to the Crossfader

The crossfader is used for making transitions between the Mixer channel signals. Any mixer channel can be assigned to either crossfader side as well as being un-assigned. If you do not intend to use the crossfader, we recommend to unassign the Mixer channels from the crossfader to prevent accidental usage in a live situation.

Furthermore, you can determine the fading behavior for the audio signals when moving the crossfader.

Assigning Mixer Channels

For any Mixer channel there is a crossfader assign selector on the front panel.

To assign the Mixer channel to the left crossfader side:

- Set the crossfader assign selector for the corresponding Mixer channel to the left.
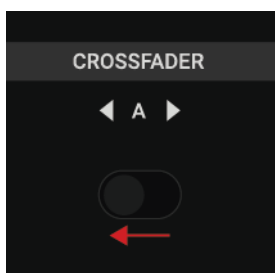
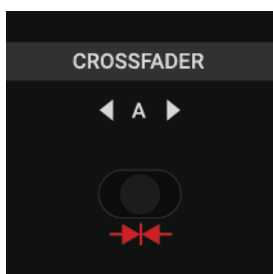To assign the Mixer channel to the right crossfader side:

- Set the crossfader assign selector for the corresponding Mixer channel to the right.
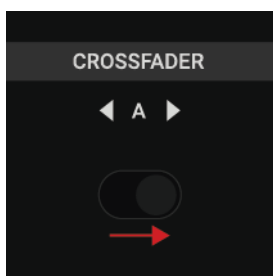
Unassigning Mixer Channels

To unassign the Mixer channel from the crossfader:

- Set the crossfader assign selector for the corresponding Mixer channel to the center position.
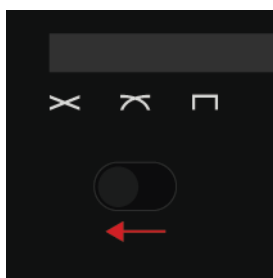

7.3.1. Setting the Crossfader Curve

The fading behavior of the crossfader is determined by the crossfader curve selector on the front panel. You can set it to the positions constant, smooth, and sharp.

- **Constant**: With this setting, moving the crossfader allows the levels of the Mixer channel signals to be raised and lowered constantly.
- **Smooth**: With this setting, moving the crossfader enables the levels of the Mixer channel signals to be raised and lowered smoothly.
- **Sharp**: With this setting, moving the crossfader lets the level of the other Mixer channel signal immediately raise to full volume. Both signals are audible in full volume when the crossfader is placed at any position between the crossfader ends.
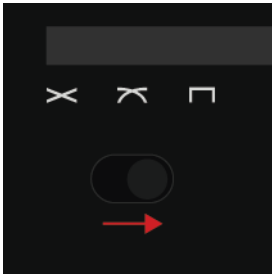
If you want the crossfader to use the constant curve:

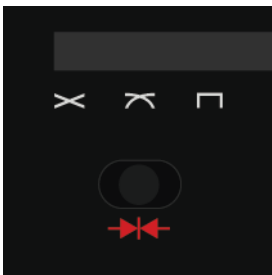- Set the crossfader curve selector to the left.

If you want the crossfader to use the sharp curve:

- Set the crossfader curve selector to the right.

If you want the crossfader to use the smooth curve:

- Set the crossfader curve selector to the center position.

7.4. Adjusting Levels

When mixing tracks you need to make sure that the levels of both tracks are at the same level for flawless transitions. But also, you need to make sure the signals are to loud neither to silent to gain the best possible audio quality. For this, you can define the level for the incoming audio signals into the Mixer channel on the one side, and you can define the level for the outgoing signals send to the MASTER output on the other side.

Adjusting Levels for Incoming Audio Signals

The **GAIN** knobs in any Mixer channel determines the level for the incoming audio signal. When adjusting the levels the Channel Volume Meter visually indicates the current level.

To adjust the level for the incoming audio signal in the Mixer channel:

- Turn the individual **GAIN** knob clockwise-or counter-clockwise so that the incoming level does not exceed the Headroom area reflected by the yellow LEDs of the Channel Volume Meter.
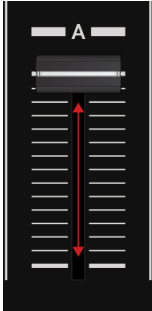

Adjusting Outgoing Mixer Channel Levels

The channel fader in a Mixer channel limits the maximum level sent from the Mixer channel to the MASTER output.

To adjust the outgoing level of the Mixer channels:

- Move the channel faders up or down.

 The outgoing level changes accordingly. When the channel fader is set to its maximum posi-
 tion, the outgoing signal level equals the level of the incoming signal.

to the you can also use the channel faders to make transitions between tracks.

Adjusting the Master Output Level

The MASTER Output stage receives the signals from the Mixer channels. The MASTER Output
level is determined by the **MASTER** knob.

To adjust the MASTER Output level:

- Turn the **MASTER** knob clockwise or counter-clockwise.
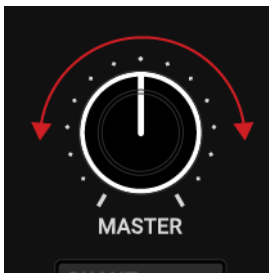
 The MASTER Output signal adjusts accordingly

Adjusting the Booth Output Level

The Booth Output stage receives the same signals from the Mixer channels like the **MASTER** out-
put stage. The **BOOTH** output level can be adjusted by using the **BOOTH** knob:

- Turn the **BOOTH** knob clockwise or counter-clockwise.
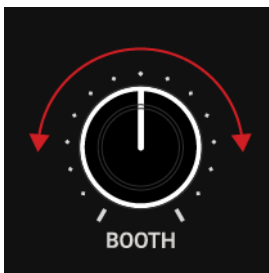
 The outgoing BOOTH signal adjusts accordingly.

> ⚠️ To avoid damaging your ears, always watch the listening level of the connected speakers or power amplifier, and set it to a comfortable listening level.

7.5. Using the Equalizer

One common technique is to take out the bass frequency of one track in order to let the bass of the other track dominate the mix. Equalizers are also great creative tools, and can be used to slightly adjust certain frequencies in order to highlight a specific part, i.e., attenuating vocals or a lead line.

The **EQ** knobs adjust the high, middle, or low frequencies in the audio signal.

Taking out Frequency Bands of the Audio Signal

To take out frequency bands of the audio signal:

- Turn the individual **EQ** knob counter-clockwise to take out the corresponding frequency band.
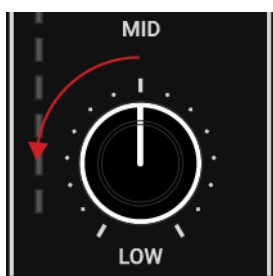
Turning the **EQ** knob entirely counter-clockwise would kill/mute the individual frequency band from the audio signal.

> 💬 Taking out frequencies can avoid clipping that can easily occur when two tracks play together with full volume.

Attenuating Frequency Bands in the Audio Signal

To attenuate frequency bands of the audio signal:

- Turn the individual **EQ** knob clockwise to attenuate the corresponding frequency band.

Using the equalizer while cueing a track can support manual tempo alignment for tracks.

7.6. Using Cue Channel

You can use the CUE channel on the Mixer to preview and tracks in the headphones. Any Mixer channel is equipped with a CUE button to route the audio signal into the CUE channel. The **MIX** and **VOL** knobs are used for determining the level for the **CUE** channel, as well as the ratio between the cued signal and the master signal.

Routing Audio Signals into the Cue Channel

To route the audio signal from Mixer channels into the CUE channel:

- Press any **CUE** button in the Mixer channel.
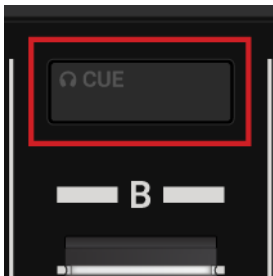
    The audio signal is audible in the CUE channel.

You can route the audio signals of all Mixer channels into the CUE channel at once.

Adjusting the Ratio between the Cue-Mix Signal

In the CUE channel, the **MIX** knob lets you determine the ratio between the cued signal and the master signal.

1. Turn the **MIX** knob clockwise to let the MASTER signal dominate.
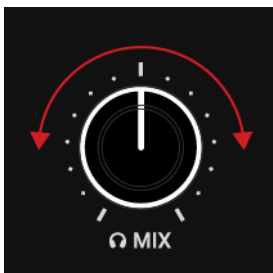
    When you turn the **MIX** knob entirely clockwise, you will only hear the MASTER signal in the headphones.
2. Turn the **MIX** knob counter-clockwise to introduce the Mixer channel signal.
    When you turn the **MIX** knob entirely counter-clockwise, you will only hear the Mixer channel signal in the headphones.

Adjusting the Cue Channel Level

To adjust the Cue channel level:

- Turn the **VOL** knob clockwise or counter-clockwise to increase or to decrease the CUE channel level, respectively.

7.7. Adjusting Tempo

The Tempo of a track can be adjusted by using the automatic Deck synchronization function and the TEMPO fader. When using the TEMPO fader the resulting effect depends on several factors:

- When using the SYNC function, changing the Tempo by moving the TEMPO fader only works on the Deck assigned to Tempo Master. Moving the TEMPO fader on the synced Deck has no effect.
- When the TEMPO fader is locked on the Deck, moving the TEMPO fader has no effect.
- The TEMPO faders can operated in two different modes - in **Absolute** By default, the TEMPO faders operate in Relative mode.
  - **Relative** In this mode, each TEMPO fader on your S4 affects the Tempo fader of the software Deck relatively to its current position, even if this position does not match the position of the TEMPO fader on your S4. This notably resolves possible conflicts between the Tempo fader and the Deck synchronization.
  - **Absolute** In this mode, whenever you move the TEMPO fader on your S4, its position is transmitted 1:1 to the Tempo fader of the software Deck — no matter what the current position of the Tempo fader in the software is. In , the software Deck's tempo always matches the Tempo fader position on your S4, unless you have somehow changed the software Deck's tempo.

The TEMPO fader mode can be selected in the Preferences. For more information, refer to Preferences

Adjusting Tempo

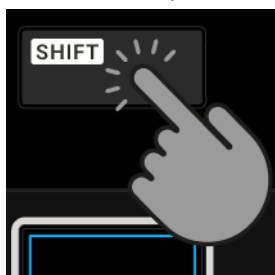To change the tempo on a Deck:

- Move the TEMPO fader up or down.
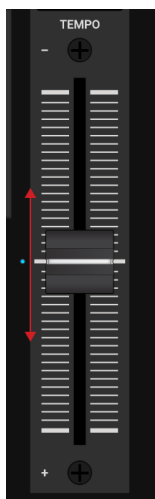
The track tempo decreases or increases, respectively. The key the track changes according-ly.
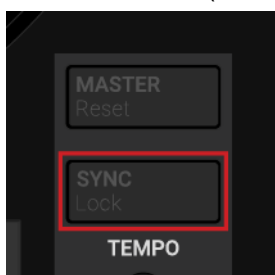
Locking Tempo Fader

To prevent accidental tempo changes you can lock the TEMPO fader:

1. On the Deck, press and hold **SHIFT** to access the secondary Deck controls.

2. While the **SYNC** (**Lock**) button.

The TEMPO fader is locked, indicated by the red TEMPO Fader LED. Moving the TEMPO Fader will have no effect.

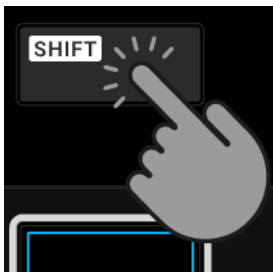3. To unlock the TEMPO fader, repeat the aforementioned steps.

> ⚠ When unlocking a TEMPO fader that is operated in Absolute Mode, the tempo for that Deck will immediately change to the value reflected by the current TEMPO Fad-er position.
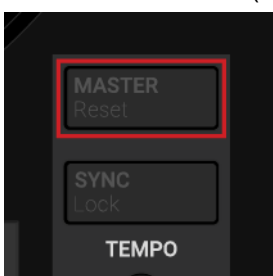
Resetting Relative Tempo Fader Position

When the TEMPO fader position in the software Deck does not match the TEMPO fader position on the S4 Deck, you can reset the relative TEMPO Fader position on the S4:

1. On the S4 Deck, press and hold **SHIFT** to access the secondary Deck controls.

2. While the **MASTER** (**Reset**) button.

   The TEMPO fader position in the software now reflects the TEMPO fader position of the S4 Deck.

⚠ When resetting the TEMPO fader that is operated in Absolute Mode, the tempo for that Deck will immediately change to the value reflected by the current Tempo Fader position.

Syncing Deck Tempo to Tempo Master using Sync

You can sync the Deck tempo to the Tempo Master:

• Press the **SYNC** (**Lock**) button to sync the Deck.
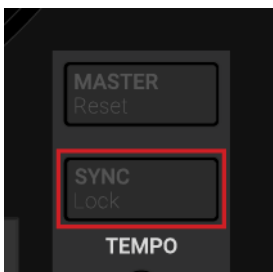
    The Deck tempo is now synced to the Tempo Master. The button brightly lights up blue.

7.8. Locking Key for Tracks

When synchronizing tracks, you alter their tempos and, consequently, their pitches (or keys). Slowing down a track will cause its pitch to drop while speeding up the track will cause its pitch to rise. This is not problematic for small tempo adjustments. But when the tempo is changed more drastically, the resulting pitch shift might sound unnatural - especially for vocals.

To avoid this, you can use the Keylock function that uncouples the pitch (key) and the tempo (BPM) of a track. This means if the you lock the key of a track at the original tempo, and you then drag the TEMPO fader up or down, the the tempo changes but the key remains at its original level:
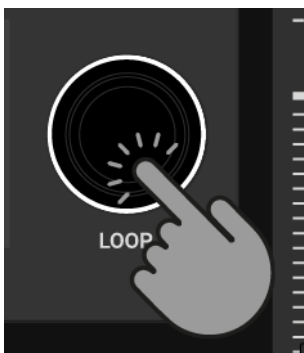
Enabling Keylock for the Track

To lock the key for a track:

1. Load a track into any Deck.
2. Set the TEMPO fader to the original tempo position.
3. Press and hold **SHIFT** to access the secondary functions.
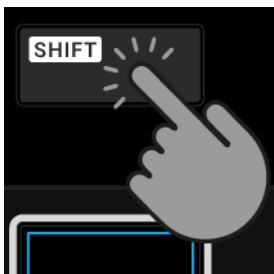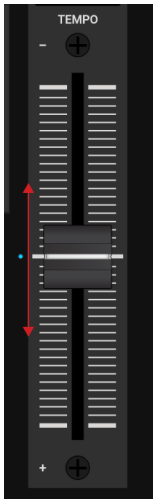

4. While holding **SHIFT**, press the **LOOP** encoder on the Deck to enable Keylock for the track.

   The Keylock field is highlighted in the display.

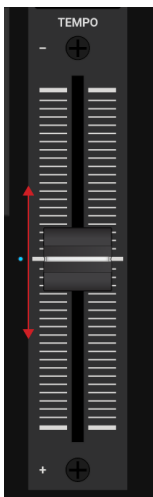5. Move the TEMPO fader up or down to change the tempo.

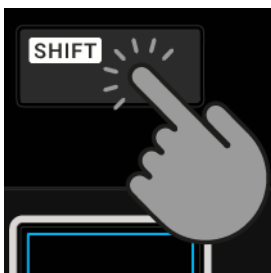The tempo changes but the key remains at its original pitch.

Adjusting the Key without Changing Tempo

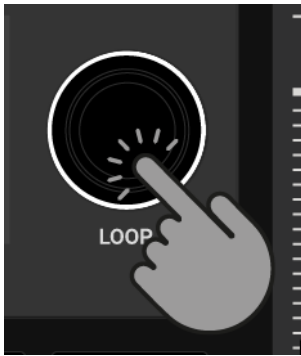To change the pitch without changing the tempo of a track:

1. Move the TEMPO fader up or down to set the desired tempo.

2. Press and hold **SHIFT** to access the secondary functions.
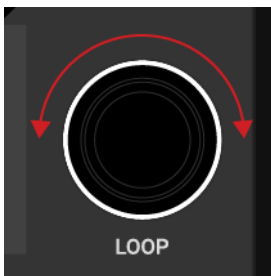
3. While holding **SHIFT**, press the **LOOP** encoder on the Deck to enable Keylock for the track.

The Keylock field is highlighted in the display.

4. While holding **SHIFT**, turn the **LOOP** encoder clockwise to shift the key up. Turn the **LOOP** encoder counter-clockwise to shift the key down.

The key changes accordingly but the tempo remains the same.

7.9. Working with Cue Points

Starting from a particular point in a track (for mixing, triggering etc.) is called "cueing". The S4 enables you to set points for cueing, enabling you to directly jump to specific positions — Cue Points
 You can store Cue Points as Hotcues using the Pads on the Deck. This allows instant access to your Cue Points.

Enabling Hotcues Mode

In order to work with Cue Points you need to ensure you are in HOTCUES mode:

• Press the button to enable HOTCUES mode for the Deck.
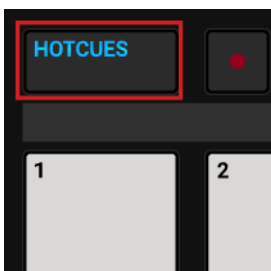
Storing Cue Points on Hotcue Buttons

To store a Cue Point on a Hotcue button.

- At the desired position in the track, press a Pad.
  The Cue Point is set at the current playback position in the track and stored as Hotcue on the Pad. This Pad lights up blue.

Triggering Cue Points on a Playing Deck

To trigger Cue Points on a playing Deck:

- Press a Pad.
  The playback position jumps to the stored Cue Point and playback continues.

Triggering Cue Points on a Stopped Deck

On a stopped Deck, triggering Cue Points result in a different playback behavior:

- When pressing and holding a Pad, the playback continues from the position of the stored Cue point as long as the Pad is kept depressed.
- When releasing the Pad, the playback position jumps back to the Cue Point and playback stops immediately.
- When pressing and holding a Pad + pressing the Play/Pause button, the playback continues as normal.

Removing Cue Points

To remove a Cue Point from the track and so the Hotcue:

- Press **SHIFT** + press a Pad.
  The Hotcue is removed and the Cue Point is deleted from the track. The Pad is now unlit.

7.10. Working with Loops

In you will learn how to play with Loops on the S4. A Loop is a snippet of audio that repeats (loops). Loops are used as tools for remixing parts of a can be used to extend track transitions. The S4 enables you to store Loops as Hotcues using the Pads on the Deck like Cue Points. This allows instant access to your most important Loops.

Enabling Hotcues Mode

In order to store and work with Loops you need to ensure you are in HOTCUES mode:
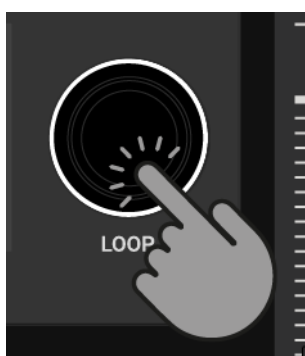
- Press to enable HOTCUES mode for the Deck.
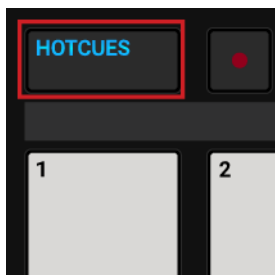
Enabling a Loop

In order to enable a Loop:

1. Press the **LOOP** encoder.

   The playback is looping by the pre-defined Loop size. The Loop appears as the green area in the Waveform.
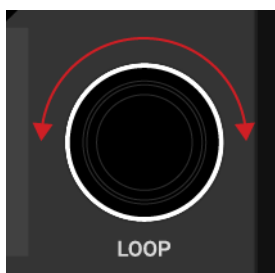

2. To disable the Loop, press the **LOOP** encoder again.
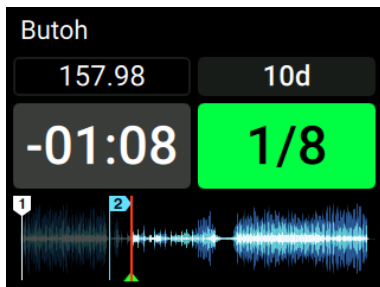   The playback continues.

Changing the Loop Size

You can instantly change the size of an enabled or disabled Loop:

- Turn the **LOOP** encoder clockwise or counter-clockwise.

The Loop size for the enabled Loop instantly changes by the value displayed in the Loop Control bar.

If there is no Loop enabled, turning the **LOOP** encoder only predefines the Loop size.

Storing Loop

To store a Loop:

1. Enable a Loop.
2. Press an unlit Pad.
   The Loop is stored as a Hotcue. The Pad lights up green.

Triggering Stored Loop

To trigger a stored Loop:

- Press a Pad.
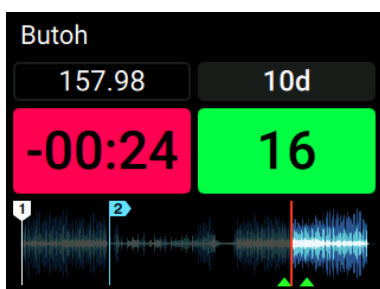 The playback continues at the position of the stored Loop.

Moving Loops

You can move enabled and disabled Loops forward or backward in the track:

- Turn the **MOVE** encoder clockwise or counter-clockwise.

This instantly moves the Loop in the track.

Removing Stored Loops

To remove a Loop from the track and also from the Hotcue:

- Press **SHIFT** + press a Pad.
  The Hotcue is removed and the Loop is deleted from the track. The pad is now unlit.

7.11. Using Flux and Reverse Modes

In Flux mode you can jump to Cue Points and Loops without loosing the phrasing of your tracks. It is a timeline-based transport technique that enables you to interact with TRAKTOR's transport controls, and then immediately jump back to the position in the timeline where the track would have been if the transport action had not been used. In other words, it is as if a second, virtual playhead continues forward in your track, while TRAKTOR loops or jumps to a cue point.

When you release the Loop or Cue Point—by releasing the relevant Pad with the Hotcue—playback resumes at this playhead position. The longer you loop, the farther ahead the playhead position will move and therefore the farther ahead playback will jump to when you release the Pad. The virtual Flux mode timeline is represented by a green playhead in the Waveform view.

In addition, you can enable the Reverse mode which makes the track playback reversely from the current playhead position.

Enabling Flux Mode

To enable Flux mode for the Deck:

1. Press the **FLX** button.
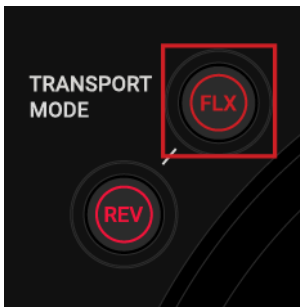
2. Press and hold a Pad with the Hotcue.
   The playback continues from the stored Cue Point or Loop.
3. Release the Pad.
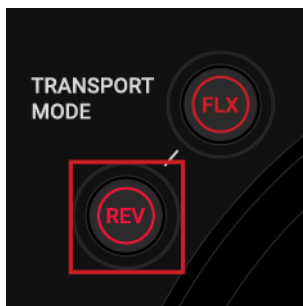   The playback resumes at the playhead position created by Flux mode.

> 💬 You can also use Flux mode in conjunction with the Jog Wheel in JOG mode. When you backspin and release the Jog Wheel, the playback resumes at the playhead position created by Flux mode.

Enabling Reverse Mode

Additionally to the Flux mode you can enable Reverse mode:

1. Press and hold the **REV** mode button.

   The track plays back reversely.
2. While holding the **REV** button, press and hold a Pad with a stored Hotcue.

   The playback reversely continues from the stored Cue Point or Loop.
3. Release the **REV** button.

   The playback resumes at the playhead position created by Flux mode.

Enabling Reverse mode also enables Flux mode.

7.12. Working with Mixer FX

A Mixer FX is a grouped effect which can be applied to the audio signal in the Mixer channel via the Mixer FX Amount knob. You can choose between the FILTER Effect and one of four pre-selected Mixer FX using the **FX SELECT** buttons **1** to **4**.

The following effects can be selected using the FX SELECT buttons:
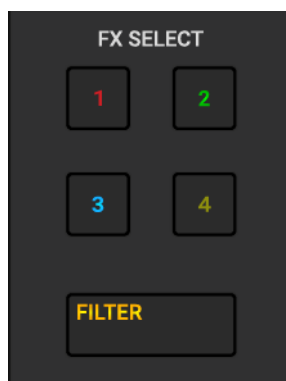
FX SELECT buttons.

- **FILTER**: Selects the Filter effect. When selected, the button brightly lights up orange.
- **FX SELECT 1**: Selects the Reverb effect. When selected, the button brightly lights up red.
- **FX SELECT 2**: Selects the Dual Delay effect. When selected, the button brightly lights up green.
- **FX SELECT 2**: Selects the Noise effect. When selected, the button brightly lights up blue.
- **FX SELECT 4**: Selects the Time Gater effect. When selected, the button brightly lights up yellow.

Selecting a Mixer FX for all Mixer Channels

To select a Mixer FX to be applied to all Mixer channels:

- Press the **FX SELECT** button with the individual Mixer FX.
  The **FX SELECT** button brightly lights up, indicating the Mixer FX is selected. The **Mixer FX ON** buttons in the Mixer channels also light up in the corresponding color.

Selecting a Mixer FX for individual Mixer Channels

You can select an individual Mixer FX for any of the Mixer channels:

1. Press and hold the **FX SELECT** button with the individual Mixer FX.
   The **FX SELECT** button lights up brightly.
2. While holding the **FX SELECT** button, press the **Mixer FX ON** button on the individual Mixer channel.
3. Release the **FX SELECT** button.
   The **Mixer FX ON** button in the Mixer channel now reflects the color of the corresponding **FX SELECT** button.

Applying Mixer FX to the Audio Signal

To apply the selected Mixer FX, in combination with a low-pass Filter, to the audio signal:

- Turn the Mixer FX Amount knob counter-clockwise.

To apply the selected Mixer FX in combination with a high-pass Filter to the audio signal:

- Turn the Mixer FX Amount knob clockwise.

If the FILTER is selected, turning the FX amount knob only applies a low-pass Filter or a high-pass Filter to the audio signal.

7.13. Working with FX Units

In this section you will learn how to assign FX Units to Mixer channels and how to control individual Effect parameters.

In TRAKTOR the FX Units in the Global section are used to modulate the audio signals in the Mixer channels. You can directly control the parameters of FX Unit 1 and 2 in the software using the controls of the corresponding FX Unit 1 and 2 on the S4. In the software the FX Units are freely configurable, whereas on the S4 you can only control the assigned effect parameters.

Assigning FX Units to Mixer Channels

To assign FX Units to the Mixer channels:

- Click the FX Unit Assign buttons for the corresponding FX Unit in the Mixer channel. The left FX Unit Assign button assigns FX Unit 1, andthe right FX Unit Assign button assigns FX Unit 2.

The FX Unit Assign button brightly lights up.

> ⊙ You can assign both FX Units to any Mixer channel at a time.

Controlling FX Units

The FX Unit controls on the S4 reflect the current FX Unit configuration in TRAKTOR.

1. Turn the FX Unit knobs 1 - 4 to change the corresponding FX parameter.
   The FX Unit knobs in the software change accordingly.
2. Press the **FX Unit ON** buttons 1 - 4 to enable or disable the corresponding parameter.
   The **FX Unit ON** buttons brightly light up on the S4 and in the software.

If the FX Unit is operated in Group FX mode in the software, the FX ON button 1 on the S4 has no effect. The button remains dimmed.

Displaying FX Units in the TRAKTOR Software

The FX Units in the software can be controlled from the S4, with or without the FX Units being displayed in the software. However, it can be helpful to display the FX Units in the software for instant feedback about the selected effects and the individual parameters.

To display the FX Units in the TRAKTOR software:

1. In TRAKTOR select **Extended** from the Layout drop-down menu to display the Global section.

2. In the Global section, click on the FX Unit buttons on the far left and far right to display the FX Units 1 and 2.

7.14. Adding Tracks to the Preparation List

The S4 enables you to prepare for your next mix. By using the Preparation List button, you can conveniently add the selected track in the Track List to the Preparation List in the Browser:

To add tracks to the Preparation List:

1. Turn the Browse encoder to select a track in the Track List.

2. Press the Preparation List button.

The track is added to the Preparation List. A diamond icon appears in the first column in the Track List in TRAKTOR indicating that the track is added to the Preparation List. Pressing the Preparation List button again removes the track from the Preparation List.

7.15. Previewing Tracks in the Browser

The S4 lets you conveniently preview tracks in the Browser view using the Browse controls:

1. Put on your headphones.

2. Press the **VIEW** button on the left S4 Deck.
   The TRAKTOR Layout switches to Browser view.

3. Turn the Browse encoder to select a track in the Track List.

4. Press and hold the Preview button to load the track into the Preview Player and to instantly start playback.

The track is now playing back and audible in the CUE channel.

5. While holding the Preview button turn the Browse encoder to seek in the track.

6. Release the preview button to stop preview.

The preview Player is unloaded.

7.16. Switching Deck Focus

Any of the S4 Decks control two Decks in TRAKTOR. The left S4 Deck controls Deck A and Deck C, the right S4 Deck controls Deck B and Deck D. However, the S4 Decks can focus only on one of the TRAKTOR Decks.
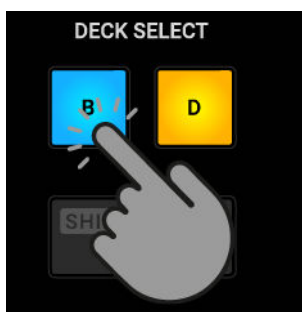
To switch the Deck Focus on the left S4 Deck:

- On the left S4 Deck press the **DECK SELECT** buttons **A** or **C** to switch the Deck focus to the corresponding Deck.
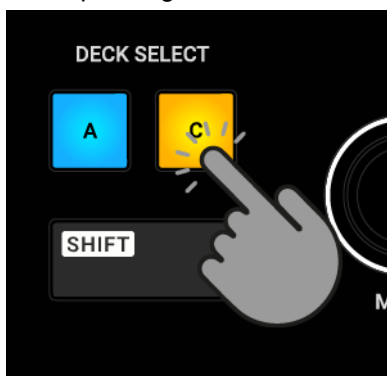
To switch the Deck Focus on the right S4 Deck:

- Press the **DECK SELECT** buttons **B** or **D** to switch the Deck focus to the corresponding Deck.

When Decks A and Deck B are focused on the S4, the Deck LEDs light up blue. When Decks C and Deck D are focused on the S4, the Deck LEDs light up orange.

7.17. Working with Remix Decks

Remix Decks enable you to load collections of Samples (Remix Sets) and trigger the individual Samples in your mix. As with Track Decks and STEM Decks, Remix Decks can be synchronized to the Tempo Master ensuring the Samples always play in sync with other tracks.

A Remix Set can contain up to 64 Samples organized in the Sample Grid. The Sample Grid consists of four columns containing 16 Sample Cells each. When a Remix Set is loaded into a Remix Deck on the S4, the first of the 16 Samples is visible in each Sample Slot. You can trigger them individually and manipulate their volume and sound using the Pads and the **MOVE** and **LOOP** encoders. You can instantly select another Sample in the Sample Slots using the Browse encoder.

Furthermore, the Remix Decks can be operated in Step Sequencer mode.
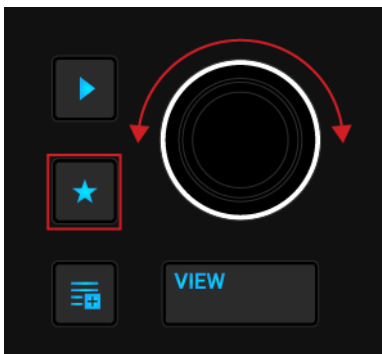
Loading Remix Sets

To load a Remix Set from your Track Collection and to switch the Deck Type to Remix Deck:
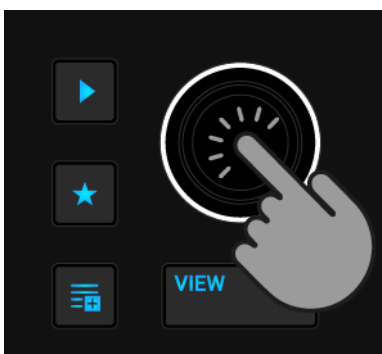
1. Press the **VIEW** button.
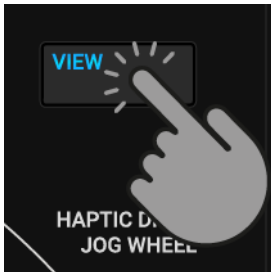
   The TRAKTOR Layout switches to Browser view.
2. Press and hold the **Star** button + turn the Browse encoder to select the **All Remix Sets** favorite folder.

3. In the Track List, select the Remix Set you want to load by turning the Browse encoder.
4. Press the Browse encoder to load the Remix Set into the Deck.

    The Deck Type switches to Remix Deck and enables the **SAMPLES** mode for that S4 Deck.
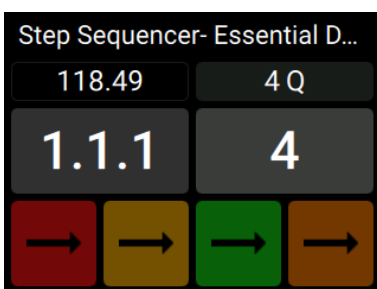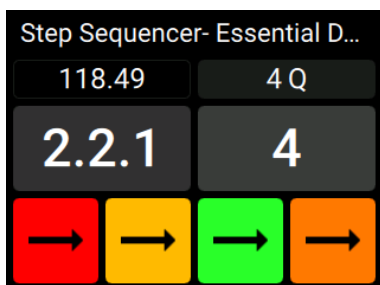
Triggering Samples

Once the Remix Set is loaded into the Deck you can trigger the Samples:

1. Press Pad 1 - 4 to trigger the corresponding Samples.
    The Deck and the Samples play back and the Pads brightly light up. When a one-shot Sample is triggered, the Pad lights up brightly as long as the Sample plays back.

2. To stop the playback of a Sample, press and hold **SHIFT** to access the Decks secondary functions.
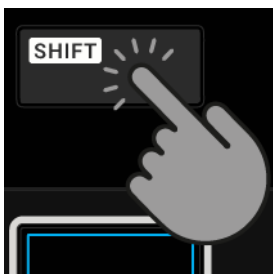
    The colors of the first row of Pads change to white.
3. While holding **SHIFT**, press the Pad for the corresponding Sample you want to stop playback.
   The Sample stops immediately and the Pad turns dim. The Deck playback continues.

Adjusting Sample Slot Volume

The volume level of any Sample Slot can be adjusted and muted individually:

To adjust the volume level of a Sample Slot:

1. Press and hold the Pad below the Pad for the corresponding Sample to access the sound controls for the Sample Slot.
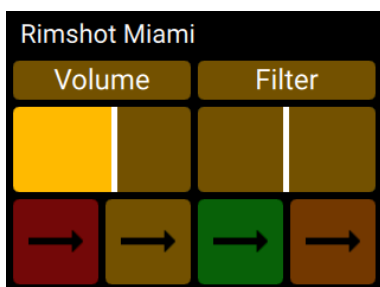   The display shows the current volume and filter parameter values.
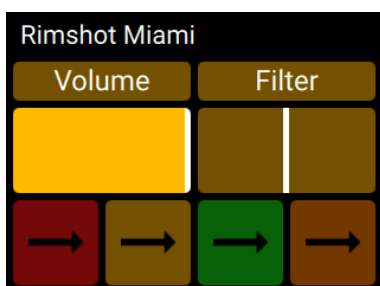
2. While holding the Pad, turn the **MOVE** encoder clockwise or counter-wise to adjust the volume for the Sample Slot.
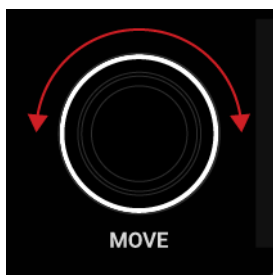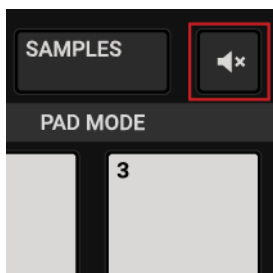
The volume parameter value in the display changes accordingly.

Muting Sample Slots

A Sample Slot can be muted immediately:

1. Press and hold the Mute button.

2. While holding the Mute button, press the Pad for the corresponding Sample Slot.
   The Sample Slot is muted.
3. To unmute the Sample Slot, repeat the aforementioned steps.

## Applying Filter Effect to Sample Slot

Any Sample Slot contains a Filter control for applying a high-pass or low-pass filter:

1. Press and hold the Pad below the Pad for the corresponding Sample to access the sound controls for the Sample Slot.
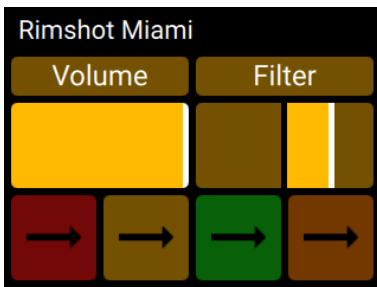   The display shows the current volume and filter parameter values.
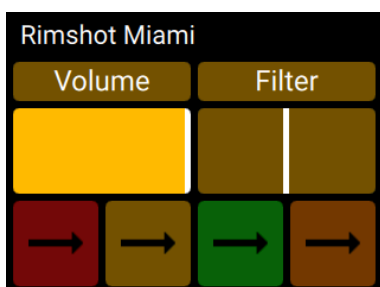
2. While holding the Pad, turn the **LOOP** encoder clockwise or counter-wise to apply a high-pass or low-pass Filter Effect to the Sample Slot.
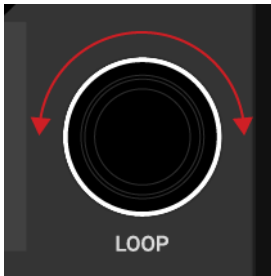
The filter parameter value in the display changes accordingly.

Selecting another Sample in Sample Slot

You can instantly select another Sample in any Sample Slot, independent of the playback status of the Sample Slot. When the Sample Slot is playing

1. Press and hold the Pad below the Pad for the corresponding Sample to access the sound controls for the Sample Slot.
   The display shows the current volume and filter parameter values.
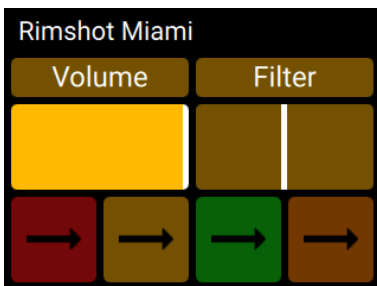
2. While holding the Pad, turn the Browse encoder clockwise or counter-wise to to scroll through the List of Samples contained in the Sample Slot.
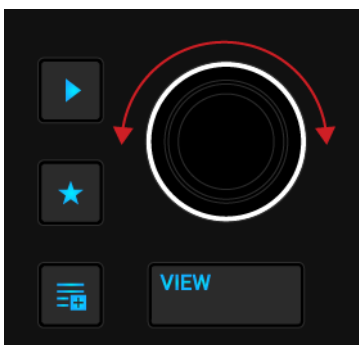
3. When you have the new Sample highlighted, release the Pad.

The playback of the Sample starts immediately in sync with the Quantize value.

Enabling and Adjusting the Remix Deck's Quantize Mode

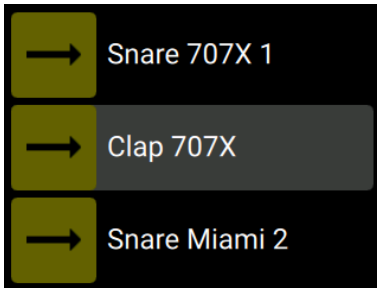The Remix Deck provides an internal Quantize mode in order to let the Samples trigger at the right beat in the internal timeline. The Quantize value can be adjusted using the **LOOP** encoder.

To enable Quantize mode for the Remix Deck:

1. Press and hold **SHIFT** to access the Decks secondary functions.
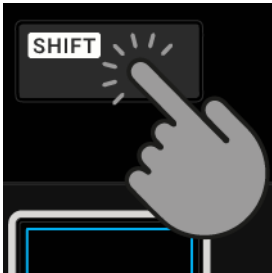
2. While holding **SHIFT**, press the **LOOP** encoder to enable or disable Quantize mode for the Remix Deck.

The Quantize parameter turns blue indicating Quantize mode is enabled.

3. To adjust the Quantize value, keep holding **SHIFT** + turn the **LOOP** encoder clockwise or counter-clockwise.

The Quantize value changes accordingly.

7.17.1. Using Pattern Recorder

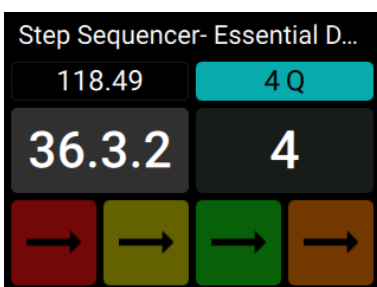The Pattern Recorder allows you to program sequences to be played by the Samples in the Remix Slots. When the Pattern Recorder is enabled, you can instantly play and record your sequences by tapping the Pads. Upon recording, the sequences will automatically be quantized and instantly play back in sync to the Deck tempo and repeat. You can program sequences up to 16 steps.

The Pattern Recorder is meant to be used with one-shot Samples such as kick drum, snare, hi-hat, sound FX, etc. The usage of Loops will also work, but may not bring the appropriate results.

Enabling Pattern Recorder

To enable Pattern Recorder:

1. Load a Remix Set into a Deck.
   The Deck Type switches to Remix Deck. Alternatively, you can load individual Samples into an empty Remix Deck.
2. To enable Pattern Recorder, press the record button on the Deck.
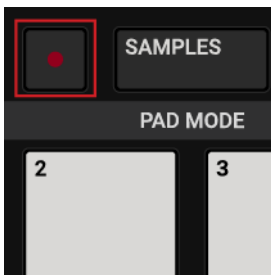
   The Pattern Recorder is enabled and the record button brightly lights up red.

Recording Sequences

Once the Pattern Recorder is enabled you can play and record your sequences:

- Play your sequences by tapping Pad 1 - Pad 4, corresponding to the Samples.
  The Pattern Recorder instantly records your sequences and repeat them.

Removing a Sequence

To remove a sequences:

- Press and hold **SHIFT** + press the Pad corresponding to the sequence you want to remove.
  The sequence is removed. You can now tap in a new sequence on that Pad.

# 7.18. Working with STEM Decks

In this section you will learn how to load and play back a STEM File, how to adjust volumes and apply Filter FX on individual STEM parts in the STEM Decks.

While DJing, STEM files allow you to interact with four different musical elements of a track independently. The four STEM parts of a track can be modified individually to create spontaneous instrumentals, remixes, or mashups. You can create transitions between elements STEM-by-STEM, or apply effects and EQ to a specific STEM part, rather than an entire track. Furthermore, you can mix musical elements across multiple STEM Decks, for example, taking the vocals from one Stem File and mixing it with the beat from another.

Loading a STEM File

To load a STEM File into a Deck and switch the Deck Type to STEM Deck:

1. Press the **VIEW** button.
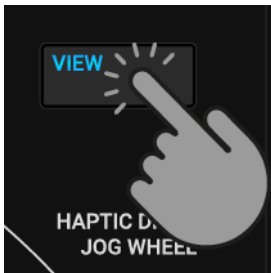
    The TRAKTOR Layout switches to Browser view.
2. Press and hold the **Star** button + turn the Browse encoder to select the **All Stems** favorite folder.
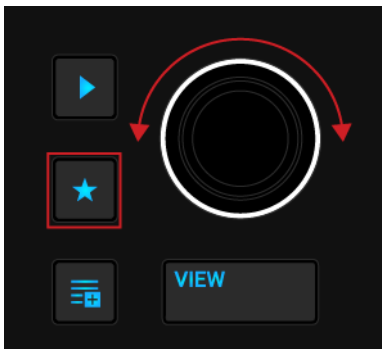
3. In the Track List, select the STEM File you want to load by turning the Browse encoder.
4. Press the Browse encoder to load the STEM File into the Deck.
    The Deck Type automatically switches to STEM Deck. The display shows the Waveform for the entire STEM File.

Playing Back the STEM File

In order to play back a STEM File:

• Press the Play/Pause button on the Deck.
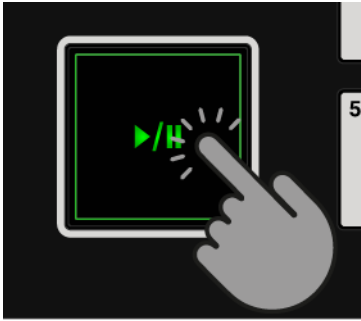
The STEM Deck plays back the STEM File.

Adjusting STEM Part Volumes

In order to adjust the volumes for the individual STEM Parts or take them completely out:

1. Press the **STEMS** button to access STEM Deck controls.
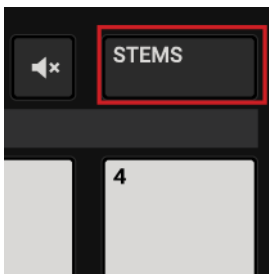
2. Press and hold the Pad below the Pad for the corresponding STEM Part to access the sound controls for that STEM Part.
   The display shows the current volume and filter parameter values.
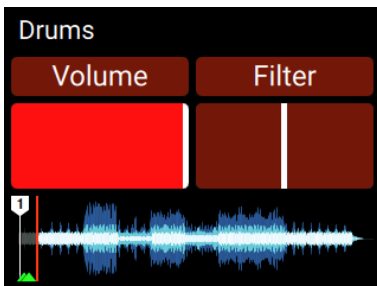
3. While holding the Pad, turn the **MOVE** encoder clockwise or counter-wise to adjust the volume for the STEM Part.

The volume of the musical element in the STEM Part decreases or increases accordingly.
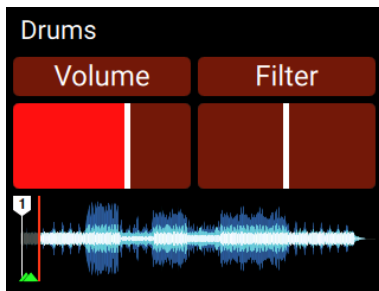
4. To reset the STEM Part volume, press and hold the Pad below the Pad of the corresponding STEM Part + press the **MOVE** encoder.

The STEM Part volume is reset to full level.

Muting STEM Parts

A STEM Part can be muted immediately:

1. Press and hold the Mute button + press the Pad corresponding to the STEM Part.
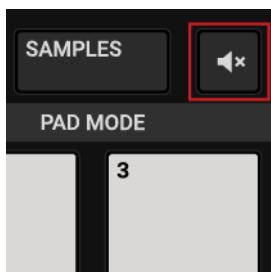
The Stem Part is muted.

2. To unmute the STEM Part, repeat the aforementioned steps.

Applying Filter FX to STEM Parts

In order to apply a Filter effect to key elements of the music:

1. Press the STEMS button to access STEM Deck controls.
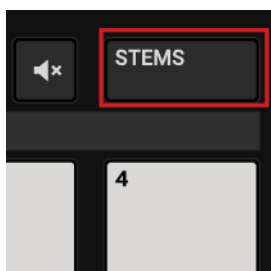
2. Press and hold the Pad below the Pad corresponding to the STEM Part to access the sound controls for that STEM Part.

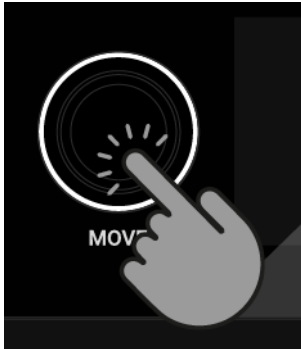   The display shows the current volume and Filter effect parameter values.
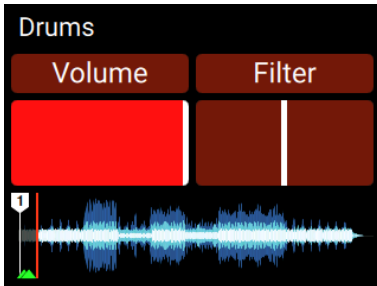
3. While holding the Pad, press the **LOOP** encoder to enable the Filter effect for that STEM Part.
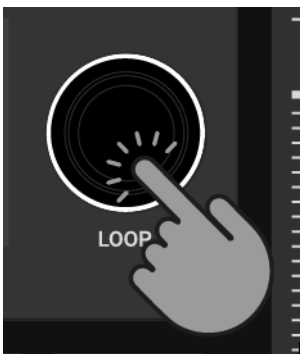
   The Filter effect parameter in the display is highlighted accordingly.

4. While still holding the Pad, turn the **LOOP** encoder clockwise or counter-wise to apply a high-pass or low-pass Filter effect to the STEM Part.
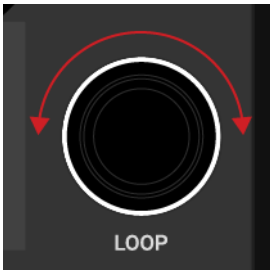
   The Filter effect parameter value in the display changes accordingly.
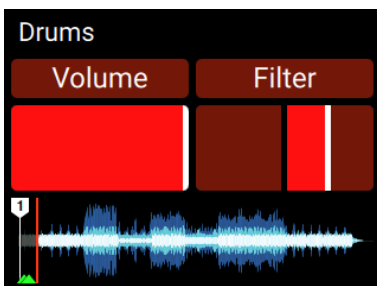
5. To disable the Filter for the STEM Part, press and hold the Pad below the Pad for the corresponding STEM Part + press the **LOOP** encoder.

   The Filter effect parameter set back to the center position.

7.19. Correcting Beatgrids

When a track contains a complex rhythm or uneven timing, in some instances the Beatgrid calculated by TRAKTOR does not precisely match the beat of the track. It is then not possible to match the beats of that track when mixing using the **SYNC** function. Incorrect Beatgrids can be corrected using the GRID mode on the S4. The GRID mode allows you to check and correct the Beatgrid of tracks:

Checking Beatgrid

1. Load a track into a Deck.
2. Press Play/Pause to start playback of the track.
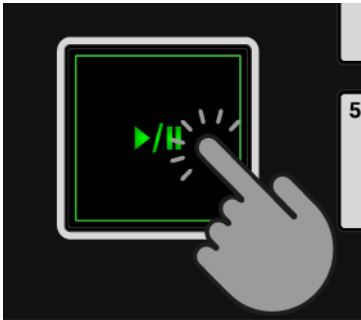
3. Press the **CUE** button in the Mixer channel.
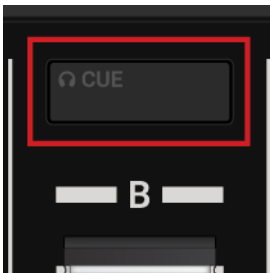
4. Press the **JOG** button to enable Jog Wheel mode.

5. Press and hold the **GRID** button on the Deck to make the Beatgrid audible.

Besides the beat of the track, you now hear a second beat tick (like a metronome) representing the Beatgrid. If the beat tick does not match the beat of the track, the Beatgrid is obviously set incorrectly.

Correcting Beatgrid

To correct the the Beatgrid setting, proceed as follows:

1. While holding the **GRID** button, slightly turn the Jog Wheel clockwise or counter-clockwise to move the Beatgrid forward or backward, respectively.
    By turning the Jog Wheel you are able adjust the Beatgrid, so that the Beat tick matches the beat of the track.
2. Release the **GRID** button.
    The track's Beatgrid is corrected and saved for the track.

Disable Analysis Lock if Tick is not audible

Ensure the Analysis Lock is disabled for the track to make Beatgrid correction possible.

To disable the Analysis Lock you need to perform the following actions in the TRAKTOR software:

1. Select the **Extended** Layout in the Layout drop-down menu in the Header.
    The Decks provide you with more functions.
2. Click on the Advanced Panel button to open the Advanced Panel for that Deck.
3. Click on **GRID** to open the **GRID** page.
4. Disable the Analysis Lock by clicking the **Analysis Lock** button.
    The Beatgrid for the track can now be corrected.

8. PREFERENCES

When opening the Preferences dialog in TRAKTOR you will find an additional page for the S4 controller with configuration settings.

Accessing TRAKTOR Preferences

To open the Preferences in TRAKTOR:

1. Click the Preferences button in TRAKTOR's Header.
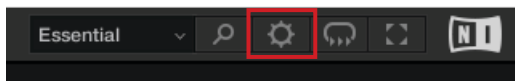
2. Select the **Traktor S4 MK3** page.

TRAKTOR S4 MK3 Preferences Page
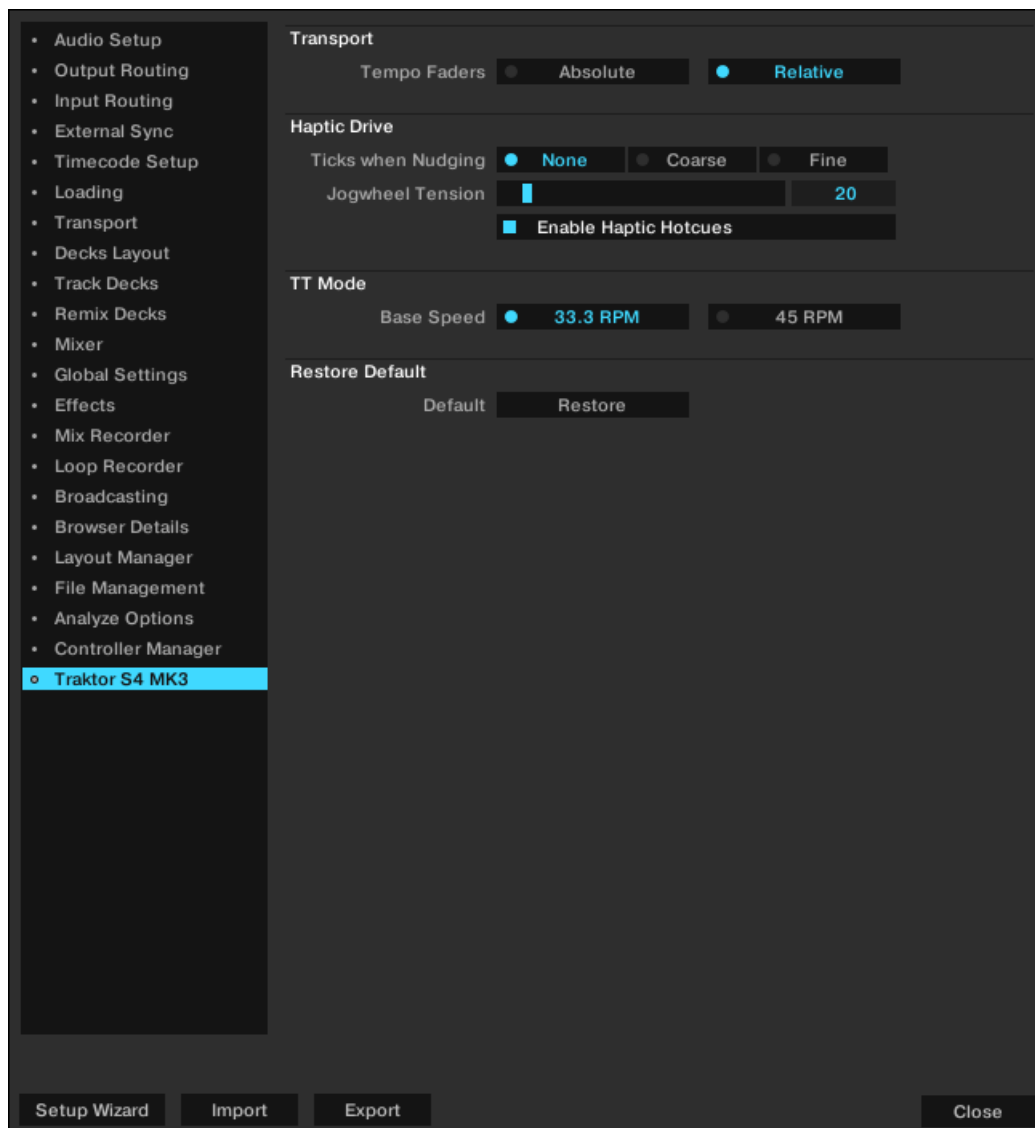
Traktor S4 MK3 Preferences Page.

Transport

- **Tempo Faders** Determines the TEMPO fader mode.
  - In , the track tempo automatically adjusts according to the TEMPO fader position when loading the track.
  - In , the track tempo is always set to the original tempo independent of the current TEMPO fader position when loading the track.

Haptic Drive

- **Ticks when** Determines the haptic feedback sensitivity when turning the Jog Wheel using the rim in **JOG** mode.
  - When selected, turning the Jog Wheel does not give any feedback.
  - When selected you feel ticks in coarse increments when turning the Jog Wheel.
  - When is selected you feel ticks in fine increments when turning the Jog Wheel.
- **Jogwheel** Determines the resistance when turning the Jog Wheel. A lower value results in less resistance, a higher value results in more resistance. The range is between **0** and
- **Enable Haptic** When this option is ticked, you feel Cue Points and Loop markers in the Jog Wheel as haptic feedback when cueing them by touching the top plate.

TT Mode

- **Base** Determines the Jog Wheel's revolutions per minute when used in **TT** mode.
  - When **33.3 RPM** is selected, the Jog Wheel rotates slower.
  - When **45 RPM** is selected, the Jog Wheel rotates faster.

Restore to default

- Restores to default S4 settings.

9. INTEGRATING EXTERNAL DEVICES

The S4 provides you with the possibility to integrate external audio devices. Besides integrating microphones, you can also connect devices like turntables and CD players. This enables you to mix in external audio from vinyl and CDs. In conjunction with turntables and CD players you can enable TRAKTOR's Scratch function and control the Decks using timecode vinyls or timecode CDs, which you can purchase separately.

In this section you learn how to integrate external audio devices and how to setup TRAKTOR for using the Scratch function:

- For integrating a microphone, refer to Integrating Microphone.
- For integrating turntables into your setup, refer to Integrating Turntable.
- For integrating CD players into your setup, refer to Integrating CD Players.
- For configuring your S4 system connected with turntables or CD players to be used with TRAKTOR's Scratch function, refer to Enabling Scratch Function in TRAKTOR.

9.1. Integrating Microphone

The Mixer channels **C** and **D** on the S4 allow you to integrate a microphone. On the rear panel on the S4 you can connect a micrphone using a 1.8" connector to be inserted into Mixer channel C. On the front panel you can connect a microphone using an XLR connector to be integrated into Mixer channel D.

Connecting Microphone

To add a microphone to your S4 system:

1. Switch off the S4.
2. Connect the microphone to the input **MIC C** on the rear panel, or to the input **MIC D** on the front panel on the S4, corresponding to its connector.

Enabling Microphone Pre-Amplifier for Mixer Channel

For the Mixer channel to receive microphone signal, you need to enable the microphone pre-amplifier stage for the Mixer channel:

1. Switch on the S4.
2. Press and hold **SHIFT** on the S4 Deck to access the secondary S4 functions.
3. While holding **SHIFT**, press the **EXT** button on the corresponding Mixer channel.
   The **MIC C** or **MIC D** LED lights up indicating the microphone pre-amplifier is enabled for the Mixer channel.

Switching the Deck to Live Input

To switch the S4 Deck to Live input:

1. Press the **EXT** button on the Mixer channel you want to insert the external audio from.

The Deck has switched to Live Input. You can now speak into the microphone.

2. Set the incoming microphone signal to an adequate level by turning the **GAIN** knob on the Mixer channel.

9.2. Integrating Turntable

The Mixer channels on the S4 allow you to connect up four audio devices, or up to two phono level devices and two line level devices simultaneously.

A Turntable requiring a separate phono pre-amplifier stage needs to be connected to Mixer channel A or B. A turntable having an integrated phono pre-amplifier stage generates a line level audio signal and can be connected to any Mixer channel.

This section provides you with the steps for connecting a turntable without an integrated phono-pre-amplifier stage. Firstly, connect the turntable to the S4, then enable the phono pre-amplifier for the Mixer channel, and switch the Deck to Live Input.

Connecting Turntable

To connect your turntables to the S4:

1. Switch off the S4.
2. Connect your turntables to the inputs **PHONO / LINE IN A** or **B** on the rear panel of the S4 using a stereo RCA cable.
3. Attach the ground wire of your turntable to the ground post **GND** on the rear panel of the S4.

Enabling Phono Pre-Amplifier for Mixer Channel

For the Mixer channel to receive phono level signal, you need to enable the phono pre-amplifier stage for the Mixer channel:

1. Switch on the S4.
2. Press and hold the **SHIFT** button on the S4 Deck to access the secondary S4 functions.
3. While holding press the **EXT** button on the corresponding Mixer channel.
   The **PHONO** LED lights up indicating the phono pre-amplifier is enabled for the Mixer channel.

Switching the Deck to Live Input

To switch the S4 Deck to Live input:

1. Press the **EXT** button on the Mixer channel you want to insert the external audio from.
   The Deck has switched to Live Input.
2. Put a vinyl on your turntable and start playback.
   The Mixer channel now inserts the audio signal from the turntable.

9.3. Integrating CD Players

The Mixer channels on the S4 allow you to connect up four ces, or up to two phono level devices and two line level devices simultaneously. This section guides you through the steps for connecting a CD player. At you will co the CD player to the S4, then enable the line level input for the Mixer channel, and switch the Deck to Live Input.

Connecting CD Players

To connect CD players to S4:

1. Switch off yoS4.
2. Connect your CD player to any of the inputs **PHONO / LINE IN A** or or **LINE IN C** or pectively, on the reanel of the S4 using a stereo RCA cable.

Enabling Inputs for Line Level Signals

The Mixer channel needs to be enabled to receive a line level audio signal. In this the **LINE** LED has to light hite. If this is not the case, you need to enable the line level input for the Mixer channel:

1. Switch on the S4.
2. Press and hold the **SHIFT** button on the Deck S4 to access the secondary S4 functions.
3. While holding press the **EXT** buttons on the Mannel corresponding to the connected CD player.
   The **LINE** LED lights up indicating channel receives line level audio signalck is used as Live Input.

Switching the Deck to Live Input

To switch the S4 Deck to Live input:

1. Press the **EXT** button on the Mixer channel you want to insert the external audio from.
   The Deck has switched to Live Input.
2. Insert a CD into the CD player and start playback.
   The Mixer channel now receives the line level audio signal from the CD player.

9.4. Enabling Scratch Function in TRAKTOR

The S4 enables you to use TRAKTOR's Scratch function in conjunction with connected turntables or CD players, and timecode control vinyl or CDs.

Enabling Scratch Function in TRAKTOR

To enable the Scratch function on the Deck:

1. Start TRAKTOR.
2. Click the Deck letter of the Deck on which you want to enable the Scratch function. The context menu will open.
3. Select **Track Deck**.
   The Deck switches to Track Deck.

4. Click the Deck letter again to open the context menu.
5. Select **Scratch Control**.
   The **CUE** and **CUP** buttons in the Transport Controls are replaced by the Absolute mode button and Relative mode button.
6. Repeat the aforementioned steps if you have a further device for Scratch control connected.

Using Timecode Media

To control the Decks you need to use the timecode media corresponding to the devices you use:

1. Load a track into the Deck.
2. Put on the timecode vinyl(s) on your turntable(s) or insert the CD(s) into your CD player(s).
3. Start playback on the device(s).
   TRAKTOR now calibrates the incoming timecode signal.
4. Click either the Absolute mode button and the Relative mode button.
   The track in the Deck is now controlled by the timecode signal.

Displaying the Timecode Scopes in the Decks

For additional monitoring the timecode signal calibration and for troubleshooting reasons, you can display the timecode signal scopes on the individual Decks:

1. Open the Preferences in TRAKTOR.
2. Select the **Decks Layout** page.
3. In the **Platter / Scope** option, select **Scope** from the individual drop-down menus.
   The timecode scopes are now visible in the Decks.

10. S4 AS DEFAULT AUDIO INTERFACE

If you want to use the TRAKTOR KONTROL S4 for playback of all audio applications on your computer, you can set it as your default audio interface.

Windows

On Windows you can define the TRAKTOR KONTROL S4 as your default audio interface as follows:

1. Open Start > Preferences > System.
2. Select the Sound tab.
3. In the device list, select TRAKTOR KONTROL S4 and click Set Default.
4. On the Sound tab scroll down to Input.
5. In the device list, select TRAKTOR KONTROL S4 and click Set Default.
6. Close the dialog.

macOS

On macOS you can define the TRAKTOR KONTROL S4 as your default audio interface as follows:

1. From the Apple menu, select System Preferences.
2. In the panel that opens, click Sound.
3. On the Sound Effects drop-down menu, select TRAKTOR KONTROL S4.
4. Click the Output tab and select TRAKTOR KONTROL S4 from the Choose a device for sound output list.
5. Click the Input tab, and select TRAKTOR KONTROL S4 from the Choose a device for sound input list.
6. Close the window to confirm your changes.

11. SPECIFICATION

System Requirements

For the minimum system requirements your computer needs to meet, see the TRAKTOR specifications section of the Native Instruments website:

https://www.native-instruments.com/traktor-kontrol-s2/specifications/

To check the compatibility with several operating systems, please have a look at:

http://www.native-instruments.com/compatibility

Dimensions

Width: 21.3 " / 542 mm

Height: 2.5 " / 65 mm

Depth: 13.3 " / 339 mm

Audio Inputs

Channels: 4

Bit Resolution: 24 bit

Sample Rate: 96 kHz

Microphone Input: (1/4 "/6.3 mm & XLR)

Full Scale Level: -30… -10 dBU @ 1 kHz

DNR (a-weighted)@ 1 kHz: 104 dB

Frequency response: 20 Hz - 20 kHz, +0.04/- 2.7 dB

Line Inputs (RCA)

DNR (a-weighted) @ 1 kHz: 110 dB

Frequency Response: 20 Hz - 20 kHz, +0.1/- 0.05 dB

THD+N: 0.002%

Phono Inputs (RCA)

Input Impedance: 48.5kΩ

DNR (a-weighted) @ 1 kHz: 78 dB

Audio Outputs (D/A)

Channels: 4

Bit Resolution: 24 bit

Sample Rate: 96 kHz

Main Outputs - 2 x Stereo Out (XLR) & Booth (1/4 "/6.3 mm)

Maximum Output Level: +1.0 dBu

DNR (a-weighted): 110 dB

THD+N: 0.001%

Frequency Response: 20 Hz-20 kHz +0.6/- 0.2 dB

Crosstalk @ 1 kHz: -80 dB

Main Outputs - 2 x Stereo Out (RCA)

Maximum Output Level: +1.0 dBu

DNR (a-weighted): 110 dB

THD+N: 0.001%

Frequency Response: 20 Hz-20 kHz +0.6/- 0.2 dB

Crosstalk @ 1 kHz: -80 dB

Headphone Stereo Output (1/4 "/6.3 mm / 1/8 "/3.5 mm TRS)

Maximum Output Level: 45 mW @ 33 Ohm load

DNR (a-weighted): 104 dB

THD+N: <0.1%

Frequency Response: 20 Hz-20 kHz +/- 1.0 dB

Crosstalk @ 1 kHz: -55 dB