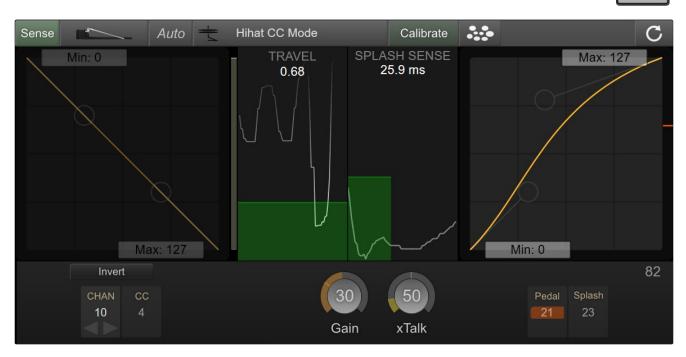
Pedal Editor

The pedal input(s) on the back of the *e*DRUM*in* supports a wide array of pedal types including hihat controllers, expression pedals, sustain pedals, and footswitches.

You can open the pedal editor by clicking pedal input icon at the top of the UI.



Pedal Type and Pedal Sensing

The pedal input will perform different functions depending on the type of pedal it is setup for. You can see that the hihat pedal is currently selected in the image on the right.

Pedal Sensing On / Off



Current Pedal Type

In order for the pedal sensing to work properly, always connect the cable to your pedal before connecting the cable to the *e*DRUM*in*.

Most pedals can be automatically detected and set up. Expression pedals and hihat controllers will be configured as hihat controllers, while footswitches and sustain pedals will be setup to perform bank changes.

Yamaha hihat controllers will initially be detected as footswitches, but will immediately switch to a hihat controller when the hihat pedal is pressed.

Some hihat setups will not be properly detected. Here are specific instructions for the Roland VH-12 and Hall effect sensor based pedals.

Hihat Controllers and Expression Pedals

When a hihat or expression pedal is connected, it is automatically setup to send out CC messages for the position of the pedal, and velocity sensitive closed hihat notes and splash articulations.

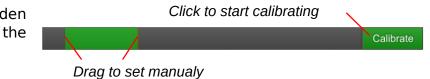
Before adjusting settings for your hihat, make sure it is properly setup on its stand.

Calibrating Your Pedal

You should calibrate your pedal even it seems to working fine when you first connect it. eDRUMin auto calibrates the pedal and won't lock in calibration settings until you go though the calibration process.

Click Calibrate to reveal the calibration range. Take the pedal through its full range of a motion. When done, click the calibrate control again to store the settings.

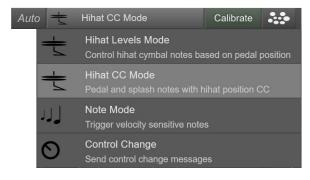
The calibration can be overridden by dragging either side of the green range indicator.



If you are using a hihat on a hihat stand, making adjustments to the tension of your hihat stand and clutch position will likely require you to re-calibrate your hihat controller for optimal results.

Modes for Expression Pedals and Hihat Controllers

By default expression pedals and hihat controllers will function as hihat controllers in CC mode as shown in the image below.



By clicking on the Mode control, you can change what the pedal does.

Only the two Hihat Modes are discussed in this manual. The other mode are more intuitive and if you want more information about them, please consult the MIDI Expression User Manual.

Note Source

Like trigger inputs, a hihat pedal can get its note assignments from the device drum map, or it can be set to 'Custom Notes'. When set to Custom Notes, the CC, Pedal and Splash are independent of the device drum map.



This setting also affects any trigger inputs that are set 'Hihat Cymbal'. If this is set to 'Custom Notes', than those pads that are set to 'Hihat Cymbal' will also use their 'Custom Note' assignments and not the notes defined in the drum map.

CC Mode vs. Levels Mode

A hihat controller has two basic functions. First, it communicates the position of the hihat pedal so that hihat sounds can vary in terms of their openness, and second it triggers velocity sensitive pedal and splash notes when you press the pedal all the way down.

CC Mode and Levels Mode handle triggering pedal and splash notes in the same way, but differ in the way they handle communicating the hihat position.

CC Mode

CC Mode sends out a CC message corresponding to the position of the pedal. Many applications can use this CC to determine which hihat sound to trigger.

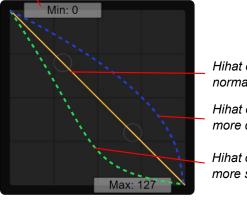
The Curve control allows you adjust the dynamics of the CC message values.

It can be turned on and off by simply clicking in the background of the control.

You use the Bezier handles to adjust how fast the hihat opens and closes when you press the pedal.

The MIN control allows you to simulate a hihat, clutch, allowing you to restrict the amount of openness when the pedal is fully released.

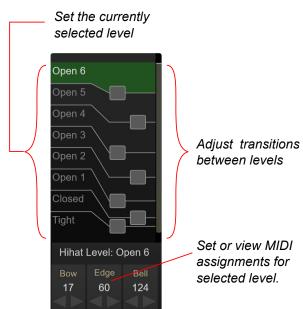
Pull down the min to simulate hihat clutch adjustments.



Hihat opens normally.

Hihat opens more quickly.

Hihat opens more slowly.



Levels Mode

With Hihat Levels Mode, eDRUMin takes more control over which hihat sounds are triggered by using different sets of MIDI notes for the hihat cymbal depending on the position of the pedal. This mode is suitable if you require more control over the transitions between your hihat sounds or for applications and devices that do not process CC4 messages.

To work properly, the input your hihat cymbal is connected to must be set to 'Hihat 1 Cymbal' or 'Hihat 2 Cymbal, depending on the pedal input you are using.



Adjusting the Responsiveness Closed Hihat Notes and Splashes

Before you adjust these controls, make sure your hihat controller is properly calibrated.

Travel

The travel control determines where along the pedals travel a note can be issued. In the image on the right, the line traces the position of the pedal over time. The pedal must pass into the green area in order for a note to be generated.

If you are using a two piece hihat like a Roland VH-13, make sure the green area is a little above the point where the two hats come together.

Splash Sensitivity

Any time a pedal note is triggered, a splash note can also be trigger if the pedal reopens quickly enough. The height and width of the green box in this control is used to adjust the sensitivity.

A splash note will be triggered the moment a pedal transient travels up and out of the box like it does in the picture on the right. The width of the box sets the maximum time window in which a splash can be triggered, and the height determines how far the pedal must reopen.

Gain



This Gain control compensates for how fast your pedal changes values. The faster your pedal moves, the lower you need to set the Gain Control. Hihat controllers typically work best with low gain values and Expression pedals work best with high gain values.

xTalk



If you are using a hihat setup where pressing down on the hihat pedal causes the hihat cymbals to vibrate, you can use the xTalk control to prevent those vibrations from causing false triggers. The control's meter measures the vibrations of the hihat trigger when the pedal generates a note. Set the value of the control above the meter.

Velocity Curve

The velocity Curve control allows you to shape the velocity response of pedal and splash notes. It works exactly like the one for trigger inputs. Look here for more information.

