Battery 2.1

Manual Addendum

User's Guide written by: Craig Anderton

Battery 2 is a trademark of Native Instruments Software Synthesis.

Germany

Native Instruments GmbH
Schlesische Str. 28
D-10997 Berlin
Germany
info@native-instruments.de
www.native-instruments.de

USA

Native Instruments USA, Inc.
5631 A Hollywood Boulevard
Los Angeles, CA 90028
USA
info@native-instruments.com
www.native-instruments.com

Battery 2.1. Addendum

Thanks to the positive reception to Battery 2.0 and helpful user feedback, Battery has already been upgraded to version 2.1. The latest version includes several new features that make working with Battery just that much more enjoyable.

Integrated Browser Import

The Browser now toggles with the Edit Pane, which makes it easier to browse, load, and edit simultaneously. The Browser works the same way as in Battery 2.0; it includes the same Preview functions (Auto, Listen, and a Volume slider), and supports Drag and Drop to the Cell Matrix. The main operational difference is how you show/hide the Edit or Browser Pane, and how you toggle between them.

Opening the Browser, and Toggling Between Browser/Edit Pane

There are three ways to open the Browser (these also toggle between the Browser and Edit Panes):

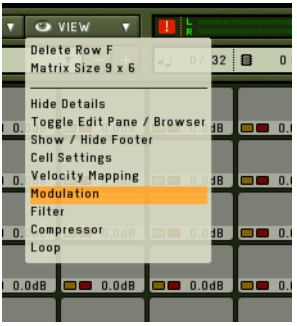
- Go *File > Import*
- Press **F1**
- Click on the **Folder** button toward the lower right of the Cell Matrix.

The small **triangle** button to the right of the folder icon provides the Show/Hide function for the Browser/Edit Pane.

View Menu Changes

The integrated Browser has led to two changes in the View menu:

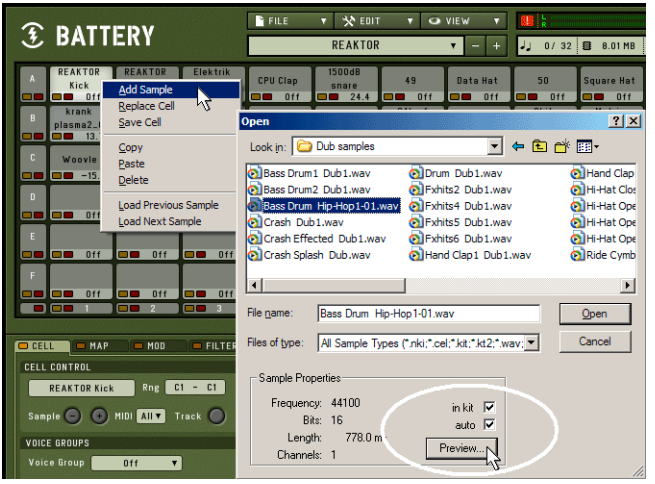
- **Toggle Edit Pane/Browser** toggles between the Edit and Browser Panes.
- **Show/Hide Footer** toggles between showing the lower Edit/Browser Pane and hiding it.



In-Kit Preview

Now you can listen to samples in the context of your track before loading them. When you right-click on a cell to Add Sample or Replace Cell, an Open dialog box appears that allows you to navigate to the sample you want to load. Note the two Preview options, which can be selected simultaneously:

- **In Kit:** If the host sequencer is playing and a kit is loaded, you will hear the sound previewed within the context of the kit.
- **Auto:** As soon as you click on a sample, you will hear it.



Direct-From-Disk (Streaming) Playback

If your computer doesn't have enough RAM to accommodate large samples, you can instead stream these samples directly from hard disk. A streamed sample's size can be up to 2GB.
Native Instruments calls this technology **DFD** (Direct-From-Disk). Although this process still needs some RAM to store the attack of the sound being streamed, DFD dramatically reduces RAM requirements, and allows loading kits with huge sounds.
DFD can be activated for anything from a single cell to multiple cells. There are also four configurations that optimize the DFD process based on the required polyphony and available memory.

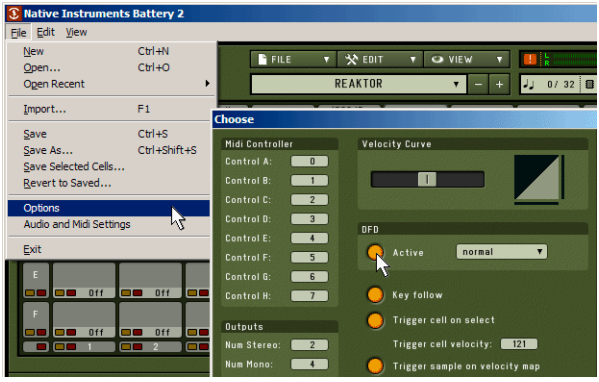
Note: Cells with DFD activated cannot be played in Reverse mode.

Obtaining the DFD .DLL

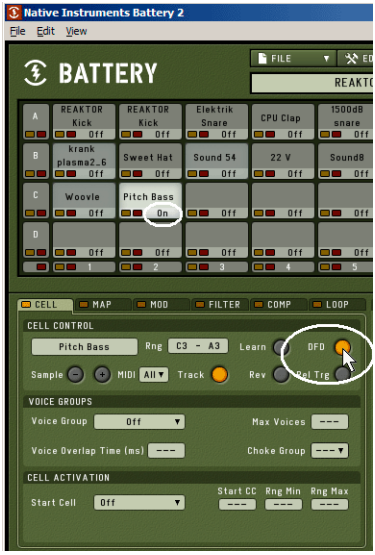
Using DFD requires a .dll file, which is available from the NI web site (www.native-instruments.com). Go to the Updates section for Battery 2, log in, and download either the Windows XP or Mac OS X version.
Use the installer application to install the DFD extension, which is placed in your operating system's system extensions folder. Upon opening Battery 2, it will automatically recognize the DFD extension. Also, please check for any Read Me file after installation, as it will include any late-breaking news on using DFD.

Using DFD

- Enable DFD for Battery 2. Go **File** ⇨ **Options**, and click on the **Active** button under **DFD**.



- Enable DFD for any cells that should stream direct-from-disk. Select the cell, then in the Edit Pane's Cell Tab, click on **DFD** under Cell Control. Note that in the matrix, when the Cell Tab is selected, the cell's lower right corner will show **On** if DFD is enabled for that cell.



Expert DFD Settings

If you have a really fast hard drive, a blazing processor, and a ton of RAM, you probably won't have to optimize the DFD settings. However, if you have inconsistent results with DFD, go *File > Options* and under DFD, choose one of four configurations from the drop-down menu. *Example:* If your kit has instruments that take up a lot of memory but it doesn't require a lot of polyphony, choose **large instruments (low polyphony, high memory)**. Experiment for the best results, as each computer setup is different.

Note that DFD is very cool, but it can't violate the laws of physics. You can't expect to run a host sequencer with lots of tracks, an instance of Battery 2 with a huge kit, and several software synths, then expect to stream lots of samples from hard disk. (One way to improve response, particularly with systems that don't have lots of RAM, is to reduce the maximum number of voices.)

Output Configuration

Go **File** ⇨ **Options**, and note the new Outputs parameter. Here you can set the overall number of stereo and mono outputs in Battery 2. The maximum amount will depend on your sound card, the audio drivers used in your computer, and how many mono and stereo outputs you've selected. For example, if your audio interface (sound card) has 8 channels, then you can likely choose 4 stereo outs, or 2 stereo outs and 4 mono outs, or 8 mono outs, etc. The total number of channels selected for Battery 2 cannot exceed the number of channels in your audio interface.

- **Num Stereo:** This chooses the number of stereo outputs, up to 16 maximum.
- **Num Mono:** This chooses the number of mono outputs, up to 32 maximum.

To enter the value, either double-click on the appropriate field and type in the desired value, or click on the field and drag up or down to increase or decrease the number of outputs, respectively. If, while modifying the outputs, you see the following message: *"The host was not able to change to the new output configuration. Please close and reopen the plugin for the new settings to become effective,"* close and reopen the plug-in to obtain the desired number of output channels.

MIDI CC (Continuous Controller) Automation

In addition to standard host automation, Battery 2 also allows remote control of knobs via MIDI continuous controllers (such as the signals provided by hardware control surfaces, which are great for real-time control). This MIDI data can be recorded into your host sequencer, and used on playback to control Battery 2 parameters.

To assign a MIDI controller to a knob:

- Right-click (Mac: Ctrl-click) on the knob.
- The Automation dialog box appears.
- Choose the desired MIDI automation mode: **MIDI Controller** is for standalone or when used as a plug-in with some hosts, while **Host Automation** is used when Battery 2 serves as a plug-in.

To assign a parameter to MIDI control, you have two options:

- Highlight the controller you want to assign to this knob (e.g, CC# 4), and either double-click on it or click on Set.
- Click on Learn, and move the hardware control that generates the MIDI data.

Note: Several knobs can be assigned to the same controller.

Here's what the other functions on the automation menu provide.

- **Remove:** Click on the controller number/assignment you want to remove, then click on **Remove**.
- **Smoothing:** This smoothes any steps between pieces of incoming MIDI data to avoid "zippering" or "stair-stepping" noise. Higher smoothing values yield the greatest degree of smoothing, but make the knob feel less "tight" (less responsive).
- **Soft Takeover:** Often times, the physical position of a knob will not correspond to a parameter's programmed setting. When you move the knob, the parameter "jumps" from its existing setting to the knob's value. However, if **Soft Takeover** is **On**, the knob value has to pass through the existing parameter value before the value will change. This avoids any abrupt changes.

Additional Options Dialog Parameters

Go **File** ⇨ **Options** to edit several other parameters new to Battery 2.1.

- **Trigger Cell Velocity:** When Trigger Cell on Select is enabled, clicking on a cell will trigger it. With the Trigger Cell Velocity parameter, you can specify the trigger's velocity level.
- **Show Absolute Paths:** This lets you show or hide the file path in the **File** ⇨ **Open Recent** menu, as well as in the waveform display.
- **Default Kit:** You can now set the current kit as the default kit on startup, as well as clear the default kit.

Enjoy the update!

Your Native Instruments Battery 2 team