soundworks

dwecontrol

Owner's Manual

DWe Overview

Drum Workshop has long been recognized as an industry leader in custom drums, with over 50 years of experience. DW instruments are respected for their innovation, craftsmanship, and durability while manufacturing custom drums in the United States. Whether it is drums, pedals, hardware, or accessories, DW is “The Drummer’s Choice.”

With the introduction of DWe acoustic-electronic convertible drums, DW takes another innovative step forward in the musical advancement of drums. At the heart of DWe are DW’s legendary handcrafted, 100% Maple shells that are built in the DW Custom Shop in Oxnard, California. These shells are fitted with groundbreaking wireless electronics and technology, which raises the bar on the sonic possibilities of electronic drums. Every shell can be easily converted to a true acoustic drum and a custom-quality acoustic drum set, making them the first of their kind.

Included with the drum set (and available separately) is the DW Soundworks™ drum software including multi-sampled acoustic drums and cymbals. Several DW kits are included, Pure Maple, Maple/Mahogany, Pure Almond, as well as the limited edition 50th Anniversary Kit featuring the unique combination of Persimmon and Spruce. Also included are a Vintage 1958 Slingerland kit and a Gretsch USA Custom kit plus a large variety of snare drums. Sound editing and shaping tools are at your fingertips to modify and create your sound.

A companion software application- DWe Control is included it connects to the DrumLink™ wireless USB hub. The DrumLink hub receives the wireless signals from the drum triggers and electronic cymbals, instantly converting those signals into MIDI messages to trigger the DW Soundworks software. DWe Control also includes a full complement of triggering parameters to dial in the feel and response that works best for your playing style whether it be light and dynamic or heavy and powerful.

In this manual, we will first explore the DWe Control software application which is the gateway to the DWe acoustic/electronic kit as it is the trigger control for the DWe kit. Then we will explore the DW Soundworks application as it not only functions as a standalone application but can also be used as a virtual software instrument plug-in compatible with the most popular DAWs (Digital Audio Workstation) including Pro Tools, Logic Pro, Ableton Live, Studio One, Cubase, Reaper, Digital Performer, and others.*

NOTE: If you are using DW Soundworks without the DWe drum kit, you won’t need to use the DWe Control. DW Soundworks can be used with MIDI controllers such as wired electronic drums, percussion pads, and even keyboard controllers.

**The DAW products mentioned are registered trademarks of their respective manufacturers.*

Contents

DW Soundworks

What is DWe Control?

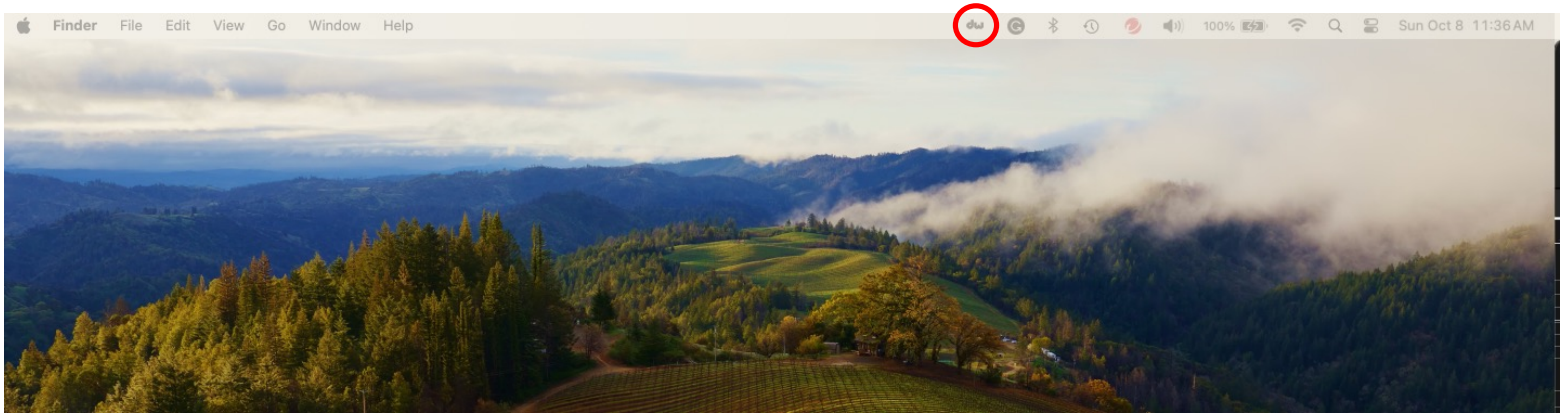
DWe Control is a software trigger control interface that allows you to manage and configure various aspects of drum and cymbal performance, calibration, and MIDI settings. Users can access and interact with DWe Control through an icon on the taskbar, with different layouts depending on whether they're using a Mac or Windows system.

DWe Control video tutorials are also available:
[DWe Control Videos]

Installation and Access:

- DWe Control is installed alongside DW Soundworks.
- Access is from the Menu Bar (upper right for Mac) or System Tray (bottom right for Windows).
- Open by clicking on the DWe Control icon.

Mac OS



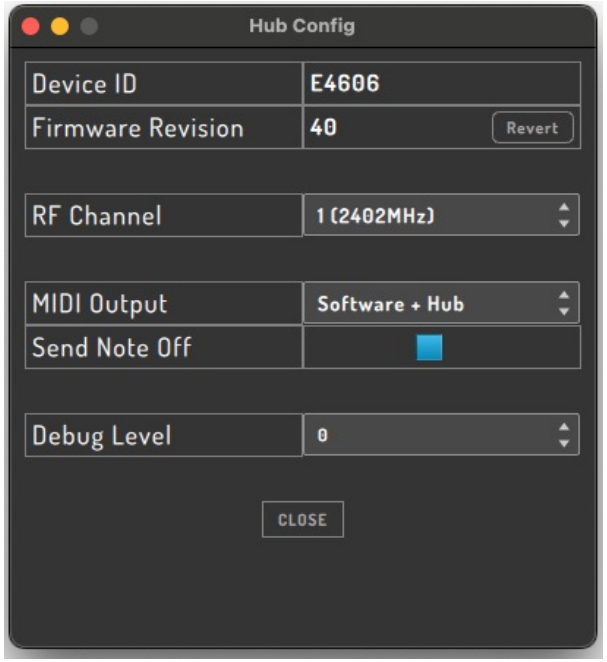
Windows OS

DWe Control Window Overview

1. **"HUB" Button:**
   - The “HUB” Button opens DrumLink Hub settings.
   - In there, you will see the Device ID, Firmware Revision, the selected RF Channel, MIDI Output, Send Note Off check box, and a Debug Level option.
   - NOTE: An ”Update” button will be shown if a firmware update is available.
   - If you ever need to roll back to an older firmware version, a revert button will be available.
   - Indicates which RF channel is currently selected in the DrumLink hub. There four RF channel options:
     - 2402 MHz
     - 2426 MHz
     - 2451 MHz
     - 2480 MHz
   - MIDI Output lets you select whether you want the DrumLink hub to send MIDI to:
     - Software only
     - HUB only (MIDI Out jack)
     - Software + HUB (Software + MIDI Out)
   - Check the “Send MIDI Note Off” box to send a MIDI note-off message after a strike.
   - “Debug Level” is a diagnostic tool for customer support to determine hardware and software issues.

DrumLink Hub Settings Button

DrumLink Hub Settings



2. Pairing Button:

- The ”PAIR" button connects drums and cymbals to the hub by allowing the DrumLink hub to listen and connect to active triggers.

Pair Button

3. Power Button:

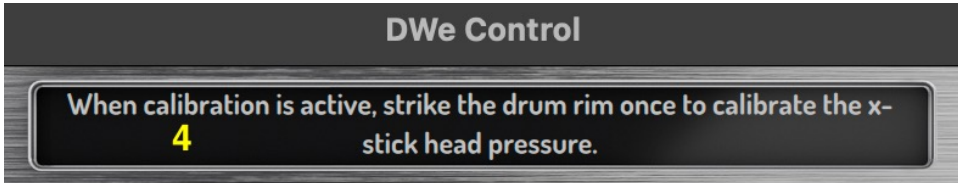
- The ”Power" button manages the pairing status and auto-population of devices by turning the DrumLink Hub on or off.
- If you have drums or cymbals not appearing in the instrument pane, try turning off the DrumLink hub and then turning it on. This wakes up the triggers once the drums and cymbals are struck.

Power Button

4. Tool Tip Bar:

- Provides tooltips when hovering the mouse over a parameter.

Tool Tip Bar

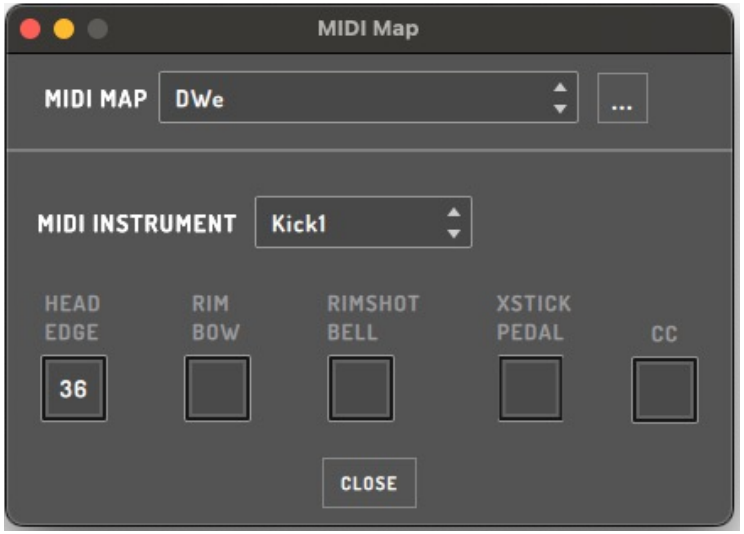


5. MIDI Map:

- This allows for the selection of what MIDI MAP is currently used for in DWe Control.
- MIDI Maps are the MIDI notes assigned to a specific instrument and/or zone.
- DWe Control has many MIDI map options available from third party software applications or drum modules. MIDI Maps are available for the following.
    - DWe
    - Superior Drummer 3
    - EZ Drummer 3
    - Superior Drummer 2
    - EZ Drummer 2
    - Addictive Drums 2
    - Perfect Drums 2
    - Steven Slate 5.5
    - Steven Slate 5
    - Steven Slate 4
    - Native Instruments Studio Drummer
    - Native Instruments Abbey Road
    - Get Good Drums
    - Mondo Drums
    - Roland TD50
    - Roland TD30
    - Roland TD27
    - Roland TD20
    - Roland TD12
    - Roland TD10
    - Pearl Mimic

MIDI Map Button

MIDI Map Pop-Up Box

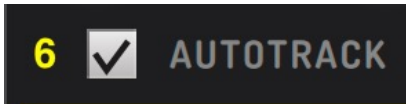


The products listed are registered trademarks of their respective manufacturers.

6. Autotrack:

- The ”AUTOTRACK" checkbox enables automatic instrument selection to allow you to you can easily get to trigger settings play simply hitting the instrument to see its trigger settings.

Autotrack



7. Kit Button:

- The ”KIT" button enables you to export or import complete trigger settings for all instruments.
- NOTE: This is useful for duplicating custom trigger settings for multiple kits.

Kit Trigger Setting Export/Import

8. Battery Level Indicator:

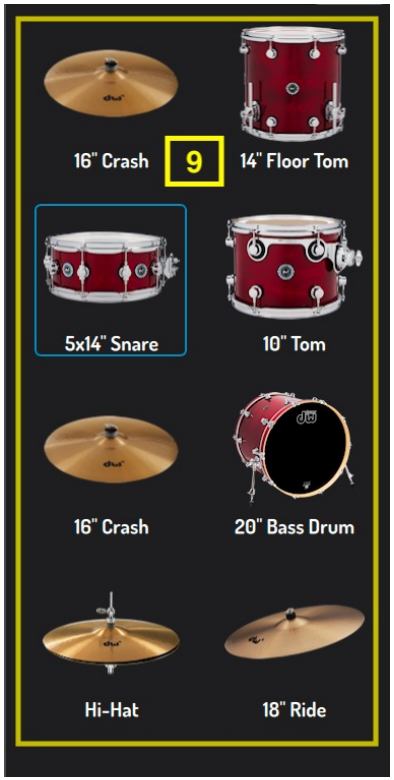
- The “Battery Level Indicator” displays how much power is remaining on a selected instrument.
- The battery level is measured in real time.
- When power level is low, the icon turns red to let you know it’s time to change the battery on the trigger(s).

Battery Level Indicator

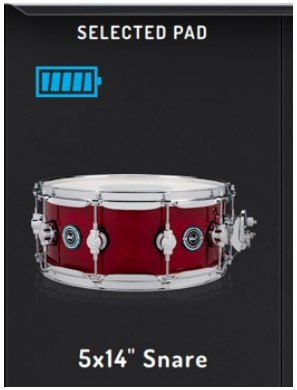
9. Instrument Pane & Selected Pad:

- The ”Instrument Pane” displays all instruments that are actively paired to the DrumLink hub.
- Once an instrument is selected it appears in the selected pad section with a graphic of the instrument.

Instrument Pane



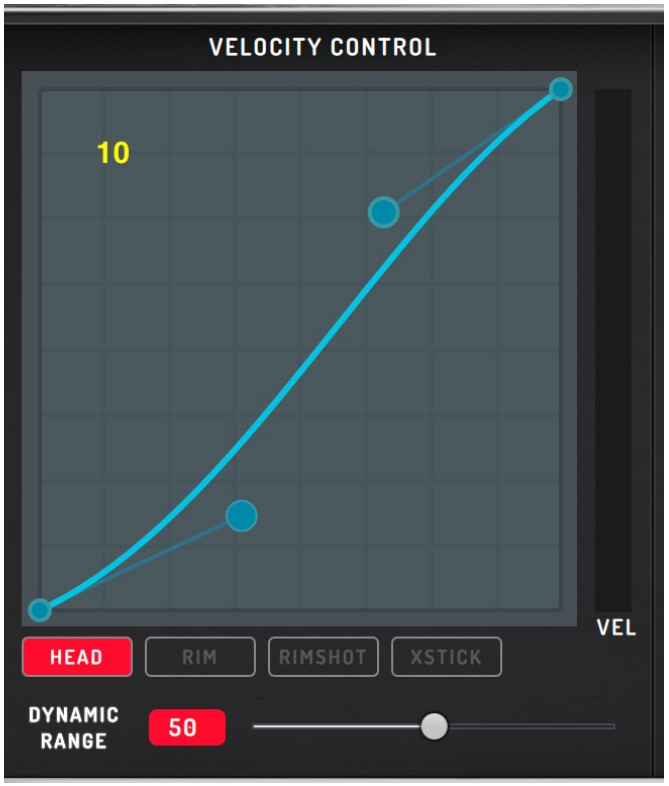
Selected Pad



10. Velocity Control:

- The “Velocity Control” section shows the Velocity Curve that is currently used in a selected zone of an instrument.
- The selected zone is the striking area on an instrument.
- The velocity curves adjust how a drum or cymbal interprets strikes.
- Also, there is a visual representation of the incoming MIDI values from 0 to 127 in a bar graph.
- This is helpful to see the softest to hardest hits in a selected zone.

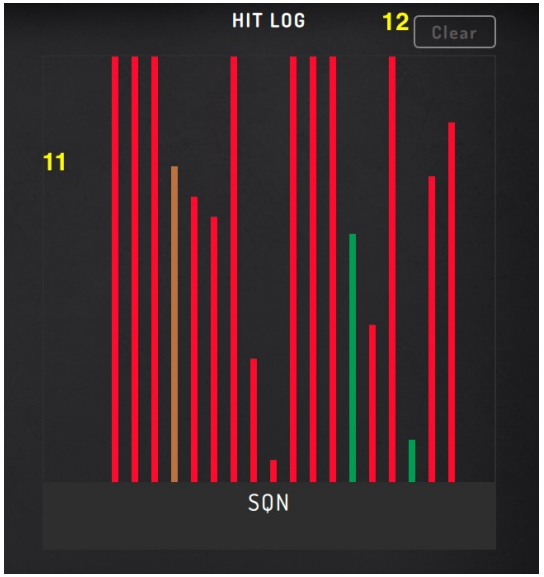
Velocity Control



11. **Hit Log:**
    - Displays strike information to help confirm trigger functionality by showing sequential hits in time from 1 to 255 before repeating.

12. **Clear Button**
    - The "Clear" button resets the hit log so you can have a clean log to look at incoming hits.

Hit Log & Clear Button



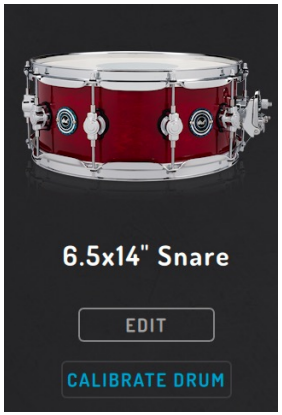
13. Edit Button:

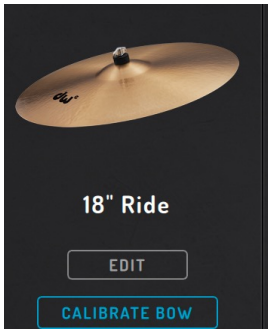
- By clicking “EDIT” button on the Selected Pad, a drop-down menu appears with options for:
  - Firmware Details
  - Exporting Trigger Settings
  - Importing Trigger Settings
  - Factory Resetting the Trigger
  - Unpairing Trigger from Hub

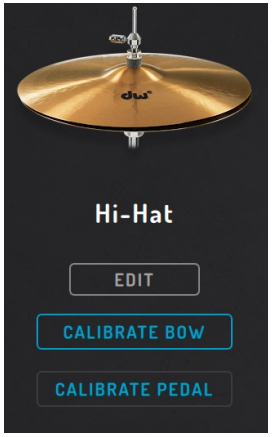
14. Calibrate Button:

- Click the ”CALIBRATE DRUM" button to adjust the drum trigger to drumhead tension as the trigger is adjusting to the amount of tension applied to it. This is vital for having a smooth triggering response.
- There is a “CALIBRATE BOW” option for the cymbals to ensure the zones are responding correctly when struck.
- Also, there is a “CALIBRATE PEDAL” option on the hi-hat to calibrate the “open” versus “closed” response on the hi-hat pedal.

Edit & Calibrate Buttons







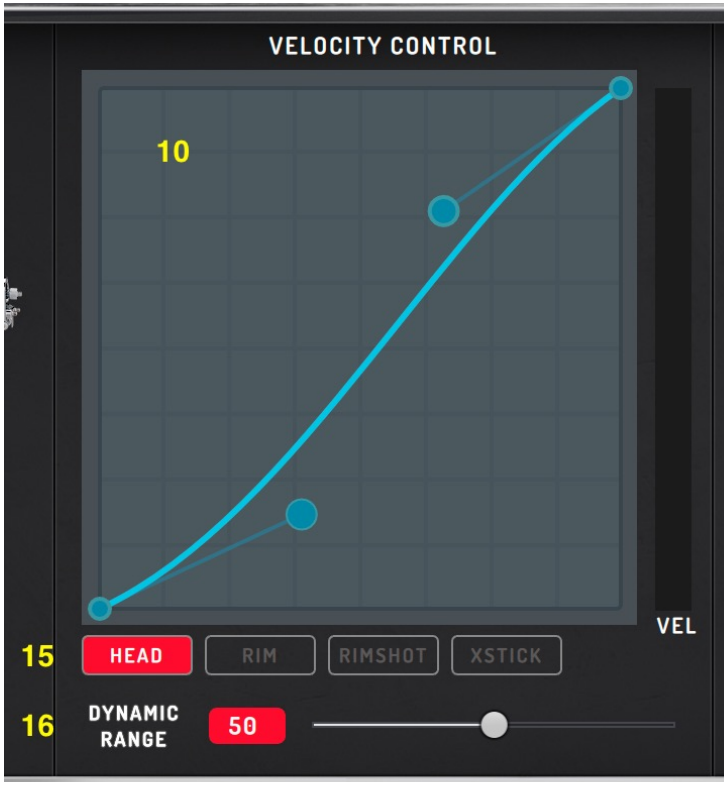
15. Velocity Control Selected Zone & Dynamic Range:

- The VELOCITY CONTROL section displays available zones on the selected instrument to adjust velocity curves.

16. Velocity Control Dynamic Range:

- The DYNAMIC RANGE setting is adjustable per zone on the selected instrument. This determines the usable range from 0 to 127.

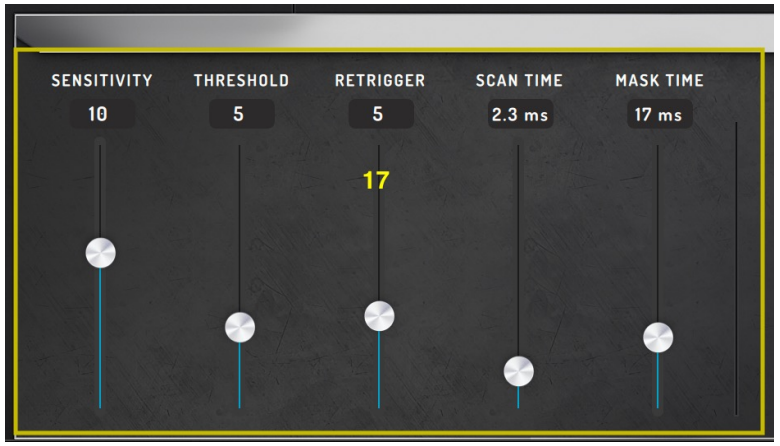
Selected Zone & Dynamic Range



17. Trigger Settings:

- There are the following options for trigger settings available for drums and cymbals.
  - SENSITIVITY
  - THRESHOLD
  - RETRIGGER
  - SCAN TIME
  - MASK TIME
- These settings are adjustable by zone.
- The SENSITIVITY setting determines how sensitive the trigger is to registering a signal, the lower the setting the easier it is to get the trigger to respond.
- THRESHOLD determines the strength it takes for the trigger to respond. The higher the setting, the more force is needed to get the trigger to respond. It is like a gate on the trigger.
- RETRIGGER is used to prevent double triggering after a strike, the higher the setting, the more likely repetitive hits are not heard.
- SCAN TIME is the amount of time it takes a trigger to respond. The lower the time setting, the faster it responds, and the higher the time, the longer it takes to play.
- MASK TIME is the amount of time after a hit that the trigger looks to listen for a strike. The higher the setting, the less double triggering, and the lower the time, the easier it is to play faster.

Trigger Settings



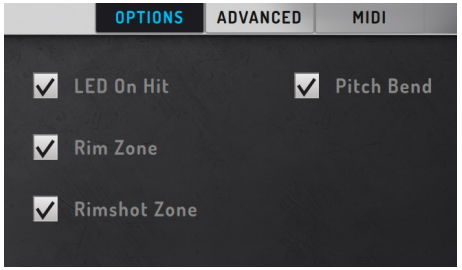
18. Options Tab:

- The “OPTIONS” tab displays additional settings based on the selected drum or cymbal.
- These have adjustments for different zones such as Rim Zone, Rimshot Zone, and Cross Stick Zone (xStick), and LED On Hit. These are instrument-dependent.
- The snare drum has options for Positional Sensing, Throw-off, and Pitch Bend. Positional Sensing and Pitch Bend cannot be used simultaneously.
- The toms have the Pitch Bend option on by default.
- The Ride and Crash cymbals have an auto-calibration option for the trigger, so it plays more evenly while playing, it is on by default.

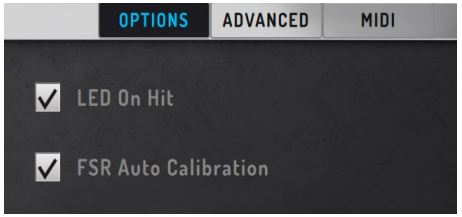
Instrument Options

Snare Drum

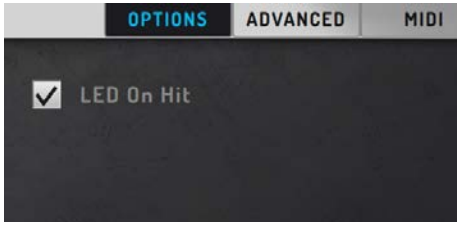
Toms



Ride & Crash Cymbals



Bass Drum & Hi-Hat



19. Advanced Tab:

- The “ADVANCED” tab provides more specific adjustments for selected instruments.
- Snare Drums have HEAD to RIMSHOT, RIMSHOT to RIM, POSITIONAL SENSING SMOOTHNESS, and POSITIONAL SENSING RANGE controls.
- Toms and Bass Drums have Head to Rimshot and Rimshot to Rim controls.
- Hi-Hats have BOW to BELL, CC SMOOTHNESS, and CLOSED PEDAL TUNE controls plus a CC bar indicator.
- Ride and Crash Cymbals have BOW to BELL control.

Advanced Tab

Snare Drum

Toms & Bass Drum

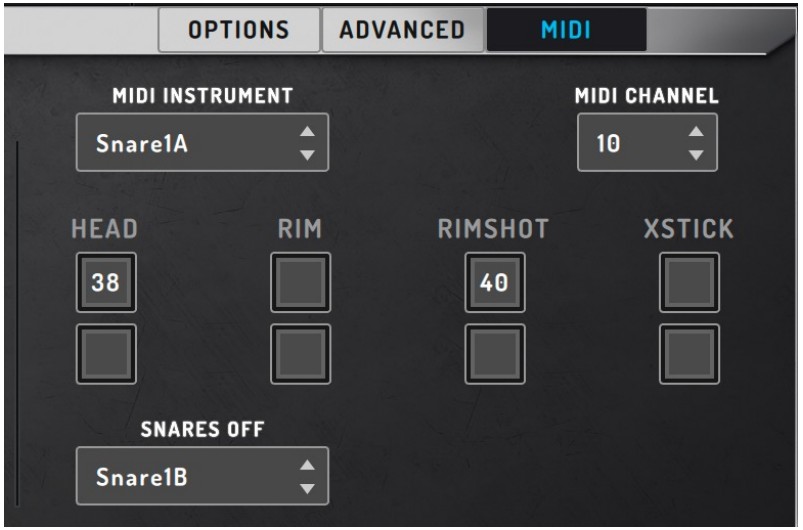
Hi-Hat

Ride & Crash Cymbals

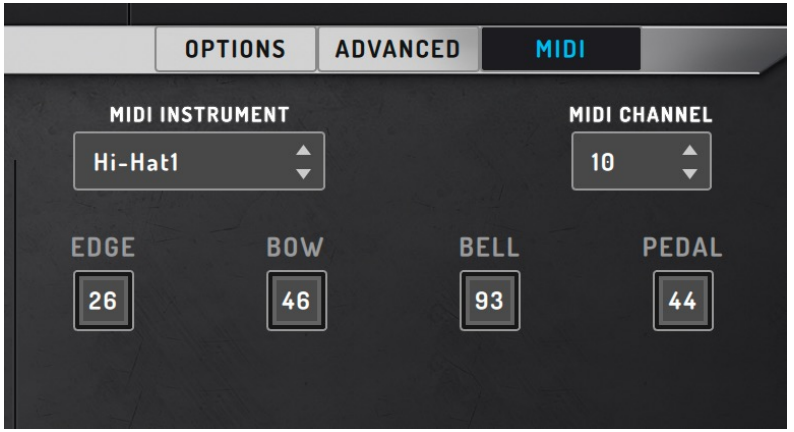
20. MIDI Tab:

- This area shows MIDI note assignments per zone, MIDI INSTRUMENT type, and default MIDI CHANNEL for the selected instrument.
    - Snare Drums will display HEAD, RIM, RIMSHOT, CROSS STICK (xSTICK) zones and the assigned MIDI Note numbers.
    - The snare also has a secondary MIDI assignment for SNARES OFF—this is the OFF position on the digiMAG snare throw-off. It gives you the option of two sound sets on one drum.
    - Toms will display HEAD, RIM, AND RIMSHOT zones and the assigned MIDI note numbers.
    - Bass drums will display the HEAD zone and the assigned MIDI Note number.
    - Rides and Crash cymbals will display BOW, EDGE, and BELL zones and the assigned MIDI note numbers.
    - Hi-Hats will display BOW, EDGE, BELL, and PEDAL zones and the assigned MIDI Note numbers.
- The MIDI INSTRUMENT and MIDI CHANNEL (1-16) are re-assignable.

MIDI Tab



Hi-Hat MIDI Tab

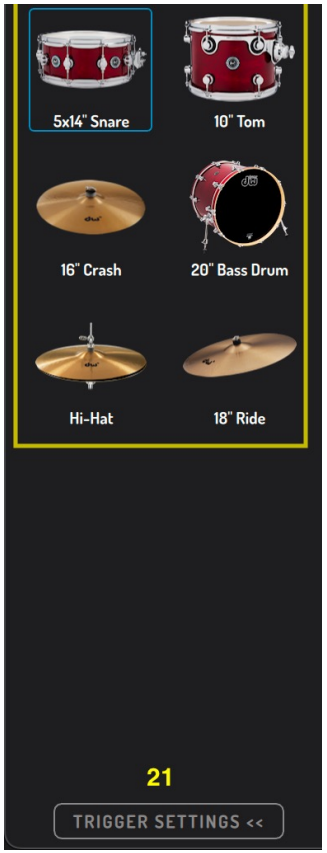


21. Trigger Settings Panel Collapse:

- This control will minimize the main panel for quick visibility of active instruments.
- This is a useful quick reference to see if the drums and cymbals are all actively paired and working.

Trigger Settings Panel Expanded

Trigger Settings Panel Collapsed



DWe Control – Pairing

Pair your drums and cymbals with the DrumLink wireless hub in the DWe kit to connect them to the DW Soundworks app.

Here's how to do it:

Activate Pairing Mode:

- Click the "PAIR" button. This puts the DWe Control app into pairing mode.

Pairing the Instruments:

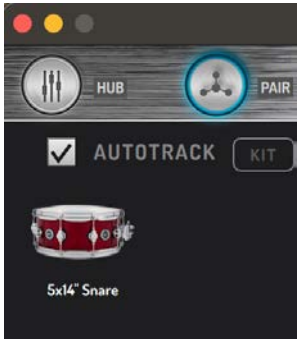
- To pair each instrument, simply hit or strike it once.
- While the app is in pairing mode, you have approximately 15 seconds to pair your drums and cymbals before pairing mode turns off.
- Pairing establishes a wireless connection between the instrument and the DrumLink wireless hub.

Missed Pairing or Additional Pairing:

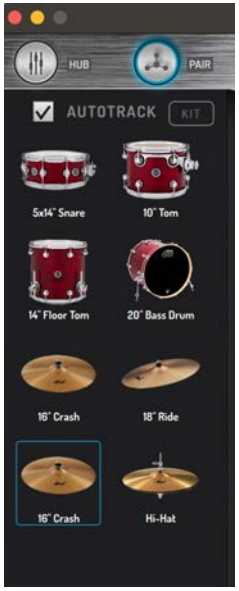
- If you miss pairing any drum or cymbal within the initial 15 seconds or if you're adding more instruments later, simply repeat the process.
- To pair missed or additional instruments, click the "PAIR" button in the DWe Control app again to re-enter pairing mode.
- Then, hit or strike the specific instrument(s) you need to pair while in pairing mode.

Unpaired DrumLink Hub

Paired Snare Drum



Paired Drum Set



DWe Control – Calibrating the Drums, Snare & Toms

Calibrating your drums and cymbals optimizes trigger performance, especially for the snare drum and toms. Bass drums do not need to be calibrated as they are a single zone instruments. Here's how to calibrate your toms and snares:

Select a Drum for Calibration:

- To calibrate a specific drum (snare or toms), hit or strike the drum you want to calibrate.
- If AUTOTRACK function is enabled, the selected pad will automatically select the corresponding instrument.

Initiate Calibration:

- Click the "CALIBRATE DRUM" button in the SELECTED PAD window.
- You will see "SYNC" flash in yellow on the selected instrument, indicating that it's ready for calibration.

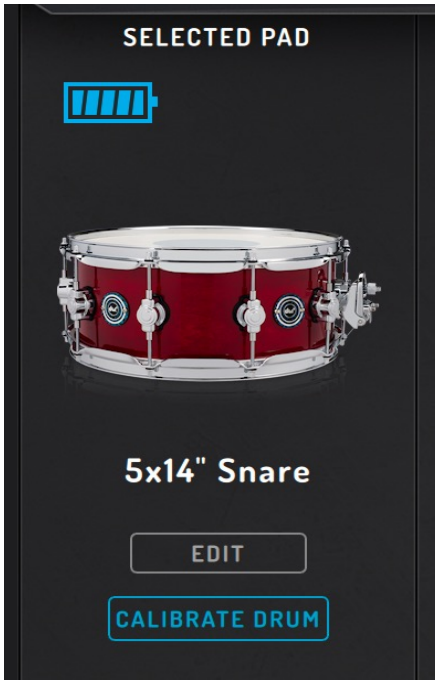
Calibrate the Drum:

- To calibrate the drum, hit the rim with your drumstick while "SYNC" is flashing.
- The flashing "SYNC" will disappear once calibration is complete for that drum.

Repeat for Other Drums:

- Repeat the calibration process for the remaining drums.

Calibrate Drum Button



DWe Control – Calibrating the Crash and Ride Cymbals

Calibrating your cymbals in DWe Control ensures optimal performance and accurate triggering. Here's how to calibrate your crashes and ride:

Select a Cymbal for Calibration:

- Strike or hit the desired cymbal.
- If the AUTOTRACK function is enabled the selected pad will automatically select the instrument corresponding to the hit.

Initiate Calibration:

- Click the "CALIBRATE BOW" button in the SELECTED PAD window.
- You will see "SYNC" flash in yellow on the selected instrument, indicating that it's ready for calibration.

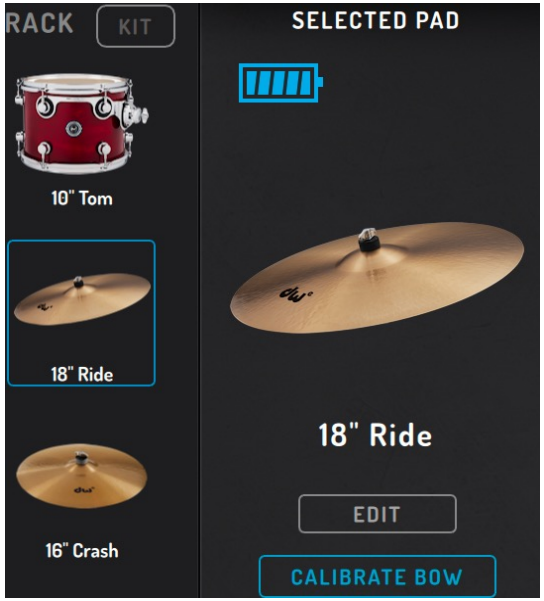
Calibrate the Cymbal:

- To calibrate the cymbal, strike the bow (the main playing surface) of the cymbal with your drumstick while "SYNC" is flashing.
- The flashing "SYNC" will disappear once calibration is successfully completed for that cymbal.

Repeat for Other Cymbals:

- Repeat the calibration process for each Crash or Ride Cymbal you want to optimize.

CALIBRATE BOW Button



DWe Control – Calibrating the Hi-Hat, Calibrating the Bow

Calibrating your hi-hat is used to achieve a natural and authentic drumming experience. Here are the for calibrating and configuring your hi-hat:

Why Optimize Your Hi-Hat

- The hi-hat is a versatile component in drumming, capable of producing various sounds.
- The goal is to make the electronic hi-hat feel and respond like an acoustic hi-hat.

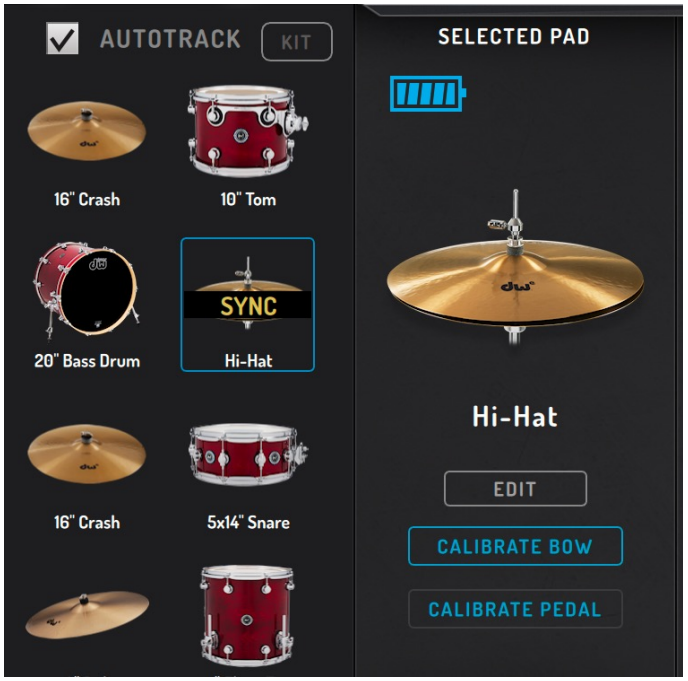
Select the Hi-Hat for Calibration

- To calibrate the Hi-Hat, strike or hit the Hi-Hat.
- If the AUTOTRACK function is enabled, the selected pad will automatically select the instrument corresponding to the hit.

Calibrate the Bow:

- Click the "CALIBRATE BOW" button in the SELECTED PAD window.
- You will see "SYNC" flash in yellow on the selected instrument, indicating that it's ready for calibration.

Calibrate Bow Button



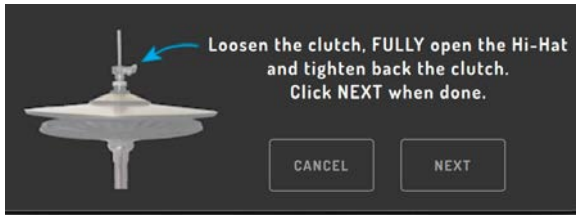
DWe Control – Calibrating the Hi-Hat Pedal

Calibrating your hi-hat pedal and clutch is used to achieve a natural and authentic playing experience. Here's how to calibrate and configure your hi-hat:

Calibrate the Pedal:

- Click the "CALIBRATE PEDAL" button and follow the onscreen prompts until completing the cymbal bow and pedal calibration.

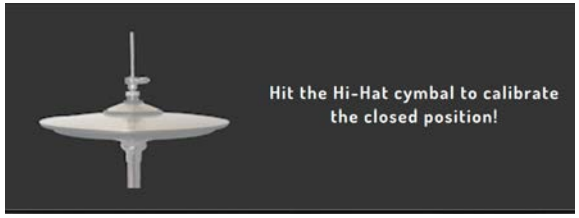
Step 1:



Step 2:

Step 3:

Step 4:



DWe Control – Fine Tuning the Hi-Hat

You may need to fine tune the hi-hat pedal response to better match your playing style.

Adjusting the Closed Pedal Tune Knob

Access the "ADVANCED" Window:

- With the Hi-Hat selected go to the "ADVANCED" tab.

Observe Cymbal Movement:

- Watch how the hi-hat cymbals move as you operate the hi-hat pedal and listen to the closed-foot or "chick" sound.

Adjust the Closed Pedal Tune knob:

- Use the " CLOSED PEDAL TUNE" knob to set your preferred trigger speed:
  - Turn to the left for a faster-closed sound.
  - Turn it to the right for a slower action.

CC Smoothness Setting

CC SMOOTHNESS determines the resolution for hi-hat pedal movement tracking.

Adjust as Needed:

- Turn the CC SMOOTHNESS to 0 for a quicker on/off switch-like feel if desired.
- The default setting is 15, providing a smooth response.

Advanced Hi-Hat Setting

DWe Control – Fine Tuning the Hi-Hat

Adjusting the CC Velocity Curve

Go to the "ADVANCED" Tab:

- Access the "ADVANCED" tab in your DWe Control app.

Ensure Hi-Hat Is Selected:

- Make sure the hi-hat instrument is selected.

Observe CC Value Indicator:

- In the "VELOCITY CURVE" window, observe the CC value indicator on the right for max and min values (0 to 127 range).

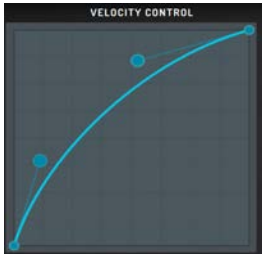
Customize the Velocity Curve:

- Adjust the “VELOCITY CURVE” to match your preference:
  - Create an upward bend for sensitivity to light foot movements.
  - A U-shaped curve for more power.

0=Hi-Hat Fully Open

127=Hi-Hat Fully Closed

Upward Bend Curve (Example)



“U” Shaped Curve (Example)

DWe Control – Trigger Settings

Adjusting trigger settings in the DWe Control app is adjusts the drum kit's response to your playing style. Here are the steps to adjust trigger settings:

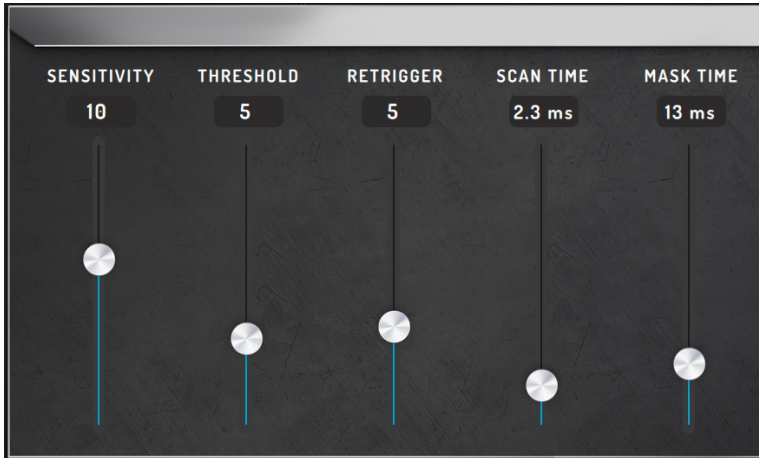
Sensitivity Setting:

- SENSITIVITY refers to the gain level for each drum or cymbal zone.
- Increase this setting for a more uniform response to lighter hits or decrease the setting so a more aggressive strike is needed for a louder response.
- For example, if the SENSITIVITY setting is set higher, light hits will be detected and be louder.

Threshold Setting:

- THRESHOLD is the minimum level at which a strike is detected, and any trigger signal beneath this value is ignored. It’s like a gate on a microphone.
- Lowering the THRESHOLD will detect light taps. Raising the THRESHOLD will require stronger hits.
- Avoid setting the THRESHOLD too low to prevent accidental triggering.

Trigger Settings



DWe Control – Trigger Settings

Retrigger Setting:

RETRIGGER releases the threshold after the loudest part of a hit:

- This prevents sensing spikes or distortion in decay.
- It ensures smooth detection and prepares for the next hit.

Scan Time Setting:

SCAN TIME is the time for the trigger to detect a hit:

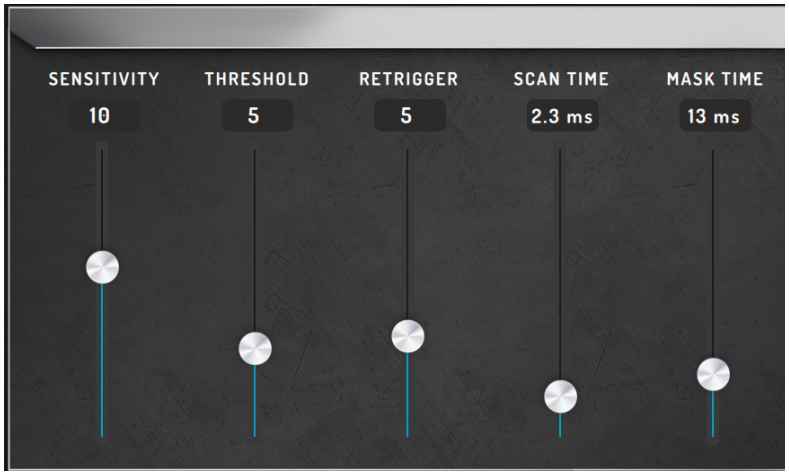
- A shorter SCAN TIME (e.g., 2.7 milliseconds) ensures quick detection.
- Extremely short scan times may miss fast hits but can be useful for main hits like backbeats.

Mask Time Setting:

MASK TIME is the time a trigger listens for a signal after a hit:

- It helps reduce unwanted hits after the initial hit, preventing double triggers or repetitive hits.
- For example, you can adjust MASK TIME to eliminate beater flutters on the kick trigger.
- Try to set the mask time to the lowest possible value before unwanted hits.

Trigger Settings



DWe Control – Velocity Curves

Adjusting VELOCITY CONTROL (Velocity Curves) in the DWe Control app helps you adjust the kit to your playing style. Here's a step-by-step guide to help you understand and adjust these settings:

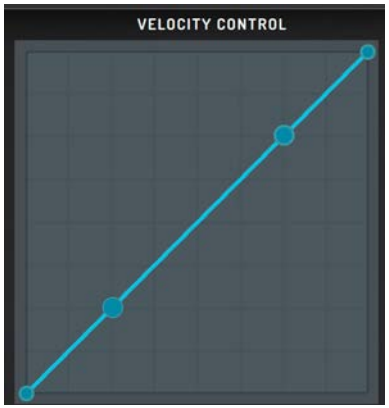
Understanding Velocity Curves and Dynamic Range

- The velocity curves measure how the playing velocity (force) corresponds to changes in volume.
- Dynamic range determines the span between the softest and loudest hits on your drum kit.

Linear Velocity Curve

- The most basic velocity curve type is the Lin (Linear) and it is the starting point when setting up a velocity curve for an instrument.
- A linear curve provides an even correspondence between your playing dynamics and soft-to-loud volume changes.
- NOTE: Acoustic drums and cymbals do not play linearly. There is a natural asymmetry in the instrument’s playing response or when it “opens up.”
- Adjusting curve options may help you get closer to your desired trigger response.

Linear Velocity Curve

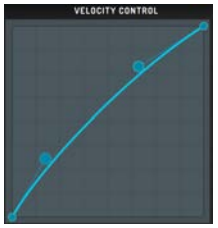


DWe Control – Velocity Curves & Dynamic Range

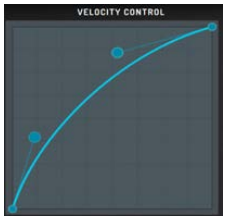
Logarithmic Velocity Curves

- Right-click on the VELOCITY CONTROL to access options.
- Choose "Log 1" (Logarithmic) for a slightly upward bent curve.
- The logarithmic curve emphasizes greater volume with soft hits, which is typically suited for instruments that require playing with ghost notes such as snare drums and hi-hats.
- Dynamics shift faster towards the middle of the dynamic range, enhancing medium velocity sounds.
- There are three Log types available starting with a gradual curve that is more subtle in its effect on the trigger's response to a more exaggerated curve with a more drastic effect on the trigger's response.

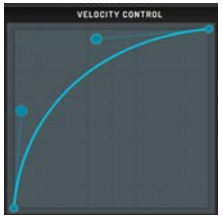
LOG 1



LOG 2



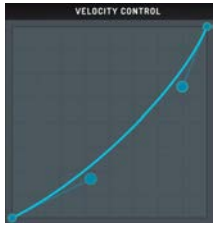
LOG 3



Exponential Velocity Curves

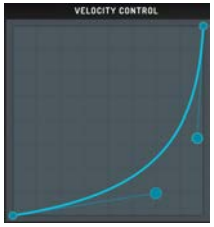
- For drummers with a more powerful playing style, the "Exp" (Exponential) curve types which feature a more U-shaped may be preferred.
- The exponential curve emphasizes greater volume with hard hits, which feels more natural on instruments like bass drums.
- There are three Exp types available starting with a gradual curve. This beings with a more subtle effect on the trigger's response ranging to a more exaggerated curve with a more drastic effect on the response.

EXP 1



EXP 2

EXP 3



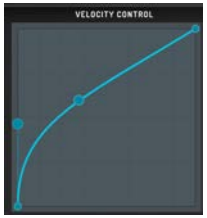
DWe CONTROL Velocity Curves

Power Velocity Curves

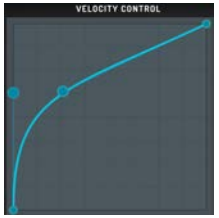
- Another velocity curve type which is a combination of linear and logarithmic curves, the ”Pow” (Power) velocity curve.
- The power curve emphasizes greater volume change with soft hits at the beginning of the curve, to a more balanced response at the top of the curve where harder hits appear.
- This curve type may be suitable for dynamic playing styles in which both ghost and hard hits are needed.
- Instruments like ride cymbals and hi-hats benefit from this curve type.
- There are three Pow types available in this preference. It starts with a gradual curve that’s more subtle in its effect on the trigger’s response ranging to a more exaggerated curve and a more drastic trigger response.

POW 1

POW 2

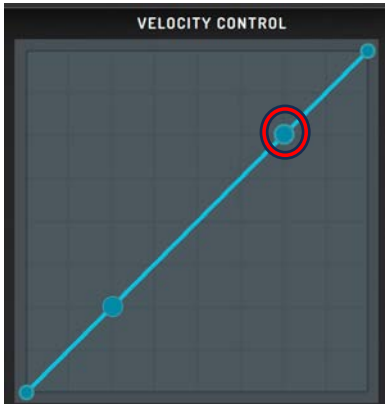


POW 3



Custom Velocity Curves

- Also, you can manually make your own velocity curves or adjust the preset options to your liking by simply moving the dots along the velocity curve to a desired location.
- You can make any shape velocity you wish with this method, and it is great for fine-tuning a trigger response.



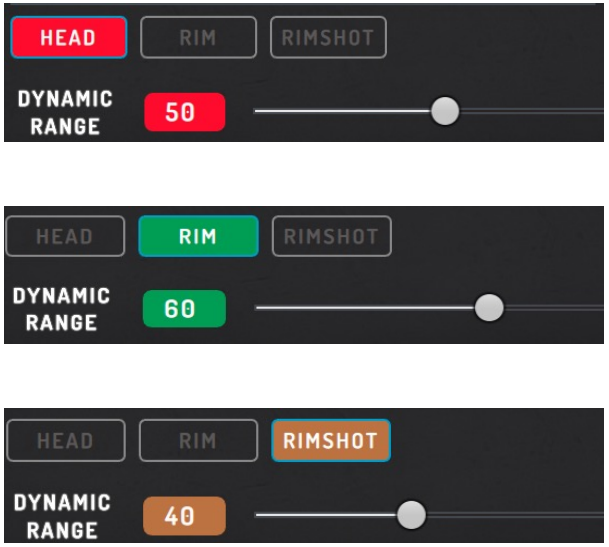
DWe Control Dynamic Range

Adjusting dynamic range in the DWe Control app helps you adjust the kit to your playing style. This step-by-step guide will help you understand and adjust this setting:

Dynamic Range Setting

- The dynamic range is the setting that lets you adjust how wide the softest-to-loudest hits are apart from each other.
- Because acoustic instruments have certain dynamic ranges that vary from each other. (i.e., Snare drums may have a wider dynamic range when compared to a bass drum.) You can emulate this natural feel with the dynamic range settings
- The lower the dynamic range number, the easier it is to get a harder or louder hit when desired—on a rimshot, etc.
- The higher the dynamic range, the more in-play volume variance. This is great for the center head of a snare drum so you can get the ghost note to loud hit and everything in between.
- Lower dynamic range settings can make hard hits sound unnatural due to compression.
- These are adjustable per zone on the instrument so you can experiment to find your preferred balance from soft to loud that suits your playing style.

Dynamic Range Control Examples



DWe Control Advanced Settings

The "ADVANCED Setting" tab allows you to fine-tune the behavior and response of individual drum and cymbal triggers to match your playing style.

Snare Drum:

Rimshot vs. Head:
This control allows you to adjust the crossover point between a center zone hit on the snare drum's HEAD and the RIMSHOT zone.

- If you move the knob towards the RIMSHOT side, you'll hear more rimshot sounds, and if you move it towards the HEAD side, you'll hear more center head sounds.

Rim vs. Rimshot:

- This control determines the crossover point between the RIM and the RIMSHOT sound.
- Lower settings make it easier to trigger a rimshot sound, meaning you'll hear more rimshots when playing on the rim.

Positional Sensing Smoothness:

- The POSITIONAL SENSING SMOOTHNESS control filters out center hits from the edge zone of the drum, so you only hear the edge sounds when you play closer to the rim.
- This helps create a natural transition from an edge sound to a center head sound, mimicking the behavior of an acoustic snare drum.

Positional Sensing Range:

- The POSITIONAL SENSING RANGE control determines where on the drum the edge sound will be triggered.
- Higher settings mean you need to play closer to the edge of the rim to trigger the edge sound, while lower settings make it easier to trigger the edge

DWe Control Advanced Settings

Toms:

Rimshot vs. Head:

- This control allows you to adjust the crossover point between a center zone hit on the tom's HEAD and the RIMSHOT zone.
- If you move the knob towards the rimshot side, you'll hear more rimshot sounds, and if you move it towards the head side, you'll hear more center head sounds.

Rim vs. Rimshot:

- This control determines the crossover point between the RIM and RIMSHOT sound.
- Lower settings make it easier to trigger a rimshot sound, meaning you'll hear more rimshots when playing on the rim.

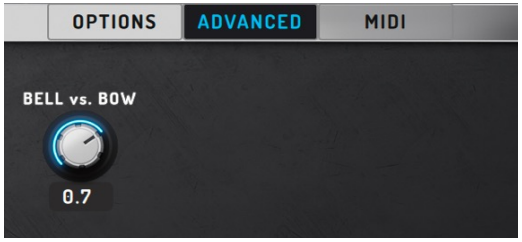
Ride & Crash Cymbals:

Bell vs. Bow:

- The BELL and BOW control determines the crossover point bell and bow sounds, allowing you to fine-tune the balance between these two distinct cymbal zones.

Advanced Tab For Toms

Advanced Tab For Cymbals



DWe Control Advanced Settings

Hi-Hat:

Bell vs. Bow:

This control determines the crossover point BELL and BOW sounds, allowing you to fine-tune the balance between these two distinct cymbal zones.

CC Smoothness:

- This CC SMOOTHNESS control determines the evenness of transitions when the hi-hat pedal moves from closed to open and back.
- Lowering the settings makes the hi-hat feel more like an on/off switch instead of a traditional hi-hat.

Closed Pedal Tune:

- This CLOSED PEDAL TUNE control is the range between the open and closed hi-hat.
- The lower the setting, the closer the pedal range between the open and closed sound.

Advanced Tab Hi-Hat

DWe Control Options Tab

Snare Drum:

- Check "LED On Hit" to trigger the LED light to illuminate when striking the snare drum.
- Toggle Rim Zone, Rimshot Zone, and Cross Stick Zones (xStick) on or off as needed. This is helpful if you only want a single sound triggered on a drum.
- Use "Pitch Bend" to enable pitch modulation by pressing and striking the drum.
- Explore "Positional Sensing" options for achieving center-to-edge sound transitions.
- "Throw-Off" on/off enables snares-off sound or alternate sounds for enhanced versatility.

Toms:

- Check "LED On Hit" to illuminate the LED light when striking the tom.
- Toggle “Rim Zone” and “Rimshot Zone” on or off as needed. This is helpful when you want a single sound triggered on a drum.
- Use "Pitch Bend" to enable pitch modulation by pressing and striking the drum.

Snare Drum

Toms

DWe Control Options Tab

Bass Drum:

- Check "LED On Hit" to illuminate the LED light when striking the bass drum.

Ride & Crashes:

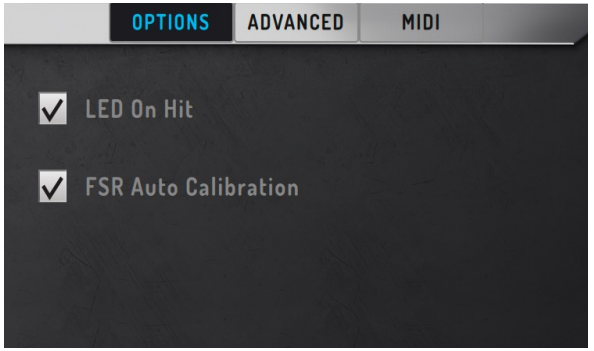
- Check "LED On Hit" to illuminate the LED light when striking the cymbal.
- FSR Auto Calibration ensures an even playing experience by automatically adjusting the cymbal edge trigger levels for consistency.

Hi-Hat:

- Check "LED On Hit" to illuminate the LED upon striking the hi-hat.

Bass Drum

Ride & Crash Cymbals



Hi-Hat

DWe Control Hit Log

The HIT LOG provides a graph and count of the hits generated. It helps you analyze your hit, which can be useful for troubleshooting issues.

Sequential Number Values:

- The lower part of the Hit Log displays the sequential number assigned to each hit, it starts at 1 and cycles up to 255 before repeating.

Hit Values:

- Each line in the Hit Log represents a hit and shows the numeric value associated with that hit.
- These values can vary based on the force and dynamics of your strike.
- Using the Hit Log for Troubleshooting:

Detecting Double Triggers:

- If you notice two hits with sequential numbers that are too close, it may indicate a double-trigger issue where the drum or cymbal is registering two hits in quick succession.

Adjusting Trigger Settings:

- If you identify a double-trigger problem, adjust settings like SENSITIVITY, THRESHOLD, and RETRIGGER to reduce or eliminate double-triggering.

Optimizing Dynamics:

- Inconsistent hit values may suggest that you need to fine-tune your trigger settings to achieve a more balanced and natural response.

Hit Log

DWe Control MIDI Map

Introduction to MIDI Maps

A MIDI MAP is a predefined list of MIDI notes assigned in a specific order for triggering drum software or modules. Different drum hardware and software often require distinct MIDI maps. DWe Control allows you to adjust MIDI maps to ensure compatibility with a wide range of drum software and modules.

Navigating the MIDI Map Window:

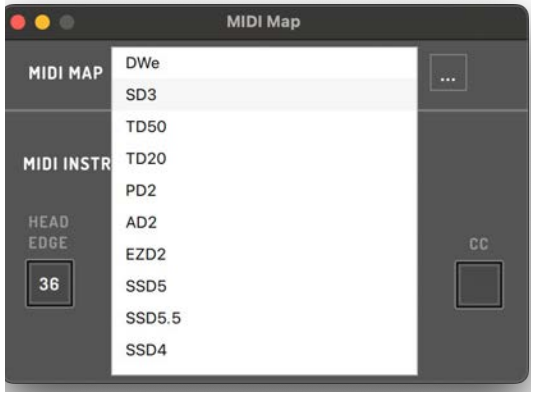
- Click on the "MIDI MAP" button to access the MIDI MAP window.
- Click on the ellipsis (three dots) icon to display the menu.
- In the dropdown menu, you will see the available MIDI maps.
- The default MIDI map loaded is the DWe map.

Loading a MIDI Map:

- From the dropdown menu in the MIDI MAP window, select the MIDI map that corresponds to your drum software or module.
- Loaded MIDI maps provide pre-assigned MIDI note assignments tailored to specific drum programs or modules.

MIDI Map Window

MIDI Map Drop Down Menu

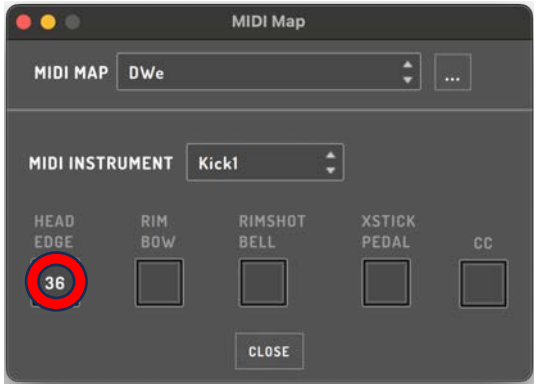


DWe Control MIDI Map

Auditioning MIDI Note Assignments:

- To audition sounds, click on the zone boxes within the MIDI Map window that correspond to different parts of your drum kit. The box will change color when auditioning.
- Use the “MIDI MAP” Instrument dropdown menu to select a specific instrument for reviewing MIDI note assignments in the selected map.

MIDI Note Audition

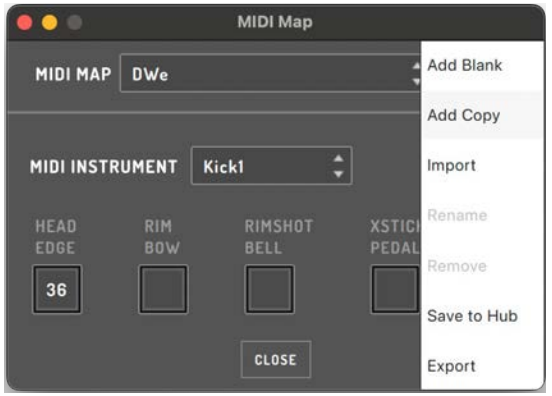


DWe Control MIDI Map

Creating a Custom MIDI Map:

- To create a custom MIDI MAP, click on the ellipsis (three dotted) icon in the MIDI Map window and either select "Add copy" or “Add Blank”.
- The “Add Copy” option copies the currently selected MIDI MAP to give you a starting point with MIDI note assignments.
- The “Add Blank” option makes a blank MIDI MAP with no MIDI note assignments.
- This is helpful if know the MIDI note assignments for the software or MIDI device you wish to use.
- Give your new MIDI MAP a name and press “Enter” to create it.
- Your custom MIDI MAP will be listed as a “User” MIDI MAP.
- This MIDI MAP is editable so you can reassign the MIDI note assignments per INSTRUMENT and ZONE.
- To edit a MIDI Note, open the “MIDI Notes” grid by clicking the dropdown arrow in the zone boxes.
- Assign MIDI Note numbers to each zone of your drum kit and save the assignments.

MIDI Map Add Copy



MIDI Note Grid

DWe Control MIDI Map

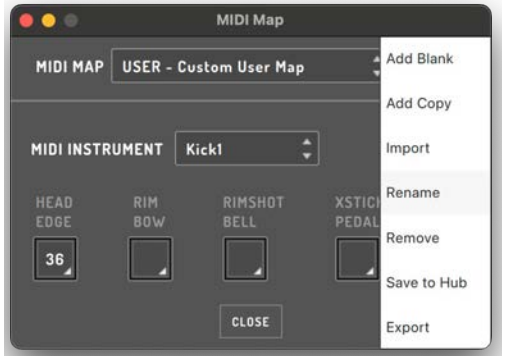
Renaming a Custom MIDI Map:

- To rename a custom MIDI MAP, click on the ellipsis (three dotted) icon in the MIDI Map window and select ”Rename”.
- You will then be able to rename the currently selected custom MIDI MAP, and press Enter to save your changes.

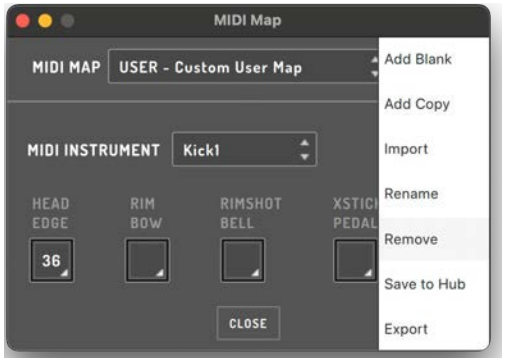
Removing a Custom MIDI Map:

- To rename a custom MIDI MAP, click on the ellipsis (three dotted) icon in the MIDI Map window and select ”Remove”.
- You will get a prompt asking if you wish to remove the currently selected custom MIDI map.

MIDI Map Renaming



Removing a MIDI Map



DWe Control MIDI Map

Using a MIDI Map with an External Drum Module

- To use an external drum module such as the Roland TD-50 with the DWe kit and DrumLink hub, first load the appropriate MIDI Map from the MIDI MAP dropdown menu.
- Then use the "Save to Hub" function to save the MIDI Map to the DrumLink Hub.
- This will allow the DrumLink hub to transmit MIDI data to the drum module.
- **NOTE:** you will need to either have the “Hub Only” or “Software + Hub” option selected in the DrumLink Hub settings, reference the “Hub Button” section in the overview portion of this manual.
- To use the DrumLink Hub without a computer connection, a USB power source is needed to enable standalone operation with your drum module.

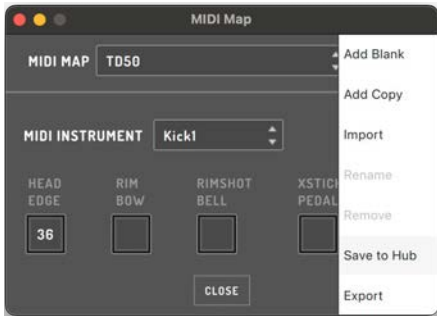
Exporting MIDI Maps:

- You can export a MIDI Map file by selecting the “Export” option in the ellipse MIDI MAP dropdown menu.
- Choose a location on your computer to save the exported MIDI Map file and press "Save.”

Importing MIDI Maps:

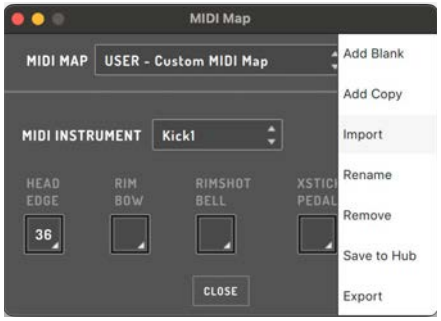
- You can import a MIDI Map file by selecting the “Import” option in the ellipse dropdown menu.
- Importing MIDI maps can be useful for adding other drum modules or drum VSTs to expand your compatibility options.

Saving a MIDI Map to the DrumLink Hub



Exporting a MIDI Map

Importing a MIDI Map



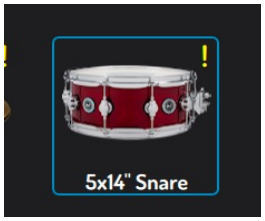
DWe Control Updating the Trigger Firmware

Updating the firmware on your DWe kit is essential for maintaining optimal performance and utilizing improvements or new enhancements. Here's a step-by-step guide on how to update firmware for both your triggers and the DrumLink USB hub:

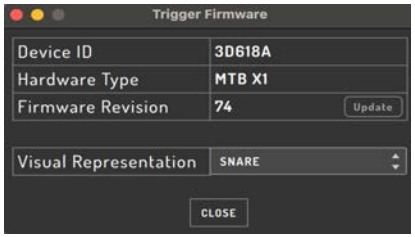
Updating Trigger Firmware:

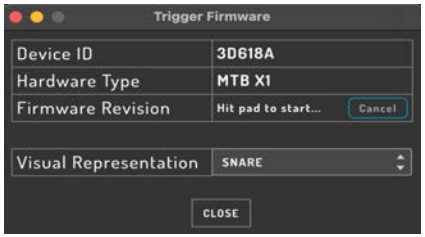
- If an instrument in the instrument pane has a "Yellow Exclamation" in the top right corner of the icon to indicate that a firmware update is available for that trigger.
- Select the drum or cymbal that needs a firmware update.
- Click the "Edit" button in the selected pad section to access the trigger's settings.
- In the pull-down menu, click on the "Firmware details" option. The “Trigger Firmware” pop-up box will appear,
- Click the "Update" button and strike the instrument to the firmware update.
- A progress bar will appear until the firmware update is complete. This may take a few seconds.
- Once the firmware update is completed, the "Yellow Exclamation" icon disappears from the instrument icon in the instrument pane, indicating the firmware is updated.

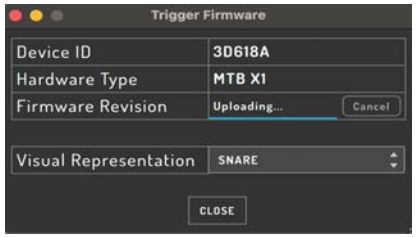
Firmware Update Indicator

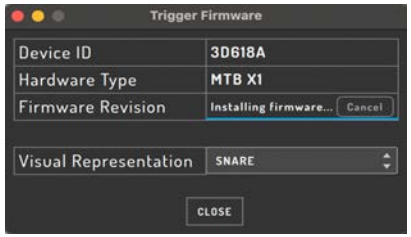


Trigger Firmware Process







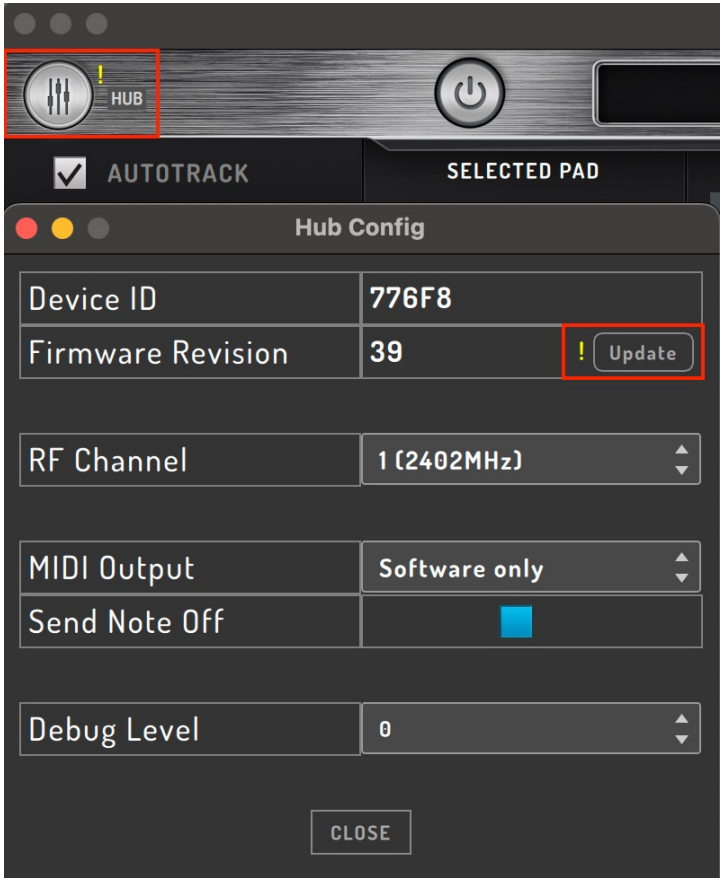


DWe Control Updating the DrumLink Hub's Firmware

Updating DrumLink USB Hub Firmware:

- In the DWe Control application, click the "Hub" button within the interface. This will open the Hub Settings pop-up window.
- If a firmware update is available for the DrumLink USB hub, it will be displayed within the pop-up window.
- Click the "Update" button to install the DrumLink hub's firmware update.
- Allow the firmware update process to complete. During this process, you will see a light blue progress bar until the firmware is updated.
- The DrumLink Hub will restart after a firmware update. The instruments will also repopulate in the instrument pane.

DrumLink Hub Settings Window



What is DW Soundworks?

DW Soundworks™ is a powerful and versatile drum sound library designed to provide drummers with a wide range of high-quality samples and articulations. The inclusion of up to 18 layers per articulation, the ability to create custom kits, and the import of user WAV files allow for a highly customizable, authentic, and expressive drumming experience. The programmable EQ, compression, reverb, and effects, along with flexible signal-routing options, further enhance the sound-shaping capabilities of this software.

This platform offers 20 instruments and 10 X-Pads for user sounds and layering, along with a collection of drum and cymbal models from respected brands like DW Drums, Gretsch, and Slingerland to ensure drummers have access to a diverse palette of sounds to suit their playing style and preferences. The extensive articulations for different drum components and the natural response of the Hi-Hat contribute to creating a realistic and dynamic drumming experience.

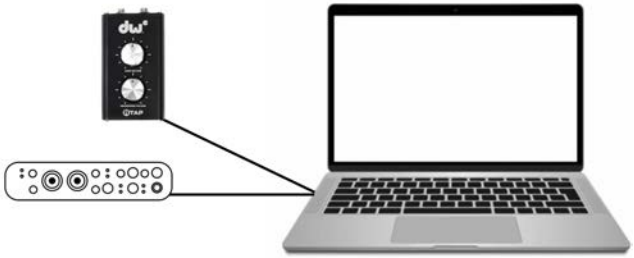
DW Soundworks is a versatile, comprehensive, and feature-rich solution with a simple, intuitive interface that puts the creators in control of their drum sound. Loaded with premium drum sounds and powerful customization options for performances and recordings, DW Soundworks delivers the most authentic electronic drumming experience.

DW Soundworks tutorial videos are available here:

[DW Soundworks Tutorial]

Launching DW Soundworks for the First Time

These steps are instructions for configuring audio and MIDI settings in DW Soundworks. These settings are important for ensuring that the software works correctly with your audio interface.



Example: only one (1) audio interface is required

Connect Audio Interface:

Make sure your computer is connected to an active audio interface such as the DWe RTAP or other audio interface The audio interface is essential for handling audio output from DW Soundworks. The interface audio or headphone output(s) should be connected to powered monitors, headphones, or another audio device to hear audio playback.

1. **Launch DW Soundworks:**

   Locate the DW Soundworks icon on your computer's dock (Mac), taskbar (Win), or applications/programs list. Double-click on it to launch the application.

Mac **Win**

2. **Hardware Settings Dialog:**

   When you open DW Soundworks, you should see a dialog box labeled "Hardware Settings." If this dialog box is not visible, you can access it by clicking on "DW Soundworks" (Mac) or "Settings" (Win) within the application.

Hardware Settings

.

4. **Select MIDI Device:**
   In the "Hardware Settings" dialog, next to "MIDI DEVICE," select "DWe Control" from the dropdown menu. This setting determines the MIDI input device to communicate with your DWe drum kit or MIDI Device.

5. **Choose Audio API:**
   Next to "AUDIO API," select "ASIO" if you're using Windows. On Mac, "Core Audio" is automatically selected. The Audio API defines the audio driver type for DW Soundworks.

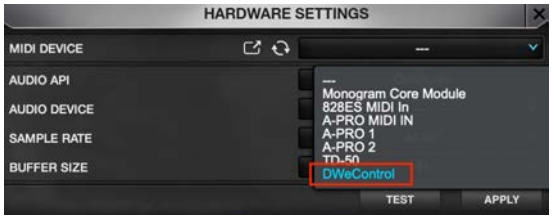
6. **Select Audio Device:**
   In the "AUDIO DEVICE" section, choose your audio interface from the dropdown menu. This is the device that handles audio output for DW Soundworks.

7. **Set Sample Rate:**
   Next to "SAMPLE RATE," select the desired sample rate from the dropdown menu. This setting defines the number of audio samples processed per second and is typically set to 44.1 kHz for CD-quality audio.

8. **Configure Buffer Size:**
   Next to "BUFFER SIZE," select "64" from the dropdown menu. The buffer size determines the amount of audio data processed in each audio cycle. Smaller buffer sizes can reduce latency but may require more processing power.

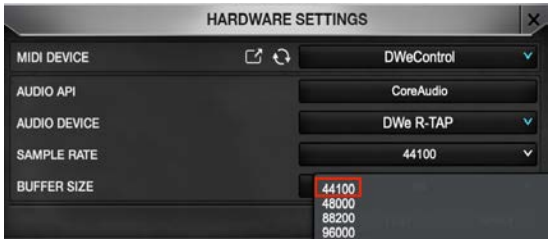
9. **Apply Settings:**
   Click the "APPLY" button to confirm and the dialog window will automatically close.

MIDI Device Selection



Audio Device Selection

Sample Rate Selection



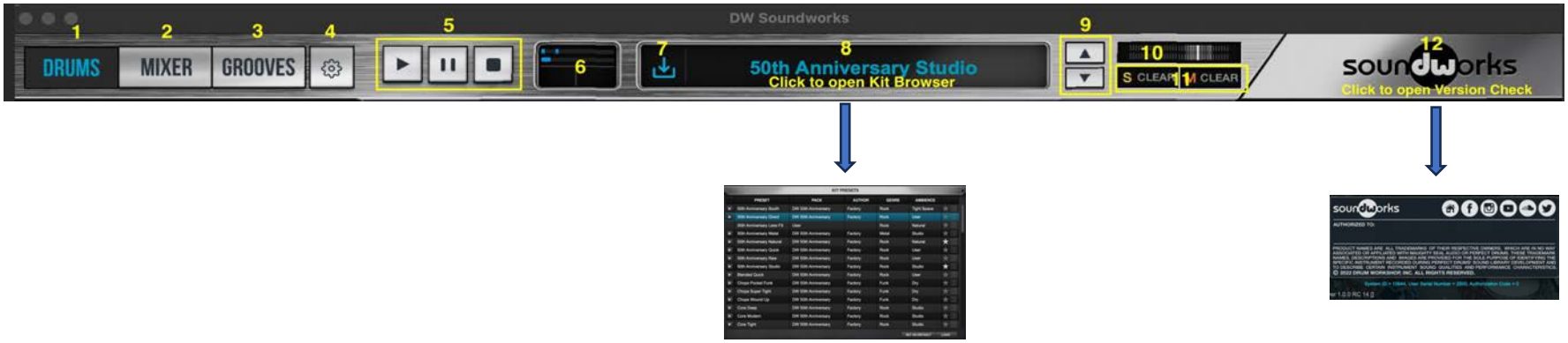
Buffer Rate Selection

Main Drum Page Overview:

In the center of the interface, you'll see an image of a drum kit. This image displays the various drum components and cymbals available for selection. You can click on each drum or cymbal to preview its sound. The X-Pads allow you to trigger user-defined one-shot sounds or layer in different sounds.

DW Soundworks Kit View with X-Pads

General Layout of DW Soundworks User Interface:



The top row of the DW Soundworks user interface consists of the following elements:

1. **Drums**: Access and select different drum and cymbal components to build your kit.
2. **Mixer**: Adjust individual channel settings for precise sound control.
3. **Grooves**: Browse and select pre-recorded groove patterns to enhance your drumming.
4. **Settings Gear**: Access various configuration options and settings.
5. **Play Controls**: Control playback, recording, and loop functions.
6. **MIDI Note Display**: Visual representation of MIDI notes being triggered.
7. **Preset Save**: Save and load your customized drum setups.
8. **Preset Browser**: Easily navigate through the factory and your saved presets.
9. **Arrows**: Navigate between different sections of the interface.
10. **Meter:** Monitor audio levels and ensure optimal sound balance.
11. **Global Clear** (Solo, Mute): Quickly mute or isolate individual channels.
12. **DW Soundworks Version Check**: Verify the current version of DW Soundworks.

Drums Page:

The Drums Page in DW Soundworks is where you interact with and customize your drum kit. It provides access to various controls, presets, and options to shape your drum sounds. Let's quickly cover the main areas and panels of the Drums Page:

1. **Navigation and Tabs:**

- The top tabs allow you to switch between different pages: DRUMS, MIXER, and GROOVES.
- The Settings button provides access to settings, including GUI scaling options for screen resolution.

2. **Play Controls and MIDI Window:**

- Play, pause, and stop buttons control groove playback.
- The MIDI window displays MIDI activity.

3. **Preset Management:**

- Save button for saving preset changes.
- The main preset window displays the currently loaded drum kit preset.
- Load and save options for different presets, including Factory and user-created presets.
- Quick access to Favorites and Set List options for streamlined performance setup.

4. **Master Volume and Mixer Controls:**

- Master volume slider for controlling the overall volume of the app.
- Solo, Clear, and Mute buttons for global solo and mute functions.

5. **Settings Sprocket:**

   - Provides quick access to additional playback options and settings.

6. **QUICK CONTROLS Pane:**

   - A miniature representation of the MIXER page, allowing quick access to mixer controls for selected drums.

7. **Drum Visualization and Interaction:**

   - Display of the drum kit with individual drum elements.
   - Left-click to audition drums, and right-click (or control-click) for instrument options

8. **Instrument Management:**

   - The dropdown menu to load, save, and clear individual instruments.
   - Option to load instruments from the KIT DESIGNER.

9. **X-Pads:**

   - Additional pads for layering or adding one-shot sounds to your drum kit.

10. **ARTICULATIONS Pane:**

    - Provides access to different articulations for selected drums, cymbals, and x-pads.

11. Advanced Settings and CC Settings:

- Access to advanced settings for in-depth customization of drum sounds.
- CC Settings button for adjusting MIDI CC assignments for specific instruments.

12. Kit Load, Save, and Clear:

- Controls for loading, saving, and clearing the entire drum kit setup.

12. Drum Kit Library and Audition:

- Library of available drum kits for loading and auditioning.
- Audition feature for testing drum sounds in various velocity ranges.

13. Tabs for Additional Panels:

- Favorites: Manage and access favored drum kit presets.
- Setlist: Organize and run live performance setlists with metronome control.
- Kit Designer: Customize drum kit components and assign instruments.
- Instrument Designer: Create and customize individual instruments.

Kit View:

- Default view when DW Soundworks is launched.
- Displays a graphic representation of the currently selected drum kit.
- Shows the sounds and other parameters assigned to each instrument in the kit.
- When the DW e-drums are played, the drums and cymbals are animated to illustrate which instrument is being played.
- You can click on each instrument using your cursor to trigger its sound.
- This view is useful for quickly auditioning and editing sounds, especially if you're away from the drum kit or using DW Soundworks as a DAW (Digital Audio Workstation) plug-in.
- Note that mouse clicks in this view do not affect the volume (velocity) of the triggered sound. In other words, it triggers sound at a consistent velocity.

Kit View

Cell View:

- Displays 30 individual cells in a layout reminiscent of a drum machine or MIDI pad controller.
- Each cell represents the current sound assignment based on the selected drum kit.
- Like Kit View, you can click on each cell to trigger the corresponding sound.
- One significant difference in Cell View is that the volume (velocity) of the triggered sound can be adjusted by moving the cursor up or down within the cell while clicking. This allows you to vary the intensity or strength of the sound, which is a common feature in electronic drum kits and MIDI controllers.

Cell View

Quick Controls:

1. **Instrument Tuning:**
   - Adjust the pitch of individual drum components for tonal customization.

2. **Mic Groups:**
   - Control groups of virtual microphones to emulate different recording perspectives.
     - Direct (Close Mics)
     - Overhead
     - Ambience (Room Mics)

3. **Channel Strip:**
   - Fine-tune the sound of each channel using equalization, compression, and other processing

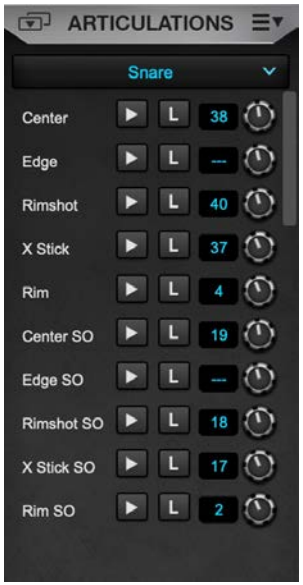
Quick Controls

Instrument Drop-Down Menu

Articulations Panel:

This panel provides a variety of articulations, such as center, edge, rim, bell, bow, and edge, to allow for more realistic and expressive drumming.

Articulations Panel



Cell View:

Cell View allows you to see and edit specific articulations for each drum component, enabling detailed customization of your drum sound and performance.

Cell View

Favorite Kits Panel:

The Favorite Kits panel lets you save and quickly access your preferred drum kit setups for efficient workflow

Favorite Kits Panel

Set List Panel:

The Set List panel allows you to organize and manage your drum patterns and performances, making it easier to transition between different songs or sections.

Setlist Panel

Kit Designer Panel:

The Kit Designer panel enables you to create your custom drum kits by selecting specific components, adjusting parameters, and saving your unique setups.

Kit Design Panel

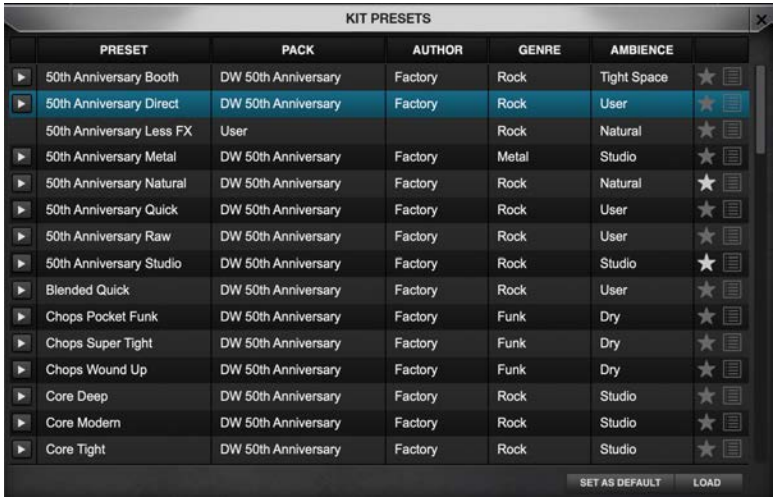
Kit Preset Browser:

The Preset Browser in DW Soundworks is a handy tool for managing and loading both Factory and User presets.

Selecting and Loading Presets:

1. **Access the Preset Browser:** Locate the Preset Browser panel in the user interface and click on it to open it.
2. **Choose Factory or User Presets:** Within the Preset Browser, you'll typically find tabs or categories for Factory and User Presets. Click on the tab based on the type of preset you want to load.
3. **Select a Preset:** Browse through the list of presets available in the selected category. Click on the name of the preset you want to load. You should see a preview or description of the preset in the browser.
4. **Load the Preset:** After selecting a preset, double click the preset you've selected or click the "Load" button. Click on it to load the chosen preset onto the MAIN Drum Page.

Kit Preset Browser



Defining the Different Columns:

The Preset Browser may include several columns that provide information about each preset:

- **Name:** The name of the preset.
- **Category:** The category or type of preset (e.g., Rock, Jazz, Electronic).
- **Author:** The creator or author of the preset.
- **Description:** A brief description or notes about the preset.
- **Date:** The date when the preset was created or modified.

Saving, Editing, and Deleting User Presets:

1. Customize a Kit:

- On the Drum Page, create a drum kit setup that you want to save as a User preset.

2. Save User Preset:

- Click on the downward arrow/square icon next to the preset name on the top of the navigation bar.
- The Save Kit Preset window will appear
- Name the kit and if desired modify the other fields (Author, Genre, Ambience)
- Click on Save Preset to save your current kit setup as a User preset.

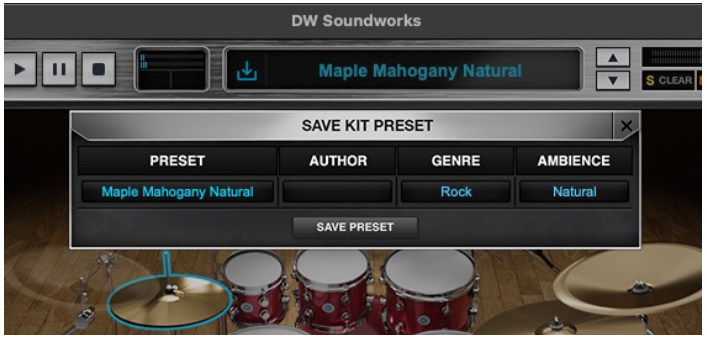
3. Renaming User Preset (Optional):

- Open the Preset Browser panel.
- Similarly, right-click on the preset's name and choose "Rename" to change the name of the User preset.

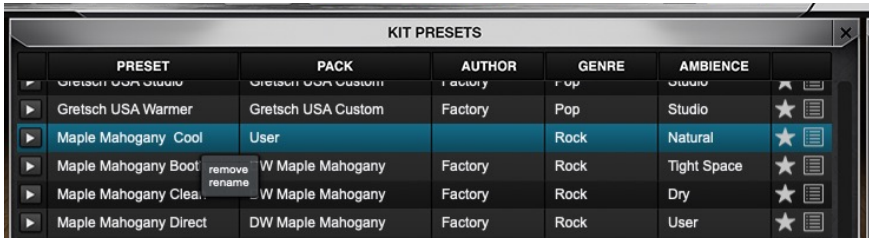
1. Removing User Preset (Optional):

- Open the Preset Browser panel.
- To remove a User preset, locate the preset in the User category. Right-click on the preset's name and choose ”Remove".

Saving a Kit Preset



Modifying a Kit Preset



Articulations:

In the context of electronic and drum sample libraries, articulations refer to the specific sets of samples or sound variations triggered when you strike different zones or areas on a drum or cymbal pad. Articulations are designed to reproduce the nuances and tonal differences when you play different parts of an acoustic drum or cymbal.

For Example:

Snare Drum:

A snare typically has several zones, each triggering a distinct articulation:

- **Edge:** Striking the outer rim of the snare pad will trigger a rim click or rimshot sound.
- **Head:** Hitting the center of the snare pad triggers the primary snare drum sound.
- **Rim:** Hitting the inner rim of the snare pad will produce a different sound than the edge, such as a rimshot or cross-stick sound.
- **Rimshot:** Simultaneously striking the head and rim triggers a specific rimshot sound.
- **Cross Stick:** Another articulation will replicate the sound of playing a cross-stick on the snare.

Tom:

Toms can also have multiple articulations:

- **Head:** Hitting the drumhead zone produces the main tom-tom sound.
- **Rim:** Hitting the rim of the tom will trigger a rim sound.
- **Rimshot:** If the tom has a rimshot articulation, hitting the rim and head simultaneously will produce a rimshot sound.

Snare Articulations

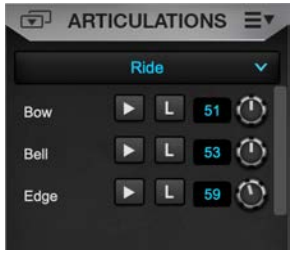
Tom Articulations

Cymbals:

Ride and Crash cymbals can also have multiple articulations:

- **Bell:** Hitting the bell zone produces the cymbal bell sound.
- **Bow:** Hitting the bow of the cymbal will trigger a cymbal bow sound.
- **Edge:** Hitting the edge of the cymbal will trigger a cymbal edge sound.
- Note: Ride and crash cymbals also feature a choke feature.

Ride/Crash Articulations

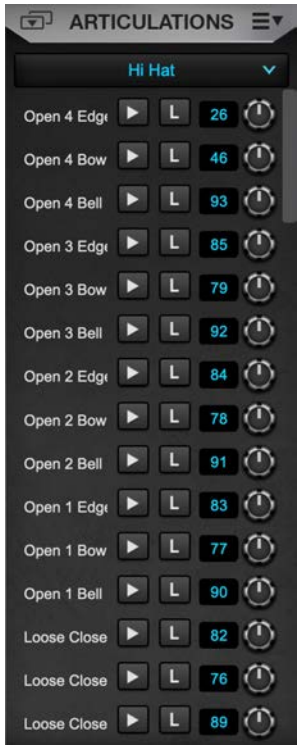


Hi-Hat:

Hi-hats can also have multiple articulations:

- **Bell:** Hitting the drumhead zone produces the main tom-tom sound.
- **Bow:** Hitting the rim of the tom will trigger a rim sound.
- **Edge:** If the tom has a rimshot articulation, hitting the rim and head simultaneously will produce a rimshot sound.

Hi-Hat Articulation Panel



Round Robin:

Round Robin is a technique used in sampling and sound design to enhance the realism and authenticity of virtual instruments, especially in the context of electronic drum kits and percussion instruments. It involves recording and using multiple variations of the same sample at a given velocity or dynamic level.

Here's how Round Robin works:

Recording Multiple Samples:

- When recording samples for a virtual instrument like an electronic drum kit, each sound (articulation) is recorded at various dynamic levels, from soft to hard hits. For example, when recording a snare drum, samples are taken at different force levels, ranging from a gentle tap to a strong strike.

Variation for Realism:

- Instead of triggering the same sample every time you play a particular velocity or dynamic level, the Round Robin technique ensures that a slightly different sample is triggered with each successive hit at that level. These variations can include subtle differences in timbre, tone, or attack.

Natural and Realistic Sound:

- By introducing this variability, Round Robin mimics the natural imperfections and nuances of acoustic instruments. In real-life drumming, no two hits are identical, even at the same dynamic level.

Avoiding Repetition:

- Without Round Robin, playing the same dynamic level repeatedly would result in the same sound being triggered every time, which can sound robotic and unnatural.

Quick Controls:

The Quick Channel Strip in DW Soundworks is a powerful tool for shaping and enhancing your drum and instrument sounds. It offers various controls and effects modules to help you achieve the desired output.

1. **Quick Controls and Articulations:**
   - Clicking on a drum or instrument in the main window provides quick access to controls on the left side.
   - QUICK CONTROLS include mixer settings, articulation preview buttons, and articulation volume adjustment.
   - PAN, SOLO, and MUTE functions are available, as well as access to the effects modules.
2. **Instrument Controls:**
   - INSTRUMENT volume and TUNING controls allow for overall adjustments.
   - Mic groups offer quick access to solo, mute, and panning options.
3. **Mixer:**
   - The bottom half of the Channel Strip houses mixer controls.
   - Direct outs for live performance or recording to an interface, main mix feed, and panning controls are available.
4. **Phase Swap and Pan Swap:**
   - The PHASE Swap button flips the phase of an instrument's direct mic against the overhead.
   - The PAN Swap button swaps perspectives for left-handers or specific recording purposes.

Quick Controls

Instrument Controls

6. **EQ Module (SSL-style):**
   - Four-band EQ with high, high-mid, low-mid, and low-frequency bands.
   - Bell filters for precise adjustments and upcoming high pass/low pass filters for frequency cleanup.
7. **Dynamics Module (Compressor):**
   - Three types of compressors: FET, Variable Voltage Amplifier (VA), and Bus Compressor.
   - Controls for compression settings, transient designer, and output gain.
8. **Saturation Module:**
   - Four saturation types: tape, tube, fuzz, and amp.
   - Wet-dry knob for blending saturation, bias control, and drive adjustment.
   - Use to add warmth and character to drum sounds.
9. **Reverb Module:**
   - Four reverb types: room, chamber, plate, and hall, each with eight variations.
   - Control over reverb parameters to add depth and space to drum sounds.
10. **Volume Balancing:**
    - Aim to keep instrument volumes between -12 and -10 dB to avoid clipping and ensure a balanced mix.
    - Make fine adjustments across the kit to achieve a consistent sound.
11. **Parallel Processing:**
    - Learn how to use sends and parallel processing to enhance drum sounds.
    - Utilize parallel compression and saturation to add depth and character to your mix.

EQ

Compressor

Saturator

Reverb

Sends

Favorites List:

The Favorites List in DW Soundworks is for quickly accessing your preferred drum kit setups.

Adding Kits to the Favorites List:

Select a Kit:

- Start by either selecting an existing drum kit setup or customizing one to your liking on the Drum Page.

Star Icon in Preset Browser

Access the Preset Browser:

- Locate and click on the ”Preset Name" on the navigation bar.
- Click on the Star icon to add any preset to the favorites.

Favorites Panel:

- Locate and click on the "Favorites" panel on the bottom left of the Drums Page

Favorites List

Arranging Kits in the Favorites List:

Reorder Kits:

- To arrange kits within the Favorites List, click and drag the kit names to reorder them according to your preferences.

Editing the Favorites List:

Remove Kits:

- To remove a kit from the Favorites List, click on the red “X" next to the kit name. Click on this to remove the kit from your Favorites List.

Setlist Panel:

- Song List: Displays the list of songs you've added.
- Current Song: Indicates the currently selected song.
- Kit Presets: Lists the kit presets associated with each song.
- Controls: Offers various controls for managing the setlist and songs.

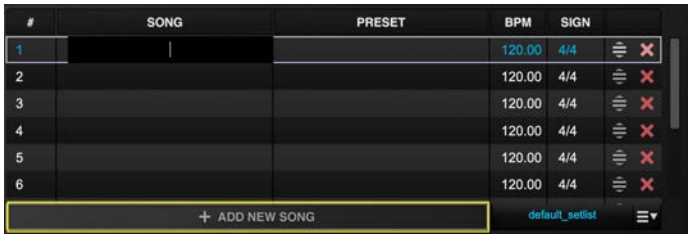
Adding a Song:

- Access the Setlist Panel: Open the Setlist panel within the DW Soundworks interface.
- Click the "Add New Song": button in the Setlist panel. Click on it to add a new song entry and enter the song title.

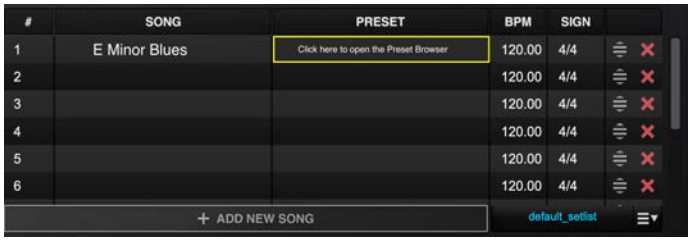
Adding a Kit to the Song List from the Kit Preset:

- Access Kit Presets: Click on the Preset field next to the desired song to open the Preset Browser.
- Select a Kit Preset: Click on the kit preset you want to add to the song list.
- Add to Song: Click on the Add To Song button to add the selected kit preset to the desired song.
- Select the BPM and Sign fields to change BPM (Beats Per Minute = tempo) and SIGN (time signature) for the selected song.
- Clicking the red “X” clears the selection

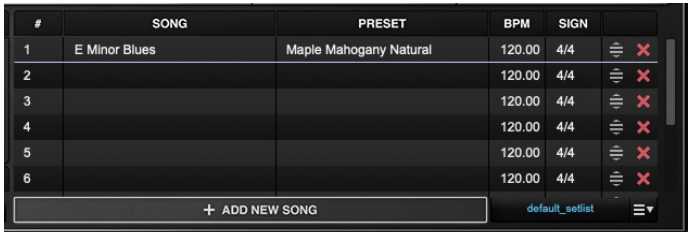
Adding a Song



Adding a Kit Preset



Finished Song in a Setlist



Arranging Your Setlist:

Drag and Drop:

- To arrange the order of songs in your setlist, select the song and use the icon next to the X to drag the song to a different position

Editing Your Setlist:

Edit Song Names:

- Double-click on a song name in the Setlist panel to edit it.

Saving and Loading Your Setlist:

Save Setlist:

- Click on the hamburger menu at the lower right to Save setlist

Load Setlist:

- To load a previously saved playlist, click on the hamburger menu to Load a Setlist

Using the Metronome:

1. **Metronome Controls:**

- Access metronome settings from the Setlist panel's controls. Adjust tempo, time signature, sound options, and level.

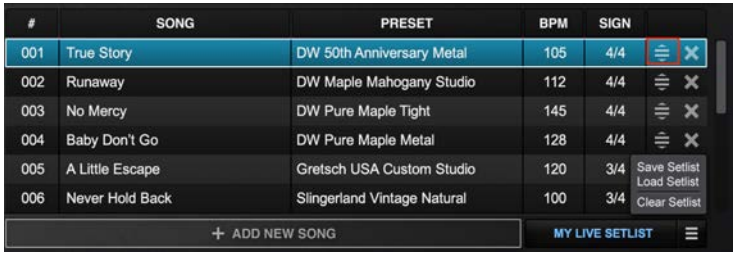
2. **Accented Beat:**

- Activate or deactivate the accented beat feature to emphasize specific beats within the metronome pattern.

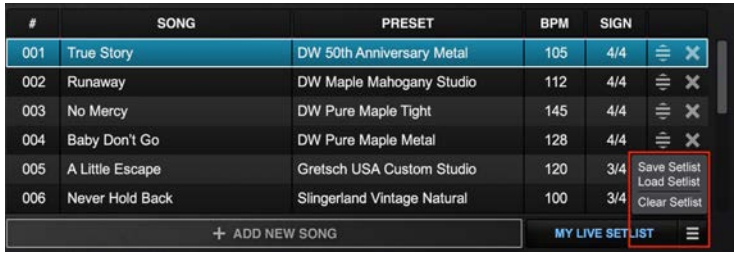
2. **Start/Stop Metronome**

- Click on the Metronome image to Start. Click again to Stop.

Moving a Song in a Setlist



Setlist, Load, Save & Clear Options



Metronome

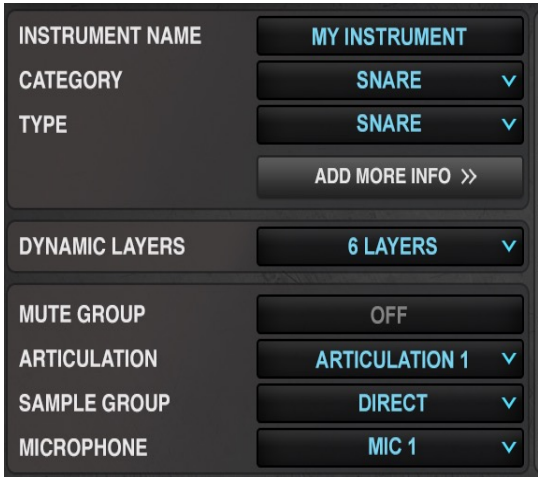
Instrument Designer:

The Instrument Designer is a powerful tool within DW Soundworks for creating and customizing drum and percussion instruments.

1. **Access the Instrument Designer:**
   To access the Instrument Designer, start with an empty instrument slot on the Main Drum Page.
2. **Category and Type/Position:**
   Choose the instrument category (e.g., Drums, Percussion) and specify the instrument's type or position within that category.
3. **More Info Box:**
   This displays additional information about the selected instrument.
4. **Layers:**
   Create multiple layers of samples to achieve complex sounds or articulations.
5. **Mute Group:**
   Assign instruments to the same mute group to ensure they cut each other off when triggered.
6. **Articulation:**
   Define how the instrument should be played or triggered, affecting the sound and behavior.
7. **Sample Group:**
   Organize samples within a group to simplify the assignment process.
8. **Microphone:**
   Organize samples within a group to simplify the assignment process.

Instrument Designer

Category, Type, Info Box, Layers, Mute Groups, Articulation, Sample Group, & Micro Assignment



Choosing a One-Shot Sample and Assigning to an Instrument:

1. Access the Instrument Designer:

Start with an empty instrument slot by clicking on the desired instrument so it is highlighted then Right-click (or control-click) the instrument and choose “Clear Instrument” from the drop-down menu. The Instrument is now accessible by clicking the Instrument Designer tab.

2. Import Sample:

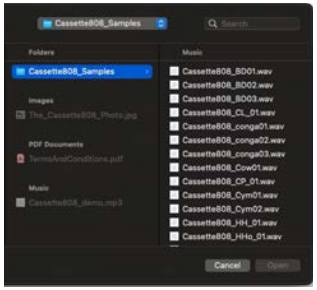
Click the + button and locate a one-shot sample (e.g., an 808 kick) and it will be added to the empty instrument slot in the Instrument Designer.

Compatible File Formats and Size Limitations:

DW Soundworks supports common audio file formats such as WAV, AIFF, and similar. Keep in mind that file sizes may be subject to limitations based on system resources and performance capabilities.

Clearing an Instrument

Importing a Sample



One-shot Sample Loaded

Creating a Multi-Wav, Multi-Articulation Instrument (Layered Instrument):

1. **Access the Instrument Designer:**

   Start with an empty instrument slot.

2. **Import Multiple Samples:**

   Import multiple samples representing different elements (e.g., Snare, Kick, Electronic Sound) into a layer, there are up to 18 layers available to pick from.

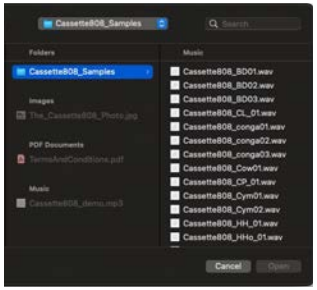
3. **Create Layers:**

   Assign each sample to a different layer within the instrument. Adjust volume and panning settings to create a layered sound.

   You also have up to 8 round robin slots to make a layer that minimizes repetitive or machining-type sounds.

Layer Selection

Importing a Sample



1 Layer with 8 Round Robin Example

Saving and Loading User-Created Instruments:

1. Save Instrument:

After creating and customizing an instrument, you can save it so it can be with other kit presets to make new combinations of sounds.

Right-click on the instrument and the Save Instrument option will appear.

Select ”Save Instrument’ and the pop-up box will ask you to name the instrument and save it in the user instruments folder.

This lets you later load the user instrument into other kit presets.

2. Load Instrument:

To load a user-created instrument, select the instrument you want to modify or select an empty instrument or an X-Pad.

Right-click on the instrument or X-Pad and the Load Instrument option will appear.

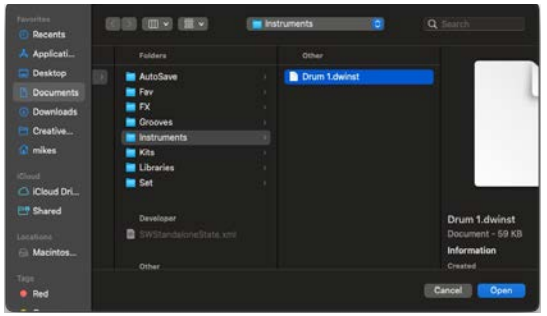
Select ”Load Instrument’ and the pop-up box will ask you to select the user instrument from the user instruments folder.

Make your selection and click on open to load the user instrument.

Save or Load Instrument

Save Instrument Option

Load Instrument Option



Saving User Packs/Libraries (Collections of User Instruments):

1. **Save User Pack/Library:**

   To save a collection of user instruments as a User Pack, go to the ellipses at the bottom of the Kit View/Cell View screen and choose Save Drum Kit Library.

   This lets you create your user pack with your custom instruments.

Save Drum Kit Library/User Pack

Kit Designer:

The Kit Designer is a tool within DW Soundworks that enables you to create and personalize your drum kit setups by selecting and assigning instruments from different expansion packs.

Auditioning Instruments in Expansion Packs:

1. **Access the Kit Designer:**

   Navigate to the Kit Designer section within DW Soundworks.

2. **Select an Instrument:**

   Click on an instrument to view the expansion pack contents.

3. **Audition Instruments:**

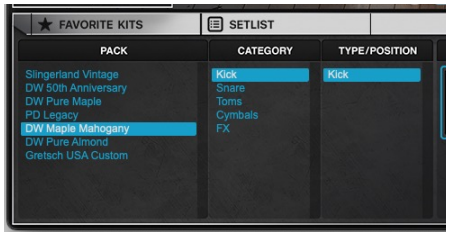
   Click on the image of a selected instrument within the expansion pack to audition its sound.

Info Window and Display:

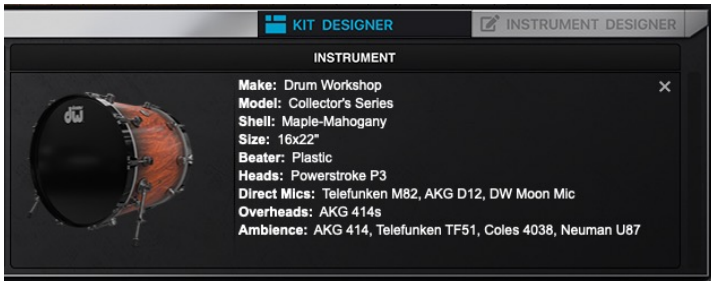
The Info window provides details about the selected instrument, including its name, category, type, and additional information that helps you understand its characteristics and usage.

Kit Designer

Kit Designer Columns



Kit Designer Columns



Kit Designer:

Assigning Instruments to Drums or Cymbals:

1. Access the Kit Designer:

2. Once you've auditioned and selected an instrument, click on a selected drum or cymbal within the Kit View page so the instrument is highlighted in blue.

3. Assign the Instrument:

Click Assign to assign the instrument to the desired drum or cymbal slot.

Kit Designer Assign Button

Creating a User Kit Preset After Making Changes:

1. Customize Your Kit:

Arrange your drum kit by selecting and assigning instruments from different expansion packs within the Kit Designer.

2. Save as User Kit Preset:

Once you're satisfied with your customized kit, click on the down-facing arrow to access the "Save as Kit Preset" pane. Here you can give the new preset a name as well as other information including Author, Genre, and Ambience. Click the Save Preset button to save this new kit preset.

Save as Kit Preset

Advanced Mappings Panel:

1. **Open Advanced Mappings Page:**

   Access the Advanced Mappings Page within the DW Soundworks interface.

Controls and Their Functions:

- **Instrument Articulations:**

  This section displays the selected instrument and its associated articulations. It allows you to fine-tune parameters for individual articulations.

- **Audition Button:**

  Use the Audition button to preview the sound of the selected articulation.

- **Volume and Pitch Controls:**

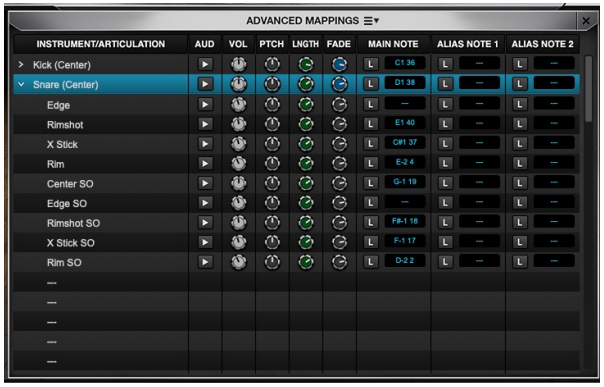
  Adjust the volume and pitch of the main instrument and individual articulations. This helps you achieve the desired balance and tonal qualities.

- **Length and Fade Controls:**

  Control the length and fading of the main instrument and articulations. These parameters influence the decay and sustain of the sound, allowing for greater sonic control.

Advanced Mapping Menu Location

Instruments Articulation



Audition, Volume, Pitch, Length, & Fade Controls

Advanced Mappings Panel:

- **MIDI Learn:**
  Assign MIDI controllers to control specific parameters, enhancing real-time manipulation during performance.

- **Main Note Assign:**
  Modify the main MIDI note assignment for the selected instrument, enabling you to trigger different sounds using your MIDI controller.

- **Alias Options:**
  Define aliases for articulations, making switching between different playing techniques easier.

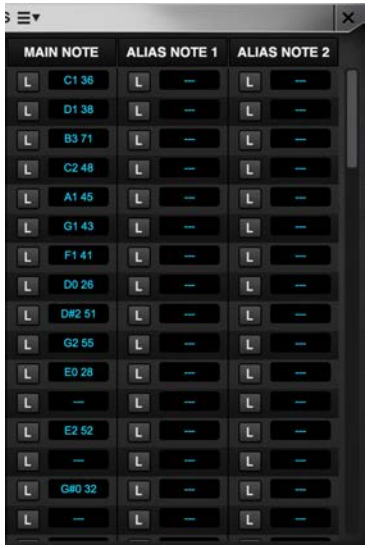
Save, Load, and Clear MIDI Map:

- **Save MIDI Map:**
  Save your customized mapping configurations to reuse later for consistent setups across different sessions.

- **Load MIDI Map:**
  Load previously saved mapping configurations to save time when setting up your drum kit. Also, you can load MIDI maps for drum modules such as the Roland TD series and other branded modules.

- **Clear MIDI Map:**
  Reset the mapping settings to default for a fresh starting point for customization.

MIDI Learn, Main Note Assign & Alias Options



Save, Load, Clear MIDI Map Options

MIDI CC Settings Panel:

The MIDI CC Settings Panel is a tool that helps you configure how MIDI CC settings control various aspects of your drum kit, enhancing your drumming experience and enabling expressive performances.

Snare Option in the CC Panel:

1. **Access the MIDI CC Settings Panel:**

   Locate and access the MIDI CC Settings Panel within the DW Soundworks interface.

2. **Select Snare:**

   Find the option corresponding to the snare drum and click on it to access its MIDI CC settings.

3. **Positional Sensing Visual Indicator and Assign:**

   The panel may display a visual indicator for positional sensing (e.g., a spectrum or bar graph). This helps you understand the sensitivity of your MIDI controller's position detection. You may need to adjust this setting to match your controller's capabilities and your desired level of responsiveness.

Snare CC Settings

Hi-Hat Option in the CC Panel:

1. **Access the MIDI CC Settings Panel:**

   Similarly, select the Hi-Hat option within the MIDI CC Settings Panel.

2. **Articulation Layering:**

   For the hi-hat, you may see options to control articulation layering (e.g., Edge, Bow, Bell). This allows you to customize the response of different hi-hat playing techniques.

3. **CC Assign, Control, and Layer Adjustments:**

   You can assign specific MIDI CC messages to control different hi-hat articulations, adjust the control range, and fine-tune layering behavior.

4. **Splash and Pedal-Close Articulation Control:**

   The panel offers settings to control splash and pedal-close articulations, enhancing the realism and expressiveness of your hi-hat performance.

Hi-Hat CC Settings

Free Assign Option in the CC Panel:

Free Assign Option:

The Free Assign option allows you to assign MIDI CC messages to various parameters beyond the default options provided. This flexibility gives you the freedom to create custom mappings to suit your unique preferences and MIDI controller capabilities.

Benefits and Use Cases:

- **Customization:**

  The MIDI CC Settings Panel empowers you to tailor your drum kit's response to your specific playing style and controller setup.

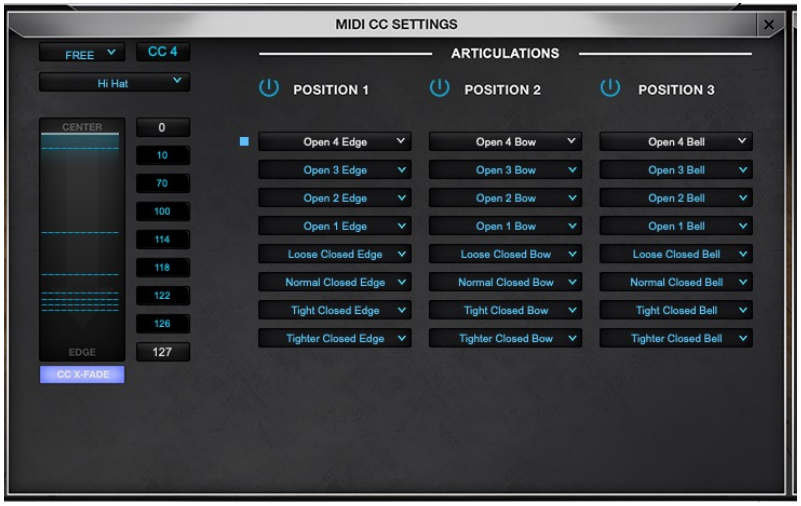
- **Expressiveness:**

  Fine-tune CC assignments and parameters to enhance expressiveness in your drumming performances, making them more dynamic and natural.

- **Realism:**

  Adjusting parameters like positional sensing and hi-hat articulation layering adds a realistic touch to your drum sounds, mimicking the nuances of acoustic drumming.

Free CC Settings



Playback Options:

Accessing the Playback Settings Panel:

Open Settings:

Navigate to the settings section within DW Soundworks to access the Playback Settings Panel.

Functions of the Options:

Snare Buzz Control:

- Increase the value to add more snare buzz to the sound, replicating the natural rattling of snare wires.
- Decrease the value for less snare buzz, resulting in a cleaner snare sound.

Benefits:

- Adjusting snare buzz control adds realism and depth to your snare drum sounds, enhancing their authenticity.

Pitch Bend Range:

- Increase the range to allow larger pitch bends using pitch bend MIDI messages.
- Decrease the range to limit the pitch modulation effect.

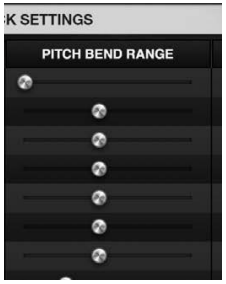
Benefits:

- Adjusting the pitch bend range lets you add expressive pitch variations to your drumming, mimicking the behavior of acoustic drums.

Playback Options

Snare Buzz Control

Pitch Bend Range



Playback Options:

Accessing the Playback Settings Panel:

- **Aftertouch Type Select:**
  - Select a type of aftertouch behavior based on your playing preferences and MIDI controller capabilities.
  - Different types of aftertouch include channel pressure and polyphonic aftertouch, each affecting how aftertouch messages are interpreted by your drum sounds.

Benefits:

- Choosing the right aftertouch type enhances your ability to control and modulate drum sounds using aftertouch messages from your MIDI controller

Aftertouch Type

Settings (Sprocket Icon):

Accessing the Settings Window:

1. **Open Menu:** Navigate to the Sprocket icon on the navigation bar within DW Soundworks to access the Settings Window.

Description of Options and Their Functions:

- **Dynamic Response:**
  - This option controls the sensitivity of your drumming triggers. Adjusting it can make your drum sounds more responsive or less responsive to your playing style.
  - Increase the dynamic response for more sensitivity or decrease it for a less sensitive feel.

  Benefits:

  - Customizing dynamic response ensures that your drumming triggers accurately reflect your playing dynamics, enhancing realism and expressiveness.
- **Layer Blending:**
  - Layer blending determines how multiple articulations are blended when triggered simultaneously. You can adjust this to control how different sounds interact and combine in complex drumming patterns.

  Benefits:

  - Adjusting layer blending lets you create intricate and dynamic drumming patterns by controlling how different sounds interact.

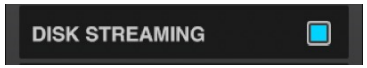
Dynamic Response

Layer Blending

- **Disc Streaming:**
  - Enabling disc streaming loads drum samples from your storage device on the fly, reducing memory usage.
  - You can enable or disable this feature.

  Benefits:
  - Enabling disc streaming optimizes memory usage and performance, allowing you to use larger drum libraries without consuming excessive RAM.

Disk Streaming



- **Voice Limit:**
  - Voice limit sets the maximum number of simultaneous drum sounds that can be played at once. Adjusting this can help manage system resources and prevent audio dropouts during intensive sessions.

  Benefits:
  - Setting a voice limit prevents audio dropouts and ensures smooth playback by managing the number of simultaneous sounds.

Voice Limit

- **Auto Save:**
  - Autosave periodically saves your current drum kit setup to prevent data loss in case of unexpected events. You can set the frequency of autosaves to ensure that your progress is preserved.

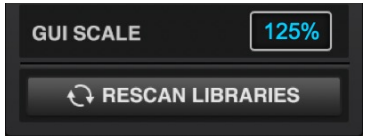
  Benefits:
  - Auto-save protects your progress and prevents data loss, giving you peace of mind during your sessions.

Auto Save

- **GUI Scale:**
  - GUI scale allows you to adjust the size of the user interface elements. This is particularly helpful for optimizing the display on different screen sizes and resolutions.

  Benefits:
  - Adjusting the GUI scale improves usability and readability, ensuring that the interface is comfortable to navigate on your specific display setup.

Layer Blending



Mixer Page Overview:

- **Channel Layout:**
  - The mixer displays individual channels corresponding to different drum components and cymbals.
- **Signal Flow:**
  - A more in-depth video may be required to explain the audio routing from individual drums to the mixer.
- **Channel Routing:**
  - Assign each channel to specific outputs for precise sound control.
- **Mic Groups:**
  - Simulate different microphone placements to achieve various recording perspectives.
- **Simple Controls:**
  - Adjust volume, panning, and effects sends for each channel.
- **Aux and Sends Buses:**
  - Route audio to auxiliary buses for further processing or applying effects.

Mixer Page

- **Channels Tabs:**
  - Channels tabs facilitate navigation between different groups of microphones or instruments.
  - You can access individual drum channels, X-Pads, auxiliary buses, and sends for detailed control and adjustment.

Channels Tabs

The Mixer Page in DW Soundworks is a crucial component for shaping and controlling your drum kit's audio output.

1. Volume Control and Grouping:

- At the top level of the Mixer Page, you have volume control for various groups of microphones, including DIRECT, OVERHEAD, AMBIENCE, and more.
- Adjusting the general volume for each group helps you create a balanced overall sound for your drum kit.
- Solo and Mute buttons at the top of each channel allow you to isolate or silence specific microphones or groups.

Mic Group Controls

2. Individual Microphone Control:

- Within each microphone group, you have access to individual microphone controls.
- Solo, Mute, and Phase Flip buttons are available for each microphone, providing precise control over each element of your drum kit's sound.
- The Volume knob lets you adjust the level of each microphone, enabling custom blends and mixing.

3. Routing and Buses:

- The routing section enables you to route audio output to different buses for further processing or mixing.
- You can send individual microphones or groups to specific auxiliary buses, creating complex routing setups.

4. Output:

- The Output section allows you to route audio to various destinations, such as external hardware or recording interfaces.
- This flexibility is valuable for both live performances and studio recording sessions.

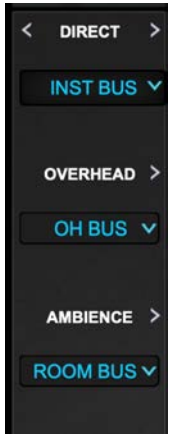
5. Main On-Off Switch and Pan Control:

- The Main On-Off switch enables you to enable or disable a specific microphone or group in the mix.
- Pan controls adjust the left-right balance of the audio output for stereo panning.

Ind. Mic Controls

Mic Group Options

Mic Buses



Mic Bus Options

Main Bus On/Off & Channel Panner

6. Phase and Panning Flip:

- The Phase Flip button inverts the phase of the audio signal, useful for correcting phase issues or achieving tonal changes.
- The Panning Flip button changes the perspective of the instrument or kit, providing flexibility in different mixing scenarios.

7. Effects Modules:

- The Mixer Page includes various effects modules such as Cue, Dynamics (compression), Saturation, and Impulse Response Reverb.
- These modules allow you to apply processing and shaping to drum sounds within the mixer environment.

8. Sends and Effects Processing:

- The Sends tab allows you to set up and manage sends to auxiliary buses, enabling additional processing for specific drum sounds or groups.

Phase & Panner Flip

FX Modules

Sends

Send Options

11. Overhead and Ambience Group:

- The OVERHEAD and AMBIENCE groups include additional microphone controls for room and overhead miking, offering further control over the overall drum sound.

12. Main Channel:

- The Main Channel serves as the final 2-channel output for the entire drum kit, allowing you to control the overall mix and balance of your drum sounds.

Overhead, Ambience, Main Group Channel Strips

The Mixer FX Modules in DW Soundworks provide extensive tools to shape and enhance your drum sounds.

EQ (4-Band EQ) Module:

The 4-Band EQ module in DW Soundworks allows you to fine-tune the frequency response of your drum sounds using four adjustable bands (low, low-mid, high-mid, high) with individual gain controls.

How to Use:

1. **Access the Mixer FX:** Open the Mixer section within DW Soundworks and locate the EQ module.
2. **Adjust Frequency Bands:** For each band, adjust the gain control to boost or cut specific frequencies, shaping the tonal balance of your drum sounds or the entire kit.

Factory Presets:

- Factory presets provide pre-configured EQ settings suitable for different drumming styles or genres.
- Examples of presets are "Punchy Kick" and "Bright Snare."

Saving User Presets and Loading User Presets:

1. **Saving User Presets:** Customize your EQ settings, then save them as a user preset. Give the preset a name and specify where to save it.

2. **Loading User Presets:** To load a user preset, access the EQ module, select the user preset option, and choose the saved preset from the list.

EQ

EQ Presets

Dynamic Compression Module:

Dynamic compression reduces the dynamic range of drum sounds, making quiet parts louder and controlling peaks for a more consistent sound.

How to Use:

- Adjust the following parameters:
  - **Threshold:** Sets the level at which compression starts to take effect.
  - **Ratio:** Determines the amount of compression applied to sounds above the threshold.
  - **Attack:** Adjusts how quickly compression engages after the input level exceeds the threshold.
  - **Release:** Determines how quickly compression releases after the input level falls below the threshold.

Factory Presets:

- Factory presets offer compression settings suited for various drumming scenarios, such as "Tight Snare" and "Smooth Kick."

Saving User Presets and Loading User Presets:

1. **Saving User Presets:** Customize compression settings, then save them as a user preset. Specify a name and location for the saved preset.

2. **Loading User Presets:** Access the Compression module, select the user preset option, and load your saved preset.

Compressor

Compressor Types

Compressor Presets

Saturator Module:

The Saturator module adds harmonic content to your drum sounds, providing warmth and character. It can emulate analog-style distortion.

How to Use:

- Adjust the following parameters:
  - **Drive:** Controls the intensity of saturation or distortion.
  - **Type:** Choose different saturation types.
  - **Tone:** Adjust the tonal balance of the saturation effect.

Factory Presets:

- Factory presets offer various saturation styles suitable for different drum tones, like "Vintage Drive" and "Modern Punch."

Saving User Presets and Loading User Presets:

1. **Saving User Presets:** Customize saturator settings, then save them as a user preset. Name the preset and specify where to save it.

2. **Loading User Presets:** Access the Saturator module, select the user preset option, and load your saved preset.

Saturator

Saturator Types

Saturator Presets

Impulse Response Reverb Module:

The Impulse Response Reverb module applies realistic reverberation to your drum sounds using convolution technology.

How to Use:

- Adjust the following parameters:
  - **Reverb Time:** Controls the decay time of the reverb effect.
  - **Room Size:** Determines the virtual room's size for reverb simulation.
  - **Type:** Choose different reverb impulse responses for various ambiance simulations.

Factory Presets:

- Factory presets offer reverb settings suitable for different room sizes and drumming environments, such as "Small Studio" and "Large Hall."

Saving User Presets and Loading User Presets:

1. **Saving User Presets:** Customize reverb settings, then save them as a user preset. Specify a name and location for the saved preset.

2. **Loading User Presets:** Access the Impulse Response Reverb module, select the user preset option, and load your saved preset.

Reverb

Reverb Types

Overview of the Grooves Page:

The Groove page is great as a source of inspiration for your compositions. With many grooves available to begin sketching ideas for your production. The ability to customize and adjust grooves allows you to create unique variations that align with your musical style. Plus, you can export groove clips as MIDI or WAV files to incorporate them into your music production software, where you can further arrange and produce your music.

The Grooves Page is divided into sections, each serving a specific purpose:

1. **Groove Library:** This section contains a collection of pre-recorded drum grooves and patterns that you can choose from. These grooves cover a wide range of styles and genres.

2. **Playback Controls:** These controls allow you to audition and play the selected groove. You can start and stop playback to listen to the groove before applying it to your drum kit.

3. **Edit Controls:** The edit controls provide options for customizing and adjusting the groove's parameters. This includes tempo, swing, and other relevant settings.

4. **Export Options:** This section provides methods for saving and exporting groove clips as MIDI or WAV files, allowing you to use them in your music production software or DAW.

Grooves Page

How to Use the Grooves Page:

1. **Select a Groove:** Browse through the groove library by clicking on different grooves. This will allow you to preview them and find one that fits your musical needs.
2. **Audition Groove:** Use the playback controls to audition the selected groove. This will help you get a feel for the rhythm and style of the groove.
3. **Adjust Parameters:** If you want to customize the groove, use the edit controls to modify parameters like tempo, swing, and other relevant settings.

Groove in Composer

Editing, Saving, and Exporting Groove Clips:

1. **Edit Groove:** If you wish to tweak the groove to better suit your performance, use the cut and bar adjustment tool to compose the groove.
2. **Save Groove Clip:** To save the groove for future use, use the option to save the groove clip. Give it a name and specify a location to save it on your computer.
3. **Export as MIDI/WAV:** To export a groove as a MIDI or WAV file, find the export option within the Grooves Page. Choose the desired file format, name the file, and select the save destination.
4. **Exporting to a DAW:** If you plan to use the groove clip in a digital audio workstation (DAW), export it as a MIDI file to import the MIDI file into your DAW's MIDI track.