xln audio

ADDICTIVE DRUMS 2

User manual

Introduction

Thanks for using Addictive Drums 2!

When Addictive Drums first hit the scene it was a jaw-dropping experience for many, as it could switch out both the kit (samples), the production (effects and tweaks) and the drummer (MIDI files) with just one click. What would previously require a multitude of applications, time, and skill sets was now within reach for everyone. And since changing sounds and beats was so fast, users experienced a workflow revolution, inspiring them to try new things.

This basic foundation is what keeps Addictive Drums immensely popular - the principles hold true whether you're a heavy weight producer or just starting out. Getting acoustic drums to sound right can be a chore, but with AD2 it's pure joy. As it should be!

We had a lot of fun creating this software, and hope that you also have a great time using it in your music - stay Addicted!

/The Addictive Drums Team

Contents

What is Addictive Drums 2?

Addictive Drums 2 is a virtual instrument that takes your drum productions to a new level.

Sounds - all sampled drum/cymbal sounds are recorded with a multichannel mic setup, just as you would record a real drum kit. Extensive layering, capturing everything from the softest to the hardest drum hit, combined with alternating samples throughout, provides the realism and playability your track deserves.

Additional 'one shot' drum samples in the form of **Trig Kitpieces** can be layered with the main samples to add an extra sonic dimension to your drum sounds.

Playback Settings & Effects - shape your sound by tweaking pitch, volume envelopes and sample selection. Then finish it off with the built in effects in AD2 - each channel has EQ, Compressor, Dist, Transient Shaper, Tape Saturation and more, as well as 2 send effects with reverb and delay.

Beats & Fills - a library of MIDI files in different styles, all easily accessible from within AD2 gives you the building blocks to create drum tracks quickly.

CloudSync

CloudSync is a small background application that is installed by default when installing Addictive Drums 2.

It works like this: If you are using AD2 while connected to the internet, all saved user files (presets, key maps and beat favorites) will be uploaded instantly to your XLN account. This means that when working on more than one computer, all your user files are automatically kept in sync. And when doing a fresh install on a new computer, the first time you start AD2 all your user files will be downloaded and become instantly available.

Overview of AD2

The AD2 interface can be divided into a **Top Section** and a **Main Section**. The Top Section is always present regardless of where you are within AD2. The Main Section changes depending on which Page you are on.

1. Top Section
2. Main Section

The Top Section

1. Loading Indicator
2. Preset Display
3. Open Preset Browser
4. Save Preset
5. Preset "Next/Previous" buttons
6. Logo
7. Play button
8. Page Select buttons
9. Top Menu

Loading Indicator

This shows you when AD2 is loading stuff from disk. Although you can play AD2 while it keeps loading in the background, there may initially be silence or audible glitches until the Loading Indicator finishes and goes "off".

Preset Display

Shows the name of the currently loaded Preset. Clicking it will open the **Preset Browser**. You can also use the scroll wheel on it to scroll through presets.

Preset Browser

In the upper section you can browse/filter presets by **Type** ("Acoustic", "Electronic", "Percussion") or by **Name** (using the text search field).

Activating the **Sound Ideal** feature enables you to sort your presets by selecting the amount of processing that has been applied to each preset. This is displayed as a level indicator with values ranging from **Natural** to **Extreme**.

On the right side you'll find filter buttons that lets you see **All Presets**, **XLN Presets** (made by us) or **My Presets** (User Presets made by you)

The **Preset Info** section shows which ADpak the current preset belongs to, as well as the **Author** of the preset. You can also **Rename** or **Delete** your User Presets, and choose any preset to be loaded up automatically when you start AD2 by clicking **Set As Startup**.

Save Preset

Choose the **Name** (click to edit), **Type** and set a suitable **Sound Ideal** value (a completely clean/natural/dry sound should get a low value, while a very distorted and mangled one should get a high value).

There is also a **MIDI Preview** function that allows you record a MIDI beat (you can play a looped section from your DAW if you're working on a drum track anyway) to be saved with the preset. If you don't record anything, the current MIDI file will be used as a preview.

If a preset with the same name already exists, you will get the option to either overwrite it or to save it with a new name.

Preset "Next/Previous" buttons

The two Up/Down buttons select the next or previous preset within the current filter/sorting settings in the **Preset Browser**.

Logo

Clicking on the Addictive Drums 2 logo takes you to the **About Addictive Drums 2** page. Here you will find program version information (which is good in support matters) and also credits, special thanks and acknowledgements from the XLN Audio team.

Play button

This is a double of the Play button within the transport on the Beats Page. Starts and stops the currently selected midi file.

Page select buttons

AD2's six different pages will be described in more detail a bit further down.

Top Menu

Brings up a sub menu with these selections:

- Map Window (for more info see the Map Window section of this manual)
- Refresh MIDI Library (do this after adding new midi beats to the External MIDI Folder)
- Open External MIDI folder
- Addictive Drums 2 Manual PDF (you're reading it now!)
- Addictive Drums 2 Keymap PDF
- UI Scaling & Settings (change the size of the AD2 interface)
- Go to xlnaudio.com
- About AD2 (same as clicking the big logo top center)

The Main Section

The main section is divided into six separate pages.

Gallery Page

This page shows the various available ADpak expansions that can be used with AD2. A description of the ADpak will be shown, with the included ExploreMaps below it.

You can select to see all Explore Maps by clicking on the **View** button in the top right hand corner.

Clicking on an ExploreMap takes you to the **Explore Page**.

Explore Page

Here you can browse through the ExploreMaps associated with each ADpak. It offers a non-cluttered approach to preset browsing, and lets you get a sense of what each ADpak has to offer. (All presets listed here are also available in the **Preset Browser**.)

In most cases the first ExploreMap for an ADpak offers more natural sounding presets, and includes some basic controls such as Kick and Snare levels. You can usually also audition the kit on display by clicking on the drums in the image.

The second ExploreMap usually goes further into sonic sculpting, with more processing overall - sometimes verging on the extreme.

Each Preset has a play button which plays a preview beat. They are in different styles and tempos within the theme of the chosen ADpak, providing a nice overview of how it sounds.

Want to use the beat from the preview? Head over to the **Beats Page:** each preview consists of a MIDI beat from the AD2 library, and you can immediately drag'n'drop it into your DAW.

Already decided on a specific tempo? On the Beats Page you can also hit **Sync Tempo**, which forces all beats and preset previews in AD2 to follow your DAW tempo (or if using the AD2 standalone: the tempo set on the Beats Page)

For ADpaks you don't own we have included audio demos of the presets, indicated with headphone icons instead of Play buttons.

Kit Page

The AD2 "kit" has 18 Kitpiece Slots. Each one shows you an image of the currently selected Kitpiece. Click on the image to audition the sound. The pad is velocity sensitive; the higher up you play the louder the volume.

Kitpiece Slot functions

1. Kitpiece **Mute** & **Solo**
2. **Midi Activity** indicator
3. **Up/Down** buttons for Kitpiece selection
4. **Load** button (opens up the **Kitpiece Browser** with an overview of the available Kitpieces)
5. **Tom Sets** (opens up a menu with options for loading toms in groups, for example, all the Sonor Toms). Note that the **Pitch** settings of the toms are reset when loading a Tom Set.

6. Kitpiece **Slot Name**
7. **Edit** button (takes you to the Edit Page with this Kitpiece selected)
8. Drag'n'drop the **Kitpiece Link** symbol to link from the Kick or Snare drums to other Kitpieces so that they play at the same time
9. Kitpiece **Volume** (for quickly adjusting the overall level for a Kitpiece)
10. Currently loaded **Kitpiece Name** (click to get a list of all available Kitpieces, same as clicking the **L** button)

Kitpiece Browser

Here you can view all the available Kitpieces that can be loaded into the Kitpiece slot. (It will also show Kitpieces that you do not currently own, these are marked with NO LICENSE tags.)

At the bottom of the window, the left section shows some **Kitpiece Info.** Next to that the available **StrokeTypes** for a given Kitpiece can be heard by clicking on the small **Play** buttons.

There is also a **Product Filter** dropdown that lets you filter out Kitpieces belonging to a specific ADPak.

Edit Page Overview

This is where most of the sound tweaking happens. The top half covers the playback settings of the 18 Kitpieces (pitch, envelopes etc). The bottom half takes care of the audio processing (EQ, compressors etc).

Note that due to how drums are usually recorded, there is not a 1:1 relation between Kitpieces and Mixer channels. Example: Cymbals are not recorded with close mics, so they have no corresponding mixer channels - they show up only in the Overhead and Room mics. Luckily (unlike in a real drum recording) you can still adjust them individually in the Kitpiece Controls section.

Edit Page (Top) - Kitpiece Select & Controls

This section provides lots of control over the raw sounds.

Right clicking will allow you either copy all the settings or copy the setting for the individual module (Response or Pitch settings for example).

Kitpiece Selector

Select a Kitpiece for editing by clicking on the corresponding button.

Basic settings

For each Kitpiece you can set overall **Volume** (in the Kitpiece Slot), plus **Level**, **Pan** and **Width** for the **OH** (Overhead) and **Room** channels.

Kitpiece controls

Response: This section controls how velocity affects:

- **Volume** - at 0% the volume is constant no matter the velocity. At 100% the dynamic range is "as recorded" for that Kitpiece. At 100-200% the dynamic range is extended downwards to provide even softer hits at low velocities.
- **Filter -** allows you to exaggerate the normal roll off of high frequencies when hitting a drum more softly, also great for Trig Kitpieces that may not have samples recorded for low velocities.
- **Sample Layer Selection** - by default AD2 uses samples recorded at various velocities for a natural response. But with this control you can choose to exclude the softest or hardest samples, or even restrict sample selection to a single sample layer.

NoAlts - AD2 generally uses alternate ("round robin") sample hits for each layer. This avoids the "shotgun" effect associated with single samples and fast drum rolls. However, by activating NoAlts you can turn off the alternate hits and make things sound more static and machine-like.

Pitch: The **Main** pitch can be adjusted 12 semitones up or down. You can also **Offset** the Overhead & Room channels 12 semitones up/down in relation to this.

Tone Designer: The Tone Designer is available for Kick and Snare. It lets you control the decay of the tonal part of the drum without changing the decay of the "noise" and room. By reducing ringing overtones or booming low end, you can easily make a drum sound more "dampened" without changing the overall volume or perceived length/decay/ambience.

Each Kick and Snare in the AD2 library has been analyzed and has a custom frequency profile. By pulling the **End** parameter up/down you can get an overview of the frequency bands affected.

Both the **Start** and **End** levels can go above the center line to boost levels if needed.

Pitch Envelope: Control the **Start**, **Hold** Time and **Release** Time. You can let velocity control the amount of Pitch Envelope applied by using the **Vel** control.

Volume Envelope: Control the **Attack** Time, **Decay** Time, **Sustain Level**, **Sustain Time** and **Release** Time. You can let velocity control the Attack Time by using the **Vel** control, simply increase it to create a softer sound at lower velocities.

Cut: A High / Low Cut Filter that affects all channels (Close/Overhead/Room)

Copy/paste

Tip: Right clicking enables you to copy Channel Settings or Insert Effect settings from one Channel or Effect to another. Or from one instance of AD2 to another!

Edit Page (Bottom) – Channel Inserts

Microphones and channels

In keeping with how a real drum kit is traditionally recorded and mixed, we have recorded the kits using close, overhead and room mics.

All Kitpieces include the Overhead (OH) and Room (RM) channels, and these are all routed to the Overhead and Room stereo channels in the mixer.

Kick, Snare, Hihat, Xtras and Toms were recorded with close mics as well.

- Kick and Snare have two close mic channels, **Top/Bottom** for Snare, and **Beater/Front** for Kick.
- Hihat, Xtras and Toms have one close mic channel each.

1. Snare Buzz
2. Kick and Snare Close Mics Balance

Snare Buzz - To further enhance the realism we have recorded the buzzy sound the snare makes whenever the kick or toms are played. The volume of the **Snare Buzz** can be adjusted with the top slider. This does not affect the sound when playing the snare itself, but rather how much "buzz" the snare generates when you play the kick or the toms.

Kick & Snare Close Mics Balance - The balance of the two close mics on Kick and Snare can be adjusted with the horizontal slider under the image. In general adding in more of the lower mic on snare means you get more of the "buzz". On the kick the "Beater" side has more click and the "Front" has more deep bass.

Room Distance

The Room Channel has a **Distance** control that lets you delay the room recordings up to 50ms (simulating a mic distance of up to around 56 ft or 17 m).

The Bus Channel

A commonly used trick in drum mixing is to create a submix of chosen kit elements (i.e. kick + snare + hihat), then distort or heavily compress this submix, and finally introduce this back into the main mix at a lower level.

The result is that you get the dynamics and punch of the "normal" cleaner main mix, but at the same time a nice "crunchy" quality and sustain from the compressed submix.

This effect can be easily achieved in AD2. Just click the Bus Channel Label to select the Bus channel, and you will notice that a **Bus Send** panel appears on top of the mixer:

Now you can easily create a submix and process it using the Bus Channel's Insert Effects!

Channel Insert Effects

Each channel in AD2 has a selection of insert effects:

Noise

Add recorded noise from various mics, studios and machines. The noise sound is triggered when an audio signal is present. You can control the **Decay** and **Level** to go from a subtle constant hiss to an exaggerated short noise burst on every drum hit.

MultiFX 1

The MultiFX unit has two different modes, **Comp & Dist** and **Tape & Shape**. Clicking on the top right arrow buttons of the MultiFX unit allows you to toggle between the two modes. Note that only one of the modes is active at a time.

Comp & Dist

Combined compressor and distortion effect. Activate or deactivate them separately by clicking the **Enable** buttons on each section.

The Compressor is optimized for drums and has an advanced AutoGain algorithm that keeps levels in check. **Thr** is the compressor threshold, **Atk** sets the attack time and **Rel** the release time. **GR** shows the Gain Reduction applied.

The Distortion effect offers several types of distortion, selectable with the **Arrow Buttons**, or by clicking the distortion type **Name**. On the left is a **Range** slider where you can select a specific frequency range to distort. Frequencies outside of the range pass through unchanged. Useful to just add some crunch to the mid range of a kick for example.

Amount lets you control how much distortion is added to the sound, while **Mix** let's you set the balance between the clean and the distorted sound.

Tape & Shape

Combined Tape Simulation, Transient Shaper and Saturating Limiter. Activate or deactivate them separately by clicking the **Enable** buttons on each section.

The **Tape** section simulates recording to analog tape. The **Drive** knob controls how hard you are pushing that poor tape, and **Bottom** offers separate control of a natural low range boost that happens with tape recording.

The **Shape** section lets you control the transients and decay in an intuitive way. Compressors can be used for this task as well, but the main difference is that a transient shaper such as this affects transients no matter how loud or soft they are. Increase the **Attack** for more transient "snap" or reduce it to soften the sound. Adjust **Sustain** to control the level after the transient, turn it up to get almost a "gated drum sound" effect, or down to make the sound shorter.

The **Sat** (Saturating Limiter) is useful to keep very short spiky transients in check - they simply be cut off, if above the **Thr** (Threshold) level. This is useful in itself as it adds a little crunch to the sound, but it is often also a good idea to avoid very short transients on individual channels that could cause havoc in the Master Channel compressor.

EQ

A 4 band equalizer with additional High / Low Cut Filters. Tweak the EQ by dragging directly in the graph: sideways to change Frequency, up/down to change Gain, mouse wheel to change Q value. You can also drag up/down directly on the values below the graph.

The additional High / Low Cut Filters can be dragged in from the sides of the graph, and easily adjusted: sideways to change Frequency, up/down to change Q value.

MultiFX 2

Same as Multi FX 1

Cut (Bus & Master channels only)

A High / Low Cut filter that sits at the end of the signal chain.

Output

Trim adjusts the level of the processed signal. It can be a good idea to adjust this so that the processed and unprocessed levels are about the same. This makes it easier to compare them, and also maintains a nice even gain structure in the signal chain.

Channel Inserts Enable

You can turn on/off all Insert Effects for a channel with the blue **Inserts** button. When off, a hatch will cover all Insert Effects to visualize that no processing is being done.

Channel FX Sends

Each channel has two **FX Sends.** They are routed to the two Delerb FX units on the FX Page. Each send has an enable button to quickly turn on/off the FX Sends.

Selecting a channel for editing

Select the channel you want to edit by clicking the corresponding Mixer Section label. You can do this from either The Kit, Edit or FX pages.

Selecting a Mixer channel also selects the correct Kitpiece in the Kitpiece Select section.

There is a shortcut from the Kit Page: Click the little 'E' in the corner of a Kitpiece Slot and it will bring you to the Edit Page with the correct Kitpiece and Channel selected.

FX Page

1. Delay
2. Crossfader & Delerb Graph
3. Reverb
4. EQ
5. Output Section with Routing
6. Channel FX Sends

The FX Section of AD2 consists of two identical Delerb units (a delay that is fed into a reverb). Each Channel in the Mixer Section can send to these effects.

The Delerb Output knobs are available in the Mixer section as well, where you can adjust volume and pan, before they are summed in the Master Channel together with the other Channels.

Delay

Delay **Time** can be set in ms, or you can click the **Sync** button to sync the delay to the current MIDI file's tempo. You can also click-hold and drag the Delerb Graph left/right to adjust delay time and reverb.

Feedback controls how many repeats you will hear before the delay fades out. At 0% you get one repeat. At 100% the delay repeats infinitely. You can also click-hold and drag the Delerb Graph up/down to adjust the delay feedback.

Swing adds a swing or shuffle effect to the echo repeats, and **Ping Pong** makes the sound bounce back and forth between the left and right output channels, creating a distinct stereo effect.

Range limits the frequency range of the delay.

Crossfader & Delerb graph

The display shows a visual graph of the current Delerb decay, and it will update as you move the **Delerb Crossfader** to set the balance between the delay and the reverb.

Reverb

This effect offers several types of reverb, selectable with the **Arrow Buttons**, or by clicking the reverb type **Name**.

The **Pre-delay** is useful for placing the reverb slightly after the drum transients, which can make the mix clearer and more punchy.

Decay adjusts the reverb time. You can also click-hold and drag the Delerb Graph up/down to adjust the reverb decay.

Damping lets you manage high frequency reflections and ringing, while **Swirl** adds thickness to the reverb tail.

EQ

A 2 band equalizer with additional High / Low Cut Filters. Tweak the EQ by dragging directly in the graph: sideways to change **Frequency**, up/down to change **Gain**, mouse wheel to change **Q** value. You can also drag up/down directly on the values below the graph.

The additional High / Low Cut Filters can be dragged in from the sides of the graph, and tweaked: sideways to change **Frequency**, up/down to change **Q** value.

Output section with routing

Apart from controls for Output **Level** & **Panning,** there are some routing options for the Delerb outputs:

- **Pre Master Inserts** (example of usage: you want to compress and filter the whole mix including reverb using the Master Inserts)
- **Post Master Inserts** (example of usage: you want to compress the complete kit heavily on the master bus, but keep the reverb uncompressed and natural)

You can also control the FX 1&2 output levels directly in the Send FX section in the Mixer. Here you can also solo the Delerb signal to hear it with the dry signal excluded.

FX sends

Shows the Send amounts from the different Mixer Channels.

Beats page - Overview

Here you can access the midi file library included in AD2, as well as any other MIDI files you want to use with it.

You can search for beats in various ways like "by Category" or "by name", or even by the desired pattern using the Grid Search feature.

Once you have found a beat you like, you can tweak it in a multitude of ways using AD2's Transform features.

When ready, just drag'n'drop the file directly into your song/arrangement.

The Beats Page with the Transform tab selected.

1. Filters
2. Grid Search
3. Main Beat List
4. Variant List
5. Beat Info
6. Beats Gallery
7. Shortlist
8. Transform
9. Transport Section

Filters

Search for beats by **Library**, **Category**, **Name, Tempo** or **Time Signature**. You can select to show **Beats** or **Fills** or both.

In the Library dropdown you can show **External MIDI**, i.e. any MIDI files that you have placed in the **External MIDI** folder inside your AD2 User Folder. These could be your own beats or ones you have gotten from a third party.

The **Tempo** dropdown allows you to narrow your search to beats that were originally made in a tempo close (+/- 10% or 20%) to the currently set tempo. This usually provides search results that feel more realistic, as drummers tend to do different things at different tempos.

Grid Search

If you're looking for a specific kick/snare pattern, Grid Search is a very quick way to find matching beats. The grid represents 1 bar of 16th notes - just "paint" in the drum hits you'd like to search for. Try the **Preset A-D** buttons as a starting point!

Another way to create a Grid Search pattern is to start with **All Off**, select a beat you like from the list or an ExploreMap, and then hit the **Similar** button. Now the beat you picked will be made into a search pattern, and hopefully result in similar beats being listed below.

Each lane in the Grid Search can be turned on or off to include/exclude it from the search.

To narrow things down even more, the **Snare** lane can be switched to **Sidestick**. The **Hihat** lane can be switched to **Open Hihat** or **Ride**.

The default mode for a lane is that it is used to search, but by clicking **Replace**, the lane actually becomes a grid sequencer and the hits you paint completely replace the notes in the playing midi file. Now you can force a specific kick pattern on any beat in AD2 for example.

The 'dots' in the grid can look a bit different. In the default Search mode they can look like this:

- **Orange with a tick**: success - there is a matching hit in the current beat
- **Orange without a tick**: a hit that is searched for but not found in the current beat
- **Gray**: a hit that exists in the current beat that was not searched for

In **Replace** mode the hits in the current beat are not used for playback but it can still be interesting to see what the original pattern looks like. The dots can look like this:

- **Red with a tick**: there is a matching hit in the current beat
- **Red without a tick**: there is no matching hit in the current beat
- **Gray dotted**: a hit that exists in the current beat but not in the replaced beat

Main Beat List

This is where all your search results will be listed. Selecting a beat here reveals one or more variants of that beat in the **Variant List**.

Variant List

All the variants of the beat you have selected will be shown here. You can click the small dot to the right to mark a variant as a **Favorite**, and list all your Favorite beats by choosing Fav Beats in the **Library** dropdown or **Beats Gallery**.

Beat Info

Shows you which MIDIPak the beat comes from, as well as length and time signature.

Beats Gallery

This view shows all the MIDIpaks we offer, and there are example beats from the ones you don't own.

At the top there are four filter buttons:

- **All Beats** shows everything,
- **Fav Beats** shows beats you have marked as favourites
- **My Beats** shows beats that you have recorded using AD2's built in MIDI Recorder
- **XLN Beats** shows all beats made by XLN Audio

Shortlist

Drag any interesting beat here to have quick access to it as you build your track.

Transform

The **Transform** section in AD2 is a powerful tool to change your selected beat. A little, or a lot - play around with it and see where you end up.

You can turn each section on/off to compare to the original, and there is also a **Transforming** button in the top right corner that lets you quickly compare original and transformed. The **Beat Visualization** shows you how the beat is affected.

The **Velo** control lets you compress, expand and/or shift the velocity range of your beat.

The **Accents** knobs are a creative way of applying accents (positive and negative) to your beat.
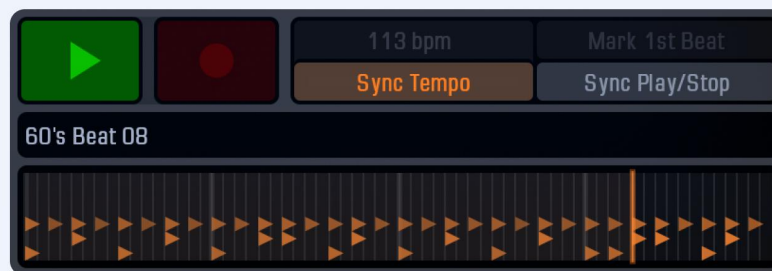
The **Random** knobs lets you apply slight randomness to the **Timing** or **Velocity** separately. Can add some "live" human feel to stiff beats.

The **Kitpiece Mix & Reassign** section allows you to control the velocity level of each Kitpiece, while **Mute** and **Solo** is helpful to isolate the parts you're interested in (like browsing only hihats from all the beats). The **Reassign** feature lets you swap out articulations: you could replace a normal snare hit with a sidestick for example.

Below are controls for the **Speed** (half tempo, double tempo and other useful things) and **Length** of your beat.

Finally, there is a **Reset** button so you can revert to where you started from if things get a little out of whack!

Transport Section

The **Play** button plays the current MIDI file. The **MIDI Record** button can record straight from your edrum kit, but also from the AD2 track in your DAW. By using the "cycle" feature in your DAW when recording a beat into AD2, the recorded beat will be nicely cut and looped. Your recorded midi beats will then appear in the **Beats Gallery** in the **My Beats** folder.

Sync Tempo allows you to sync the tempo to your DAW host. **Sync Play/Stop** makes AD2 follow your DAW transport. **Mark 1st Beat** lets you "re-sync" where a beat starts, to align with your arrangement (example: AD2 plays the 2nd bar in a 4 bar pattern when your chorus starts and you want it to play the 1st bar there - just click **Mark 1st Beat** when the chorus starts)

When running AD2 in stand-alone mode the **Tempo Sync** will default to 120 bpm, but can be changed to any tempo by clicking and dragging up/down.

The **Beat Visualization** at the bottom provides a visual representation of the currently selected beat, with a marker that follows the beat as it plays.

The PowerMap Engine

So many maps! Usually having a map is a good thing: when you are lost it can help you find your way home. But when it comes to drums and midi, things get slightly messy.

There are a lot of different key maps (the way the sounds are laid out in the keys) out there; meaning that midi files created for Software X often aren't compatible with Software Y.

This is why we created the PowerMap Engine! Here are a few examples of usage:

Mix live performances with library beats

Connect your e-drum kit and select the appropriate Map Preset for it. Here comes the magic: All your AD2 beats will still work, and be remapped to match the key layout of your e-drums! So you can mix'n'match ready-made beats from AD2's library and your own live performances in the same arrangement.

Use beats from different sources regardless of their mapping

This is very useful if you have MIDI files from various sources. Let's say you have some MIDI files with AD2 mapping, and you also found this great collection of GM compatible files. And then there are a bunch of files from the great "Software X" that you'd like to use as well. PowerMap can remap all these files on the fly, so you can browse them side by side in AD2's Beat Browser! All you need to do is

1. Open the **External MIDI Files** folder from the **Top Menu**. If you have MIDI files that are already AD2-mapped, you can just put them there.
2. If you have files with different mapping: create a folder for each type of files, and then save a "translation" Map Preset in each folder. So you'd have a "GM" folder, with all your GM files and a "GM.ADmap" in it. A "Software X" folder, with the MIDI files that came with it and a "Software X.ADmap".

In the case of GM you can probably use the GM map included in AD2 and just resave it to your new GM folder. In case of other files, you need to create a map yourself. You can remap everything in AD2 in the Map Window.

MIDI file naming conventions

All MIDI files in the AD2 library are tagged with a **Category** and if it's a **Fill** or a **Beat**. You can do this on your own files too.

Fills
If you create your own midi files you just have to add "_F_" to the file name and it will be considered a "Fill" in the Beats Browser. All other files are considered "Beats".

Categories
There is also a "_C_" tag, for category. Add "_C_Mushroom Metal" to the midi file name and it will show up as "Mushroom Metal" in the Category column in AD, and also in the "Categories" dropdown menu. If you do not add a category tag, the Category column will simply be empty.

Grouped MIDI files
Most Beats are part of a group of related files (clicking a file in the "Main" list reveals all the "Variants" in the list next to it). You can add this functionality to your own files easily, by adding special "tags" to the names of your MIDI files.

Example: Let's say you have 3 files with a similar feel, and you want to group them.

Adding the tag "_V_" to the file name tells AD2that the files are variations of the same thing and that they should be grouped:

- MyCoolBeat_V_Bidge.mid
- MyCoolBeat_V_Chorus.mid
- MyCoolBeat_V_Verse.mid

The part of the file name before "_V_" (i.e. "MyCoolBeat") must be the same for all 3 files, and is shown in the "Main" list.

The part after "_V_" is the name of the variation and is shown in the "Variants" list.

But which Variant is selected as the default when you click 'MyCoolBeat' in the Main list? Well you decide that, by putting the tag"_G_" in the name of that file. Example:

- MyCoolBeat _V_Bridge.mid
- MyCoolBeat _V_Chorus _G_.mid
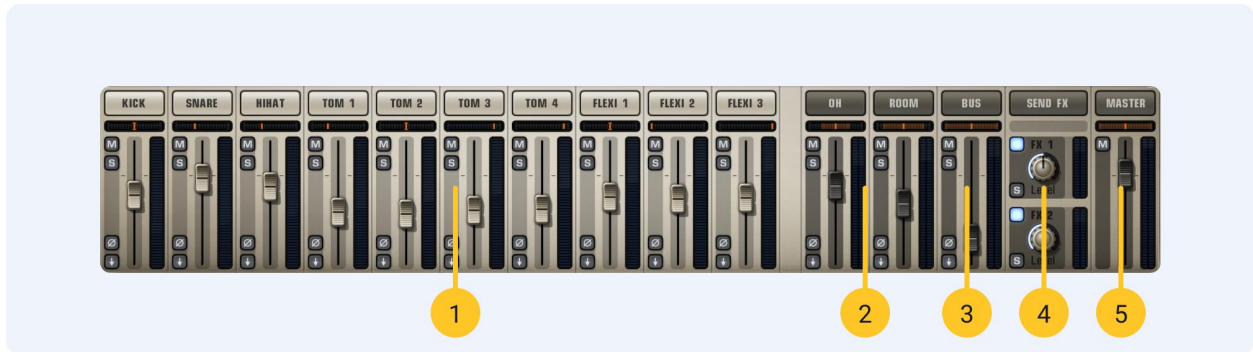- MyCoolBeat _V_Verse.mid

Here the file "MyCoolBeat _V_Chorus _G_.mid" will be the default selection.

Note: The tags "_V_" and "_G_" are never shown in the Beat Browser, they are just there to tell AD2 how to display grouped files.

The Mixer Section

Overview

AD2's Mixer Section has 14 audio mixer channels.

1. Ten mono channels handling the close mics of **Kick**, **Snare**, **Hihat**, the four **Toms** and the three **Flexi** channels. (The Flexi channels can load various percussion type sounds)
2. Two stereo channels handling the Overhead (**OH**) and **Room** mics.
3. One stereo **Bus**, which can be used for special effects (the previously mentioned channels can send a submix to the Bus, which can for example be distorted and sent into the Master channel).
4. One **Send FX** section for the levels of the Delerb 1 & 2 units.
5. One stereo **Master** Channel.

The Mixer section - Channel settings

All channels have:

- Pan (Including stereo width control for stereo channels by moving mouse up/down, stereo image can also be reversed)
- A Volume fader
- Solo and Mute buttons
- Phase Reverse button
- Separate Out button (You can choose to route each channel to the Master or to a separate output or both)

Exception: The Master Channel has no Solo, Phase Reverse or Separate Out buttons

Using separate outputs in AD2

AD2 is by default a multi-out instrument. There are no separate "Stereo" and "Multi-Out" versions.

Every channel in the AD2 mixer can be routed to a separate output, which appears in your host. Just click the downward pointing arrow button, and select from

- Master (default)
- Separate Out (Pre-Fader)
- Separate Out (Pre-Fader) + Master
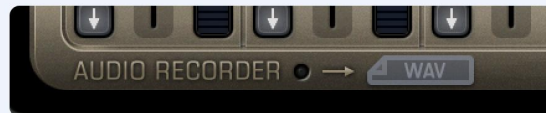- Separate Out (Post-Fader)
- Separate Out (Post-Fader) + Master

+ Master? When sending to a separate out, the signal normally disappears from the Master channel. However, it is sometimes useful to send out some sounds without affecting the overall mix in the AD2 master channel. You could for example make a submix of some elements outside of AD, or send out the kick to use for sidechaining with a bass track and other things.

Pre-Fader and **Post-Fader**? The difference here is that with **Pre-Fader** all signals are sent out at unity gain, and the setting of the AD2 channel volume does not affect the level in the separate output. This is nice if you want to mix the kit entirely outside of AD - you can choose any preset and the levels going into the external mix setup do not change.

Each channel is pre-assigned to a certain output:

1+2 = Master	7 = Tom 2	12 = Flexi 3
3 = Kick	8 = Tom 3	13 + 14 = OH
4 = Snare	9 = Tom 4	15 + 16 = Room
5 = Hihat	10 = Flexi 1	17 + 18 = Bus
6 = Tom 1	11 = Flexi 2	

The Audio Recorder

The **Audio Recorder** continually records the output from the Master out. It will record up to 15 seconds, or stop recording when there is silence (and the internal midi player is off). The resulting file can then be dragged into your DAW or onto your desktop.

Note: This feature won't slowly fill up your hard drive with recordings - the file is not actually created on disk until you start dragging it. It is also overwritten each time, using the same file name, so make sure it is properly imported into your DAWs pool of audio files (and you may wanna rename it as well there)

You can play a drum sound on the kit page, or a beat on the beats page, and then directly drag it out as audio to a track. Some common use cases:

- Drag out kicks and snares and build your main drum track using layering of different sounds
- Drag out a cymbal hit, reverse it to create a build into the chorus.
- Play a snare with massive reverb on it and use it in a particular place in a song
- Play a beat on the Beats page and drag it out to create a drum loop type background beat - having it as audio means you can chop it up and re-slice it in various creative ways.

Snapshot

Clicking the camera icon lets you take a **Snapshot** of your current settings, and places a small numbered polaroid icon beside the camera. Load a Snapshot by clicking the numbered icon. Delete the Snapshot by right-clicking.

The Map Window

Introduction

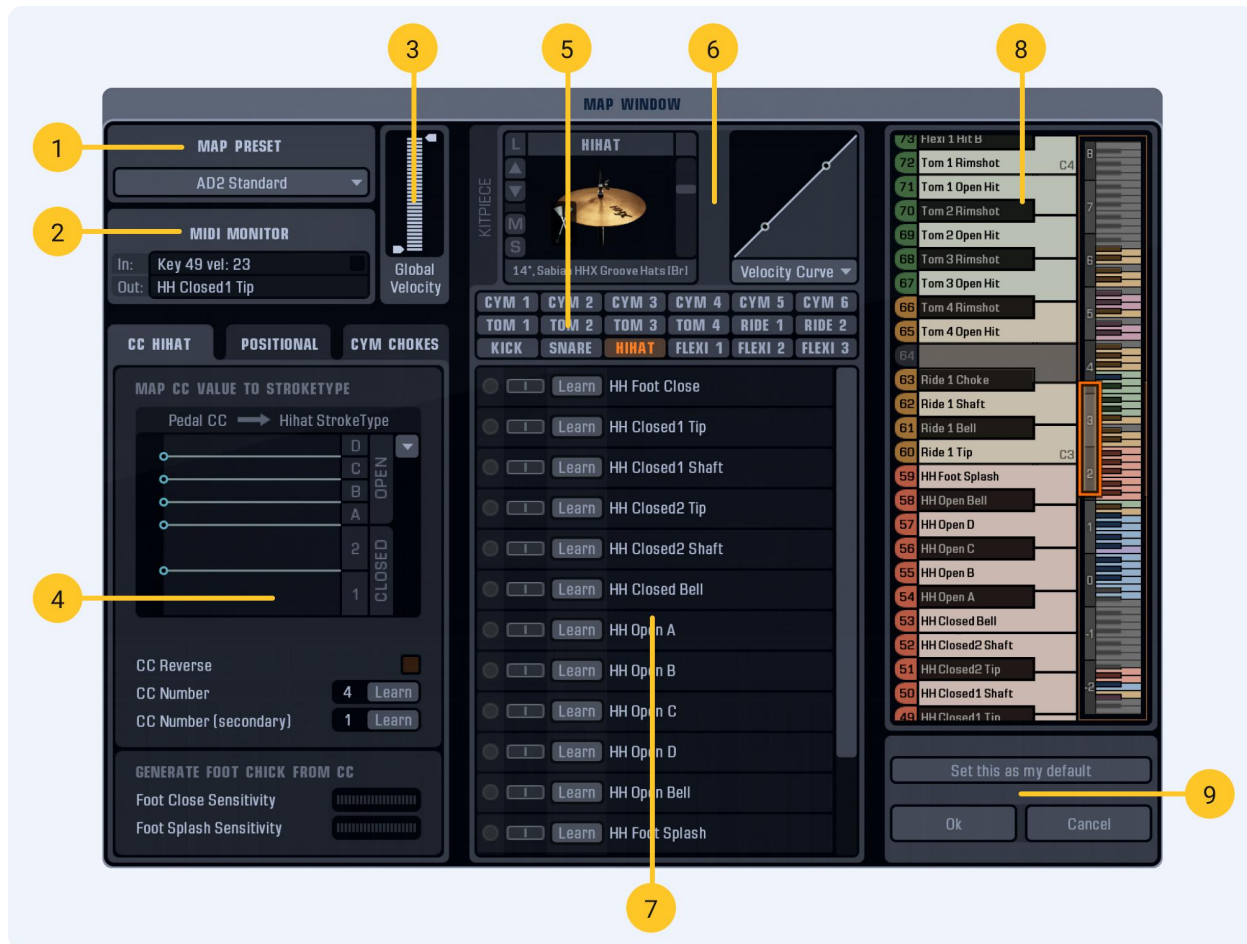You can access the Map Window from the Top Menu.

Addictive Drums 2 comes with extensive midi remapping and e-drum support. You can use the Map Window to change which key/map/controller triggers a certain drum sound. This can be useful if you

- Own an e-drum kit and want to use it to trigger the sounds in Addictive Drums 2
- Have MIDI drum grooves that use a different keymap than Addictive Drums 2, for instance, GM standard or grooves from another software drum manufacturer
- Want to make it easier to play grooves on a midi keyboard

Using an electronic drum kit with AD2

In the Map Window, click the Map Preset menu and select your electronic drum kit if it is listed there. After that it should just be a matter of record enabling the Addictive Drums 2 track in your DAW host and start banging! If your electronic drum kit is not listed in the Map Preset menu – try the GM Map Preset. It works with most electronic drum kits.

There are some e-drum specific features in AD2 like MIDI CC control of hihat, positional sensing and cymbal chokes. Check the **Advanced E-drum Settings** for more on this.

1. Map Preset Menu
2. MIDI Monitor
3. Global Velocity
4. Advanced E-drum Settings
5. Kitpiece Selector
6. Kitpiece and Velocity Settings
7. StrokeType List
8. Keyboard View
9. OK/Cancel & "Set this as my default"

Map Preset Menu

All settings in the Map Window can be saved and loaded as a Map Preset. AD2 comes with a number of Map Presets for common electronic drum kits and controllers, so you may not need to dig deeper into the Map Window than the Map Preset menu. You can also save your own custom created map and load it whenever you want.
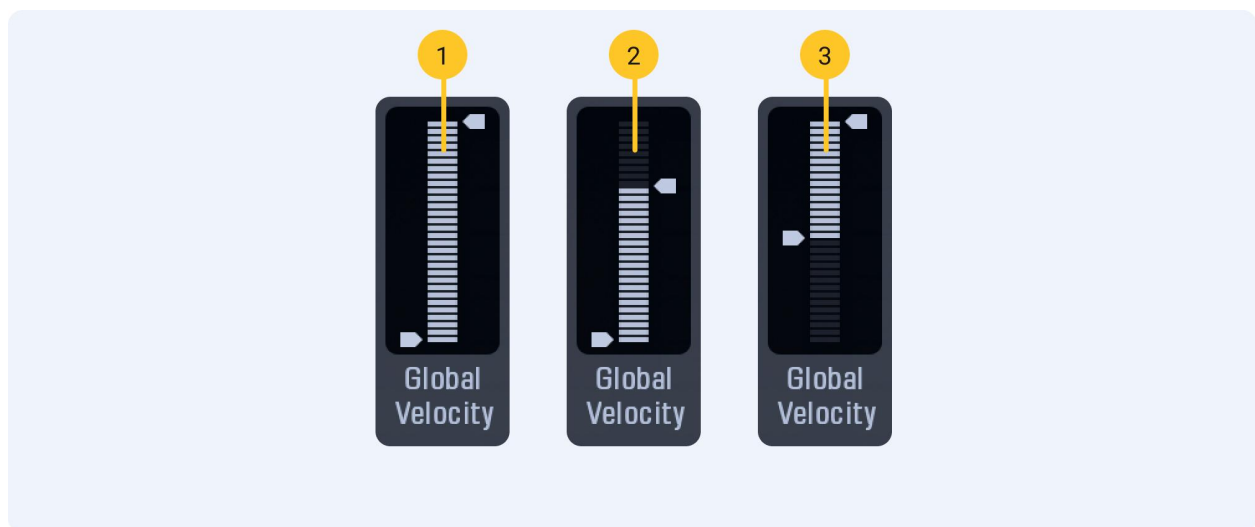
If you want the currently loaded map to load automatically every time you start up AD2, click the **Set this as my default** button.

MIDI Monitor

This area displays your incoming MIDI signals ("IN"), as well as what they are currently mapped to ("OUT").

Global Velocity

The Global Velocity slider controls the velocity response for all Kitpieces and StrokeTypes.

1. Default setting (whole velocity range is used)
2. Softer (maximum velocity is 90)
3. Harder (minimum velocity is 60)

Advanced E-drum Settings

See next chapter of this manual.

Kitpiece Selector

Each of the 18 Kitpieces can be selected and edited by clicking the corresponding button in the Kitpiece Slot Selector.
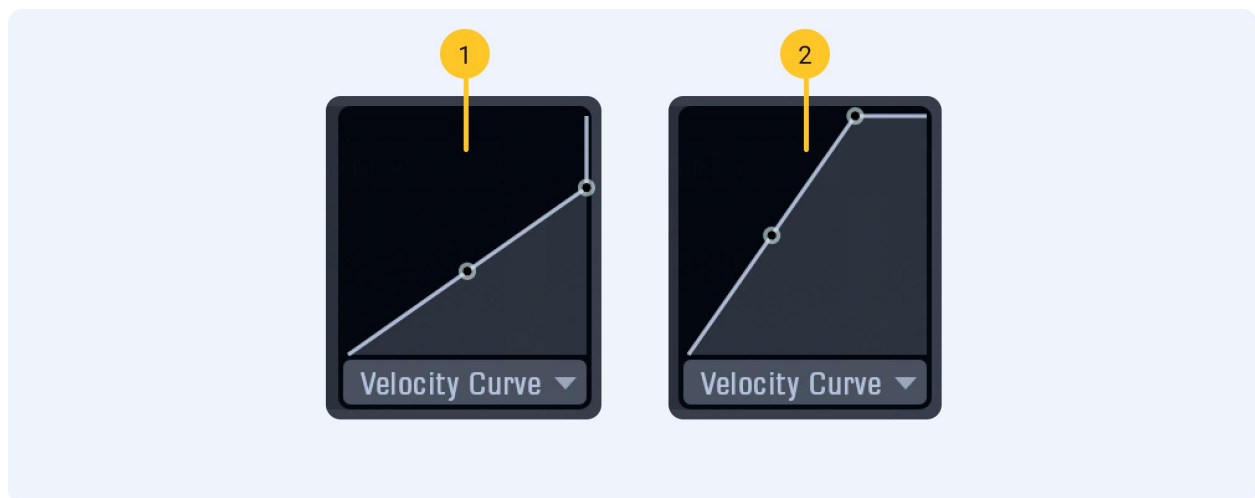
Kitpiece and velocity settings

This section shows the Kitpiece Slot and velocity response settings for the currently selected Kitpiece. The Kitpiece Slot works like the ones on the KIT page, which means that you can audition and load Kitpieces without leaving the Map Window.

Velocity Curve

This box displays a graph of the velocity response of the currently selected Kitpiece. The horizontal axis represents the velocity received by Addictive Drums and the vertical axis represents the outgoing velocity. Move the nodes to alter the velocity response.

Velocity Curve Presets

Clicking the arrow displays the Velocity Curve Preset menu. The presets give you a good overview of different approaches to velocity response.

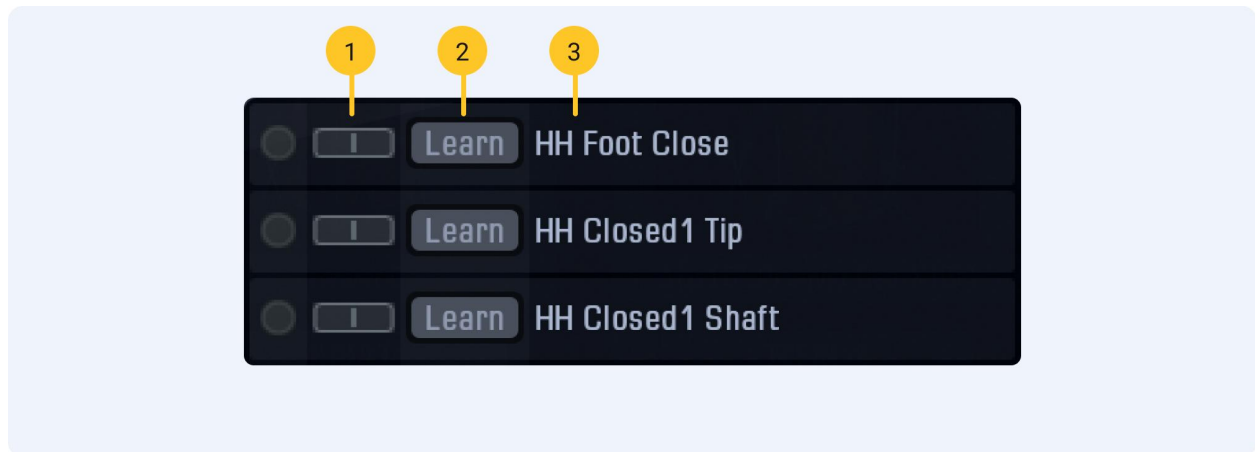1. Softer Velocity (preset)
2. Harder Velocity (preset)

Keyboard View

The **Keyboard View** shows how the StrokeTypes are mapped across a keyboard. Use the orange scrollbar handle to zoom in on another part of the keyboard. Dragging a StrokeType from the **StrokeType List** to a key will instantly map it. You can also drag a StrokeType from one key to another. Moving a StrokeType to a key that is already mapped will replace that StrokeType. You can select and move several StrokeTypes at the same time by using [Ctrl] or [Shift] on PC and [Cmd] or [Shift] on Mac.

StrokeType List

This list contains all the available StrokeTypes for the currently selected Kitpiece.

Please note that the StrokeType names in the StrokeType List are the default names from the Addictive Drums 2 keymap (open PDF from Top Menu). Some ADpaks may deviate slightly from that standard. For instance, in the Modern Jazz Brushes ADpak, the "RimClick" StrokeType has been replaced by the "Sweep: Short 1" StrokeType, but it will still be labeled as "RimClick" in the StrokeType List.

1. Velocity Adjust
2. Learn
3. StrokeType Label

Mapping

To map a StrokeType, simply drag'n'drop it onto a key in the Keyboard View. You can select and move several StrokeTypes at the same time by using [Ctrl] or [Shift] on PC and [Cmd] or [Shift] on Mac.
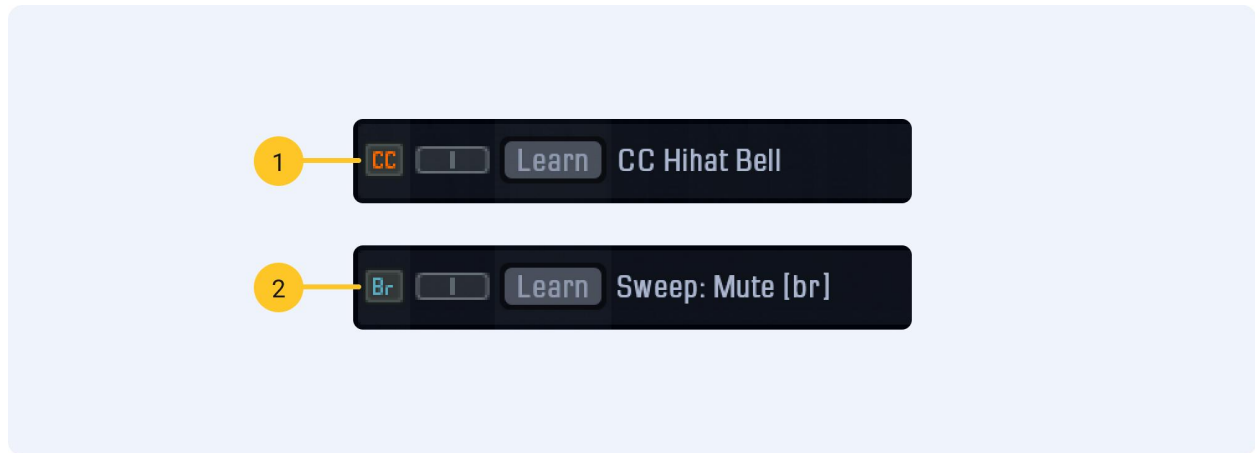
Velocity

The velocity sliders on the left lets you increase or decrease the velocity for a single StrokeType. Use this to, for example, make the sidestick louder than the regular snare sound.

Learn

Click **Learn** and hit the corresponding pad/key on your e-drum kit/controller to map it.

Icons

1. **CC** - used by special CC StrokeTypes (see the "Map Window – Advanced Settings chapter for more information)
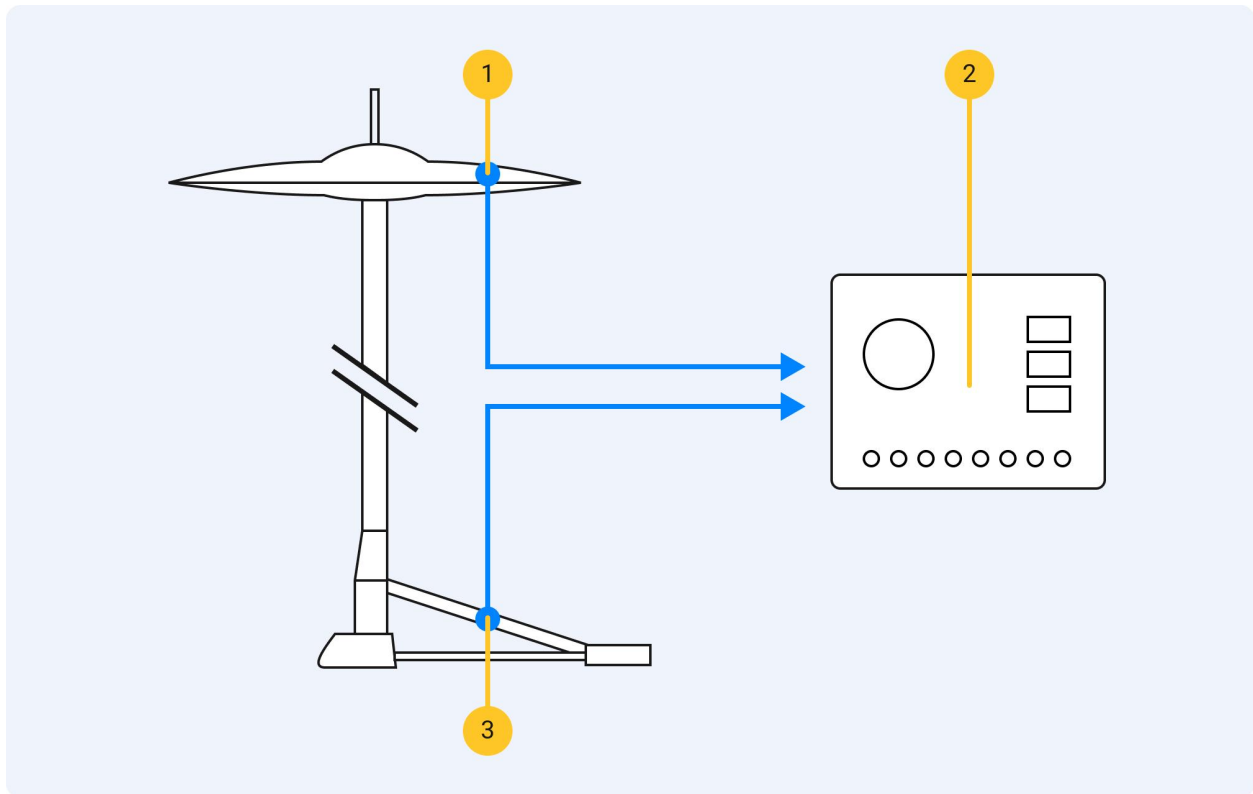2. **Br** - only used by sounds played with brushes, such as those in the Modern Jazz – Brushes ADpak

Map Window – Advanced E-drum Settings

CC Hihat

In order to understand how the settings in the CC Hihat tab works, information on how e-drum hihats work in general is necessary. Different e-drum kits come with different types of hihat setups. Below you will find descriptions of the most common types. Please refer to your e-drum manual for further information.

Hihat setup A

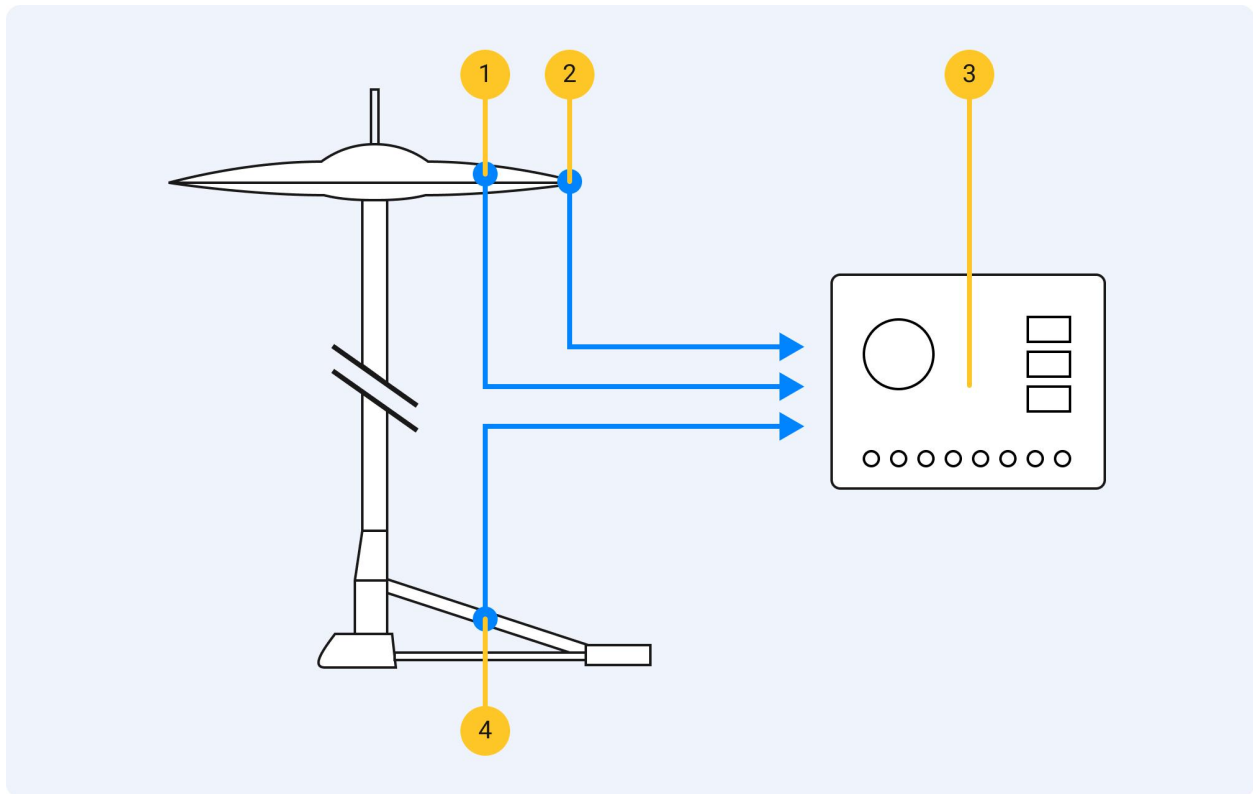With this setup you can get two hihat articulations: closed and open.

1. Pad sensor
2. e-drum module
3. Pedal

MIDI Output	Mapped in AD2 to
"Closed Hihat" (MIDI note #42)	"Hihat Closed 1 Tip"
"Open Hihat" (MIDI note #46)	"Hihat Open C"

Hihat setup B

This setup has a slightly more advanced Hihat pad with 2 strike zones.

This drum module also recognizes when you move the pedal down quickly and sends out a "Hihat Foot Close" note.

1. "Bow" Sensor
2. "Edge" Sensor
3. E-drum Module
4. Pedal

MIDI Output	Mapped in AD2 to
"Hihat Closed Edge" (MIDI note #22)	"Hihat Closed1 Shaft"
"Hihat Closed Bow" (MIDI note #42)	"Hihat Closed1 Tip"
"Hihat Open Edge" (MIDI note #26)	"Hihat Open C"

"Hihat Open Bow" (MIDI note #46)	"Hihat Open C"
"Hihat Pedal" (MIDI note #44)	"Hihat Foot Closed"
"Pedal Position" (MIDI CC #4)	Ignored

Hihat setup C

This setup uses the "CC Hihat" StrokeTypes to take advantage of AD2's full range of hihat articulations.

1. "Bow" Sensor
2. "Edge" Sensor
3. E-drum Module
4. Pedal

MIDI Output	Mapped in AD2to
"Hihat Closed Edge" (MIDI note #22)	"CC Hihat Edge"
"Hihat Closed Bow" (MIDI note #42)	"CC Hihat Tip"
"Hihat Open Edge" (MIDI note #26)	"CC Hihat Edge"
"Hihat Open Bow" (MIDI note #46)	"CC Hihat Tip"

"Hihat Pedal" (MIDI note #44)	Unmapped
"Pedal Position" (MIDI CC #4)	Used to determine hihat "openness", using the "Advanced/CC Hihat" controls

CC Hihat

Using the CC Hihat StrokeTypes instead of the regular StrokeTypes will cause AD2 to ignore the drum module's idea of closed and open. Instead, AD2 cares only about

- where you hit the pad (bow or edge)
- your current pedal position (sent out as MIDI CC #4)

Now, using the CC Hihat control in AD, it is now possible to fine tune exactly which AD2 hihat StrokeType is triggered for a certain pedal position.

Foot Close / Foot Splash Sensitivity

Even if the drum module recognizes when you move the pedal down and generate a note for this, we ignore that note in this example. Instead, AD2 uses its internal detection system, and when you move the pedal down quickly a "Foot Close" sound is generated. If you move the pedal down and then release it immediately you get a "Foot Splash". The sensitivity for these articulations can be adjusted using the **Foot Close / Foot Splash Sensitivity** controls.

CC Hihat

Map CC value to StrokeType

Adjust the nodes on the left side of the Pedal CC graph up or down to change the transition values for the different hihat StrokeTypes.

CC Reverse

This reverses the Pedal CC range (for compatibility with certain e-drum kits).

CC Number

If your e-drum kit sends out Pedal CC values on a different CC number than the default (CC #4), you can set a new number here.

CC Number (secondary)

If you're using two controllers at the same time, for instance, an e-drum kit and a keyboard, you can also set a Pedal CC number for the secondary controller.

Foot Close Sensitivity

When you move the pedal down quickly, a "Foot Close" sound is generated. Use this controller to set the trigger sensitivity.

In order for Foot Close features to work properly, do not map the Foot Close StrokeTypes to the notes sent out by your kit.

Foot Splash Sensitivity

When you move the pedal down quickly and then release it quickly, a "Foot Splash" sound is generated. Use this controller to set the trigger sensitivity.

In order for the Foot Splash features to work properly, do not map the Foot Splash StrokeTypes to the notes sent out by your kit.

Positional Snare & Ride

Some e-drum kits have support for so-called positional sensing. This means that when you hit the snare pad, the drum brain sends out a MIDI CC message that represents the distance from the centre and the edge. Addictive Drums has a special "CCpos Snare" StrokeType (see Keymap PDF) that can use this information. This StrokeType will play a Snare Open Hit StrokeType (when hitting the centre), a Snare Shallow Hit (when hitting the edge) or a mix of both (when hitting in between centre and edge).

Snare Position CC Reverse

This reverses the snare position data, set it so you get the correct sounds as you move from the centre to the edge.

Snare Position CC Number

If your e-drum kit sends out positional sensing values on a different CC number than the default (CC #16), you can change it here. This could also be useful if you want to control the snare position data with, let's say, a midi keyboard mod wheel or controller knob. Click the **Learn** button and move a controller to map it.

Snare Position CC Range

This slider adjusts the crossfade between the Snare Open Hit and the Snare Shallow Hit positional snare StrokeTypes. The left side of the slider represents the center of the drum pad (Open Hit) and the right side represents the edge (Shallow Hit).

1. Using the default setting, the crossfade will start immediately when moving from the edge to the centre and vice versa.
2. This setting crossfades to the Shallow Hit closer to the center than the default setting.
3. Reducing the crossfade from both ends means that a smaller area of the drum pad will trigger a mix between the positional snare StrokeTypes.

Velocity Compensation

On some e-drum kits you may notice unwanted changes in velocity response when using positional snare - perhaps you have to hit the edge harder to achieve the same velocity as hitting the center. Use this controller to compensate for such behavior.

CC Positional ride

The positional sensing for the Ride works like the snare, here the StrokeTypes used are Ride Tip and Ride Shaft.
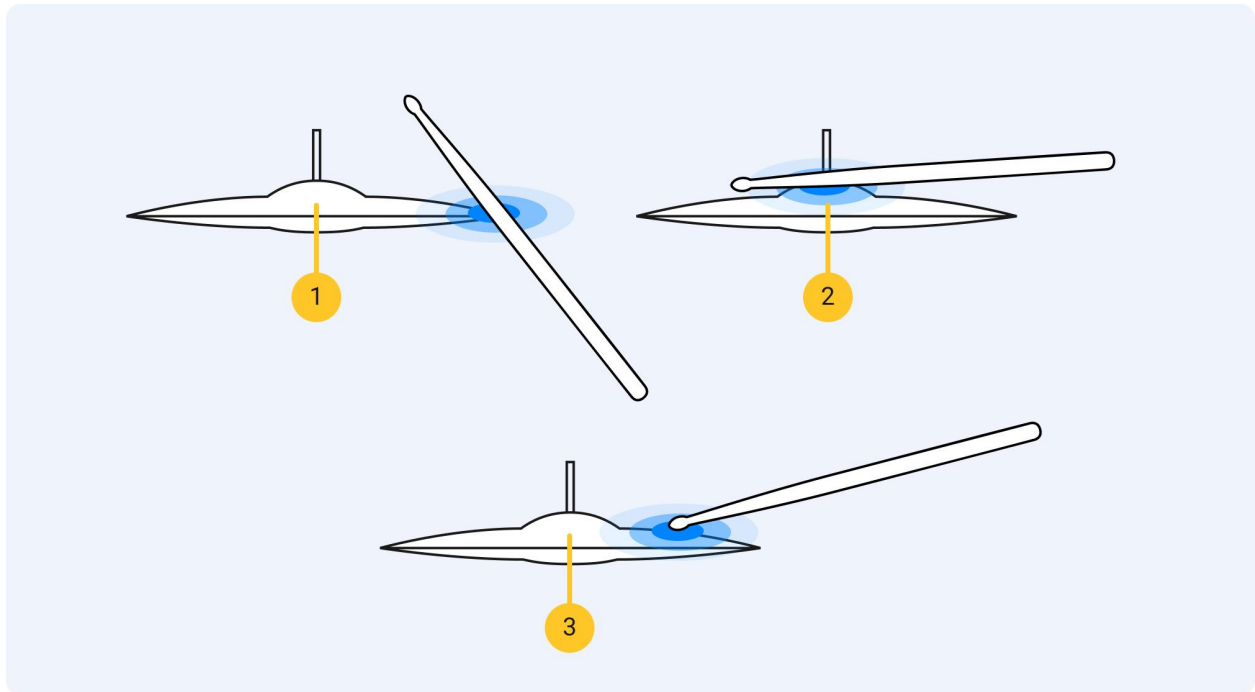
Cymbal Chokes

For certain e-drum kits, the cymbals send out aftertouch MIDI messages when they are firmly grabbed. If you check the boxes in the Chokes section, these aftertouch messages are set to trigger the cymbal choke StrokeTypes in AD2. This means that you can choke a cymbal by grabbing it!
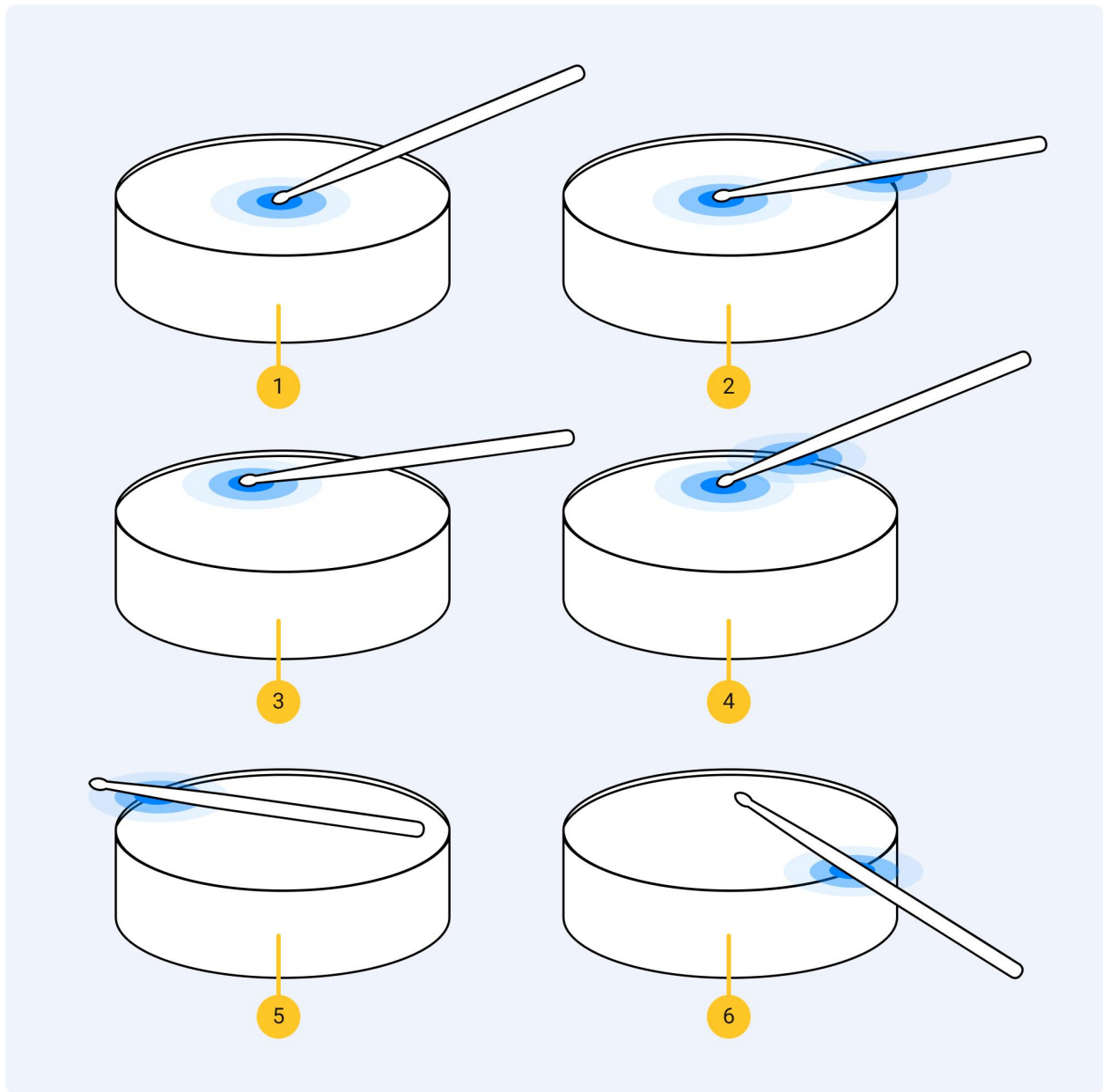
If you're using a midi keyboard that has aftertouch support, you may want to disable this feature.

StrokeTypes explained

Here's an illustration of the different StrokeTypes included in the AD2 sample library. For information on how these StrokeTypes are laid out on a keyboard, please see the Addictive Drums 2 Keymap PDF (available from the **Top Menu**).

1. Hihat & Ride: "Shaft" / Cym: "Hit"
2. Hihat & Ride: "Bell"
3. Hihat & Ride: "Tip"

1. Snare, Toms: "Open Hit"
2. Snare, Toms: "Rimshot"
3. Snare: "Shallow Hit"
4. Snare: "Shallow Rimshot"
5. Snare: "Sidestick"
6. Snare: "Rimclick"

Automation

The following parameters can be automated in Addictive Drums 2:

For every Kitpiece

- Solo, Mute, Level, Pan
- OH Level, OH Pan, OH Width
- Room Level, Room Pan, Room Width
- Pitch Main, Pitch OH/Room
- Filter Lo, Filter Hi

For every Mixer channel

- Level, Pan, Solo, Mute, Width (Width on stereo channels only)

For the Bus and Master channels

- Solo, Mute, Level, Pan, Width
- Filter Lo, Filter Hi

Converting AD1 Presets

If you previously owned Addictive Drums 1 and now wish to use your saved AD1 Presets and Map Presets in AD2: Simply drag and drop them onto AD2 and they will load up. You can then save them as AD2 Presets.