



Version 2.5 for Windows XP and Mac OS X

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Chapter 1: Introduction

Congratulations on your purchase of DrumCore! DrumCore is the ideal solution for anyone who needs professional drum parts in any style within seconds. Use DrumCore to dial-in the perfect beat for composing, arranging, remixing, or just flat out jamming. Since DrumCore is both a stand-alone and ReWire™-compatible application, you can take advantage of its extensive rhythmic catalog on its own or as an integrated rhythm machine within your favorite DAW (such as Pro Tools®, Digital Performer®, Sonar®, Nuendo®, or Logic ®).

Search for the perfect groove quickly and easily using DrumCore's intuitive browser interface. DrumCore boasts of an extensive library of rhythmic content recorded by professional drummers and percussionists of the highest calibre—such as Alan White (John Lennon, Yes), Terry Bozzio (Frank Zappa, Missing Persons), Matt Sorum (The Cult, Guns and Roses, Velvet Revolver), Sly Dunbar (Bob Marley, Peter Tosh), Zoro (Bobby Brown, Lenny Kravitz), and more!—using state-of-art digital and vintage recording gear in best possible acoustic environments. Furthermore, DrumCore's catalog is expandable: You can import your own rhythmic content or purchase additional DrumCore Drummer Packs produced by Submersible Music.

DrumCore features:

- An extensive catalog of the highest quality rhythmic content. DrumCore's database of drum loops (24-bit, 48 kHz stereo) were recorded with world-class drummers in state of the art studios. Each groove includes variations and fills in addition to the basic beats. Every groove was recorded at multiple tempos so that you get the groove you want at the tempo you want, with all of the artist's nuance at each tempo and without the artifacts introduced by common time-compression and expansion algorithms. Most grooves in DrumCore's database also have a MIDI version, which provides an even greater degree of flexibility in conjunction with DrumCore's DrumKits. See "A Note about DrumCore's Content" on page 17.
- An intuitive, easy to use search engine to find the perfect groove, drum loop, or fill. You can sort loops by tempo, style, drummer, and several other relevant criteria. You can even import your own audio or MIDI files and provide your own metadata (including "style" definitions) for quick search and retrieval. See "Searching the Database" on page 19.
- The Gabrielizer™, a tool for beat manipulation, lets you quickly and easily reshuffle your audio and MIDI loops to create new unique and interesting rhythms. See "Gabrielize" on page 25.
- ReWire-compatibility integrates DrumCore with your favorite multitrack audio and MIDI sequencing program (e.g., Pro Tools, Digital Performer, Sonar, Logic, Nuendo, Live, etc.). See "Chapter 5: Using DrumCore with ReWire."

- A stand-alone audio and MIDI playback engine (ASIO or DirectSound on Windows, and CoreAudio on Macintosh) lets you play back DrumCore’s drum loops for easy auditioning.
- MIDI DrumKits—DrumCore provides multiple sampled DrumKits of the drummers’ kits to match DrumCore’s MIDI grooves. You can play DrumCore’s DrumKits from DrumCore’s own catalog of MIDI grooves, or from your ReWire-compatible sequencer. You can also create your own kits to suit your needs. See “Chapter 4: The DrumKit Editor.”

New Features in DrumCore 1.5:

- Drag and drop files (audio and MIDI) to the Desktop or to any DAW that supports drag and drop (such as Cubase, Sonar, Digital Performer, or Logic).
- Import new User Packs
- Create New DrumKit
- Improved Import dialog
- Enhanced Export to Pro Tools

New Features in DrumCore 2.0:

- DrumCore supports “stretchy tempos”—files can be played back and exported at any tempo between 20 and 240 bpm.
- Full transport and tempo synchronization with your DAW via ReWire.
- DrumCore provides separate ReWire outputs for each pad of the MIDI DrumKit.
- DrumCore provides pan and pitch control on every pad of the MIDI DrumKit.
- DrumCore supports REX and ACID files—you can export DrumCore content as REX files as well as import REX and ACID files into DrumCore.
- DrumCore lets you type in the desired tempo to three decimal places (e.g., 133.333 bpm).

- DrumCore can now synchronize to any compatible ReWire host application (such as Pro Tools, Logic, Digital Performer, Live, or Cubase), even if you start playback mid-bar!
- When updating to DrumCore 2.0, use the new Import DrumCore Database command to import all your custom content and any previously installed DrumCore DrummerPacks.

New Features in DrumCore 2.5:

- Universal Binary support for Intel-based Macs.
- Queue play lets you queue the next file for seamless auditioning.
- Pad swapping lets you swap samples between kits. For example, you can use Matt Sorum’s snare within John Bishop’s kit.
- Sample audition lets audition samples within the DrumKit Editor by simply clicking on them.
- Velocity audition lets you click on the audition strip along the left side of the DrumKit Editor to audition samples and crossfade points at various MIDI velocities.
- You can now drag and drop samples from the desktop straight to the Pad editor to easily create new sample layers (samples are copied into the Drumkits folder automatically). You can also drag and drop samples within the Pad editor to rearrange them.
- Stand Alone MIDI lets you play DrumCore from any MIDI controller.
- MIDI fills now have their own unique icon.

System Requirements

You must have Administrator Access on your computer to install DrumCore.

When using DrumCore as a ReWire client with a ReWire-host (mixer) application, such as Pro Tools, DrumCore's system requirements are in addition to the ReWire-host application's requirements.

Minimum Requirements for Windows

- Pentium® PIII or AMD Athlon® 800 MHz processor or faster
- 512MB RAM, 1 GB or more recommended
- At least 9 GB of available Hard Drive space for Drum Loop Content
- DVD ROM Drive (for installation)
- Windows XP Home or Professional edition
- 1024 X 768 minimum display resolution

Minimum Requirements for Macintosh

- Apple® Macintosh® Power Mac® or PowerBook® G4 500 MHz or faster
- 512MB RAM, 1 GB or more recommended
- At least 9 GB of available Hard Drive space for Drum Loop Content and application
- DVD ROM Drive (for installation)
- Mac OS X (v10.3.x or later)
- 1024 X 768 minimum display resolution

Register DrumCore

You must register DrumCore to receive your DrumCore authorization code. Registered users can receive technical support by email or on the DrumCore Web site. The initial response time for technical support inquiries is within 24 hours. Registered users will also receive periodic software update and upgrade notices.

Conventions Used in This Guide

This guide observes the following conventions to indicate menu choices and key commands:

Convention	Action
File > Import Files	Choose Import Files from the File menu
Ctrl+I on Windows or Command+I on Macintosh	Hold down the Ctl key on Windows or the Command key on Macintosh and press the I key
Ctrl-click on Windows or Command-click on Macintosh	Hold down the Ctl key on Windows or the Command key on Macintosh and click the mouse button

The following symbols are used to highlight important information:



User Tips are helpful hints for getting the most out of DrumCore.



Important Notices include information that could affect DrumCore's performance.



Shortcuts show you useful keyboard or mouse shortcuts.



Cross References point to related sections in the guide.

Chapter 2: Installation and Configuration

Installing DrumCore

On Windows, the DrumCore application will be installed in C:\Program Files\Submersible\DrumCore\. On Macintosh, the DrumCore application will be installed the Applications folder on your system drive. DrumCore content can be installed to any available drive with at least 9 GB of available storage space. If your system does not have at least 9 Gb of available storage space, DrumCore cannot be installed.

Installing DrumCore on Windows

To install DrumCore:

- 1 Insert the DrumCore DVD 1 of 2 into your computer's DVD drive.
- 2 Double-click the installer icon.
- 3 Follow the on-screen instructions to install the DrumCore application and all DrumCore content.
- 4 When prompted, locate and select where you want the DrumCore application to be installed. (It is installed in the Program Files folder by default.)
- 5 When prompted, locate and select where you want the DrumCore content to be installed.
- 6 When prompted, eject the DrumCore DVD 1 of 2 from your computer's DVD drive and insert the DrumCore DVD 2 of 2.

7 Follow the on-screen instructions to complete the installation.

8 When installation is complete, exit the DrumCore installer.



If you are upgrading from an earlier version of DrumCore, and have your own custom content or any previously installed DrummerPacks, use the Import DrumCore Database command to import all of your previous DrumCore content into DrumCore 2.0. See "Importing DrumCore Databases" on page 31.

DrumCore will install the following:

- DrumCore.exe (C:\Program Files\Submersible\DrumCore\, unless specified otherwise)
- DrumCore Guide (C:\Program Files\Submersible\DrumCore\, unless specified otherwise)
- DrumCore Data (<user specified>)
- DrumCore Engine.dll (in c:\Program Files\Submersible\DrumCore\ReWire Support\)



The installer makes an entry in the Local registry on the DrumCore Engine's location. If you move the DrumCore application directory after installation, DrumCore will not be able to use ReWire.

- ReWire.dll (\\WINDOWS\system32\)
- REX Shared Library.dll (\\WINDOWS\system32\)

Installing DrumCore on Macintosh

To install DrumCore:

- 1 Insert the DrumCore Installer DVD-ROM Disk 1 into your computer's DVD drive.
- 2 Double-click the installer icon.
- 3 Follow the on-screen instructions to install the DrumCore application and all DrumCore content.
- 4 When prompted, locate and select where you want the DrumCore application to be installed. (It is installed in the Applications folder by default.)
- 5 When prompted, locate and select where you want the DrumCore content to be installed.
- 6 When prompted, eject the DrumCore Installer DVD-ROM Disk 1 from your computer's DVD drive and insert the DrumCore Installer DVD-ROM Disk 2.
- 7 Follow the on-screen instructions to complete the installation.
- 8 When installation is complete, quit the DrumCore installer.



If you are upgrading from an earlier version of DrumCore, and have your own custom content or any previously installed DrummerPacks, use the Import DrumCore Database command to import all of your previous DrumCore content into DrumCore 2.0. See "Importing DrumCore Databases" on page 31.

DrumCore will install the following:

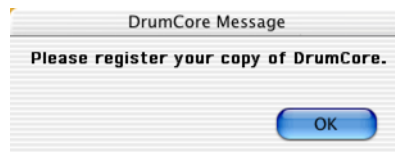
- DrumCore Application (/Applications/DrumCore/DrumCore.app)
- DrumCore Guide (/Applications/DrumCore/DrumCore_User_Guide.pdf)
- DrumCore Data (<user specified>)
- DrumCore Engine (/Library/Application Support/DrumCore Engine)
- ReWire Engine (/Library/Application Support/Propellerhead Software/), if not already installed
- REX Engine (/Library/Application Support/Propellerhead Software/)Authorizing DrumCore

Authorizing DrumCore

DrumCore requires an authorization code in order to run. You must register your copy of DrumCore in order to receive your DrumCore authorization code.

To authorize DrumCore:

- 1 Launch the DrumCore application.
- 2 You will be prompted to register DrumCore.



3 Click OK. The Register DrumCore dialog opens.

Register DrumCore

Step 1.) Enter your name and Serial Number

Enter your name (as you want it to appear in DrumCore):

Enter your SERIAL NUMBER (16 numerical digits) from the Registration Card:

Step 2.) Generate a Challenge Code

Generate a unique CHALLENGE CODE (28 lowercase letters) by clicking on the button below:

Generate Challenge Code

Step 3.) Register at DrumCore.com for a Response Code

Click on the following link to register via the DrumCore website. If you can't access DrumCore.com from this machine then copy your SERIAL NUMBER and CHALLENGE CODE (from above) and register using any web-enabled computer.

<https://secure.drumcore.com/register/default.aspx>

If you can't register via the website, send an email to register@drumcore.com with your name, Serial Number and Challenge Code from above. You will receive a Response Code which you can enter below to authorize DrumCore.

Step 4.) Use the Response Code to authorize DrumCore

Copy the RESPONSE CODE and paste it in below. The Response Code is generated on the DrumCore website when you register and consists of 24 uppercase letters.

Help **Cancel** **In 30-Day Demo** **Authorize**

Register DrumCore dialog

4 Enter your Name and Serial Number (your serial number is located on your DrumCore Registration card).

5 Click the Generate Challenge Code button. A unique “challenge” code (a series of 28 lowercase letters) will be generated and displayed in the Challenge Code field.

6 Register DrumCore at DrumCore.com by doing the following:

- Click the hyper link DrumCore’s secure Web site.
 - Your default Web browser will launch to DrumCore’s Product Registration page.
 - Your Name, Serial Number, and Challenge Code should be entered automatically.
 - Enter your email address (your authorization code will be sent to this email address).
 - Click the Submit Registration button.
- or -

If you are unable to register using the DrumCore Web site, send an email to register@drumcore.com with your Name, Serial Number, Challenge Code, and email address (your authorization code will be sent to this email address).



You must register DrumCore to receive your authorization code.

7 A unique “response” code (a series of 24 uppercase letters) will be emailed to you. However, until you receive your authorization code, click the 30-Day Demo button to use DrumCore.



DrumCore is fully functional for the duration of the 30-day demo period. After 30 days you must enter your authorization code to continue using DrumCore.

8 Once you have started the demo period, you can open the Register DrumCore dialog by choosing Windows > Register.

9 When you receive your response code, enter it in the Response Code field and click the Authorize button.

Configuring Audio MIDI Setup

(Macintosh Only)

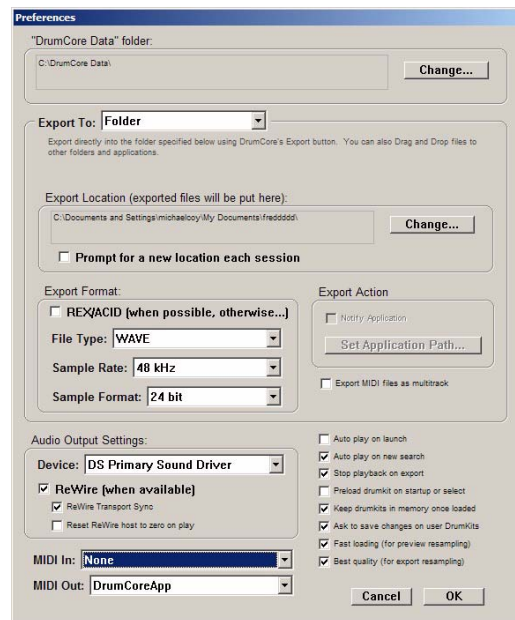
DrumCore can be used as a stand-alone application with audio playback using Apple® CoreAudio. CoreAudio is how Mac OS X manages audio streams between audio software and hardware. Most third-party audio hardware has drivers for CoreAudio. If you want to use DrumCore with a third-party audio interface, you must first configure the Apple Audio MIDI Setup application (AMS). For more information, refer to Apple's documentation.

DrumCore Preferences

Before you start using DrumCore, you should configure DrumCore's Preferences according to your preferred work habits. In the DrumCore Preferences dialog, you can define standard file export and playback options. The DrumCore Preferences dialog provides slightly different options specific to the Windows or Macintosh platform.

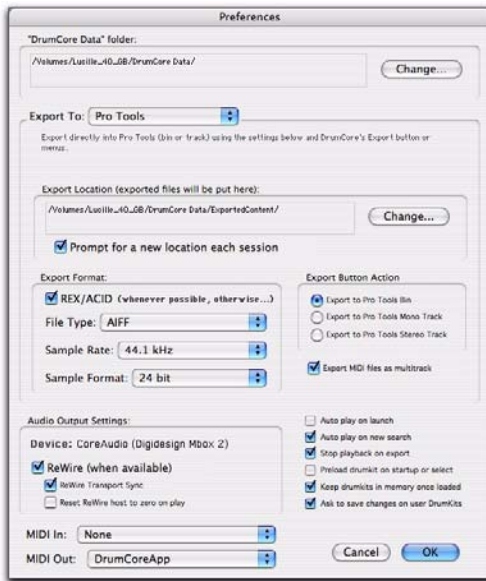
To open the DrumCore Preferences dialog:

- 1 Launch DrumCore (either stand-alone or from your ReWire-compatible DAW).
- 2 On Windows, choose Edit > Preferences (or press Alt+;). The DrumCore Preferences dialog opens.



DrumCore Preferences, Windows

On Macintosh, choose DrumCore > Preferences (or press Command+;). The DrumCore Preferences dialog opens.



DrumCore Preferences, Macintosh

“DrumCore Data” Folder

DrumCore expects the DrumCore Data folder to be in the location where it was originally installed. If you move the DrumCore Data folder to a different location, you will have to tell DrumCore where to find it. When you first launch DrumCore after the DrumCore Data folder has been moved, you will be prompted to locate it.

If the DrumCore Data folder has been moved, you need to identify the correct location of the DrumCore Data folder from the DrumCore Preferences dialog.

Export Preferences

DrumCore provides several relevant preferences for standard export options.

Export To

Use the Export To pop-up menu to specify whether or not you want to export files to Cubase, Digital Performer, GarageBand, Logic, Nuendo, Pro Tools, Tracktion, Application, or a Folder. When using DrumCore as a ReWire client with a ReWire mixer application (your DAW), this preference lets you export files directly to your DAW.

If your DAW supports drag and drop, select your DAW from the Export To pop-up menu and configure the rest of DrumCore’s export preferences as desired.

If you have any problems using Export to your application, select “Folder” and set-up the audio file export settings to match your DAW project with the DAW’s project/session folder as the export location.

Export Location

The default folder for exported content is \DrumCore Data\ExportedContent\. You can change the default location (folder) for exported content by clicking the Change button, and selecting a new location (folder). To be prompted to specify the location (folder) for exported content every time DrumCore is launched, enable the Prompt for a new location each session option.



Set the Export Location to your DAW project’s audio files folder. This lets you easily manage audio files exported from DrumCore that are specific to the project.

When dragging and dropping a file to a DAW, the file is converted to the export format, written as a new file to the specified export location, and then imported into your DAW.

Export Format

The Export Format Preferences let you specify standard audio file formats: File Type (AIFF, Sound Designer II, Sound Designer II Split .L/.R, or WAVE), Sample Rate (44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, or 192 kHz), and Sample Format (16- or 24-bit). Enable the REX/ACID option to have DrumCore export REX or ACID files whenever they are available. Most of DrumCore's factory content can be exported as REX files, or as AIFF, SD II, or WAVE files. If you have imported ACID files, they can be exported as ACID files, or as AIFF, SD II, or WAVE files. If the REX or ACID format is not available, DrumCore will export the file as the format selected in the pop-up menu (AIFF, SD II, or WAVE).

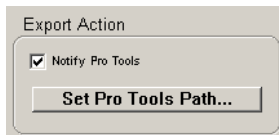
DrumCore's content is all 24-bit, 48 kHz, and is encoded in DrumCore's proprietary file format.



The Sound Designer II file format is only supported on Macintosh.

Export Action

(Windows Only)



Export Action (Windows only)

Notify Application

Enable the Notify Application (e.g., Pro Tools or Cubase) option to have DrumCore prompt the specified application to automatically import content export from DrumCore. You must also locate

and select the specified application using the Set Application Path button. You only need to do this once. If you use DrumCore with more than one DAW, you will have to do this only once for each application.

Export Button Action

(Pro Tools on Macintosh Only)



Export Button Action (Pro Tools on Macintosh Only)

If Pro Tools is selected in the Export To pop-up menu, you can choose to Export to the Pro Tools Regions List (Export to Pro Tools Bin), one or more mono tracks (Export to Pro Tools Mono Track), or to a stereo track (Export to Pro Tools Stereo Track).

If Pro Tools is not selected in the Export To pop-up menu, the Export Button Action preferences are grayed out.

Export MIDI Files As Multitrack

Enable the Export MIDI files as multitrack option to export MIDI files with each MIDI note number as its own track. This is useful, if you want to separate your drum sequence out on different tracks; for example, if you want the kick, snare, and ride on different MIDI tracks. If you prefer to have your MIDI drum programming all in one MIDI track, disable this option.

DrumCore also exports information about time signature and tempo. When importing DrumCore MIDI files into another application, different applications handle MIDI file import differently. For example, Logic will import the time signature and

tempo as a separate MIDI track, Digital Performer will import the time signature and tempo to the conductor track. Consult the manufacturer's documentation for your DAW for more information.



Exporting MIDI files to a folder, or dragging and dropping the exported MIDI file onto MIDI tracks in your DAW (as supported by your DAW) is the most efficient way to import MIDI into your project or arrangement.



Some applications are very specific as to where you can drop the file to create a track. When using drag and drop to import a DrumCore multitrack MIDI file into Logic or Digital Performer, you need to make sure there are enough MIDI tracks for each MIDI track from DrumCore, plus one extra track for the tempo and meter information. When using drag and drop to import a DrumCore multitrack MIDI file into Sonar, drop to empty space in the Arrange window (not onto an existing track) to automatically create new MIDI tracks. With ACID, be sure to not drop the MIDI file on the upper timeline as this creates a blank MIDI track with no data.

Audio Output Settings

ASIO or DirectSound

(Windows Only)

Select the desired ASIO or DirectSound device from the Device pop-up menu.



DrumCore always tries to set the selected ASIO device to match its internal sampling rate of 48 kHz.

CoreAudio

(Macintosh Only)

DrumCore will playback through CoreAudio by default. The default audio device can be configured using either the Apple Audio MIDI Setup or in the Sound Control Panel.

ReWire

Enable the ReWire (when available) option to have DrumCore playback through and receive MIDI from a compatible ReWire-host application when it is running (e.g., Pro Tools).

If the ReWire (when available) option is enabled, you can enable the ReWire Transport Sync option to start and stop playback in DrumCore from the transport of the ReWire-host application. You can also enable the Reset ReWire host to zero on play option to ensure that the ReWire-host application plays back from the beginning when the DrumCore Transport is used to initiate playback.



If you plan to use DrumCore as the input for a Voice track in Digital Performer, the Reset ReWire host to zero option must be disabled. If you only use DrumCore as the input for an Aux track in Digital Performer, the Reset ReWire host to zero option may be enabled.

Playback Options

Auto Play on Launch

If you want DrumCore to playback on launch, enable the Auto play on launch option. This option is disabled by default.

Autoplay on New Search

To have DrumCore always playback the first item returned in a search, enable the Autoplay on new search option.

Stop Playback on Export

To have DrumCore stop playback when you export a file, enable the Stop playback on export option.

DrumKit Options

DrumCore plays back its DrumKit samples from RAM. Consequently it needs to load the selected DrumKit samples into RAM for playback.

Preload DrumKit on Startup or Select

To have DrumCore load the currently selected DrumKit samples into RAM on launch or when a new DrumKit is selected, enable the Preload DrumKit on startup or select option.

If you're using DrumCore as a MIDI Drum module for a sequencer, preloading eliminates the delay encountered when loading each sample the first time a particular note is played. This mode is common to hardware samplers in that all samples are loaded when a program (or patch) is selected. This takes longer, but then lets you immediately trigger sounds once the program is loaded as opposed to waiting for a pads sounds to load as they are triggered.



DrumCore indicates that a DrumKit is loading into RAM by a progress bar under the DrumKit Indicator in the main DrumCore window. Once the DrumKit is loaded, it displays "Fully Loaded."



It is recommended that you do not play DrumCore's MIDI DrumKit while a DrumKit is loading.

Keep DrumKits in Memory Once Loaded

To keep DrumKit samples loaded in RAM, even when switching DrumKits, enable the Keep DrumKits in memory once loaded option.



When the Keep DrumKits Loaded in Memory Once Loaded option is enabled, every DrumKit selected during the course of a single DrumCore session remains loaded in RAM. Consequently, this option requires the most memory and fastest hard drive response time. Some systems may encounter performance problems with this option enabled. If you have a slower machine or not enough RAM available you should not use this option, but rather use only the Preload DrumKit on Startup or Select option, or just use DrumCore's default option of only loading samples only when a pad is triggered.

Ask to Save Changes on User DrumKits

To be prompted to save your changes when editing a DrumKit, enable the Ask to save changes on User DrumKits option.

Resampling Options

(Windows Only)

Fast Loading (for Preview Resampling)

For the quickest resampling response on playback of audio loops and fills, and MIDI DrumKits with ASIO and ReWire, enable the Fast Loading (for preview resampling) option.

Best Quality

For the best quality sample rate conversion on export, enable the Best Quality (for export resampling) option. When this option is enabled, export may be a little slower, but provide high quality sample rate conversion. Disabling this option results in faster exports (less delay when dragging and dropping), but results in slightly lower audio quality.

MIDI In

The MIDI In pop-up menu lets you specify any available MIDI port or device in your MIDI setup for controlling DrumCore's DrumKits. For example, if you have a MIDI controller, like an M-Audio Trigger Finger, you can use it to play DrumCore's DrumKits as a stand-alone drum module.

MIDI Out

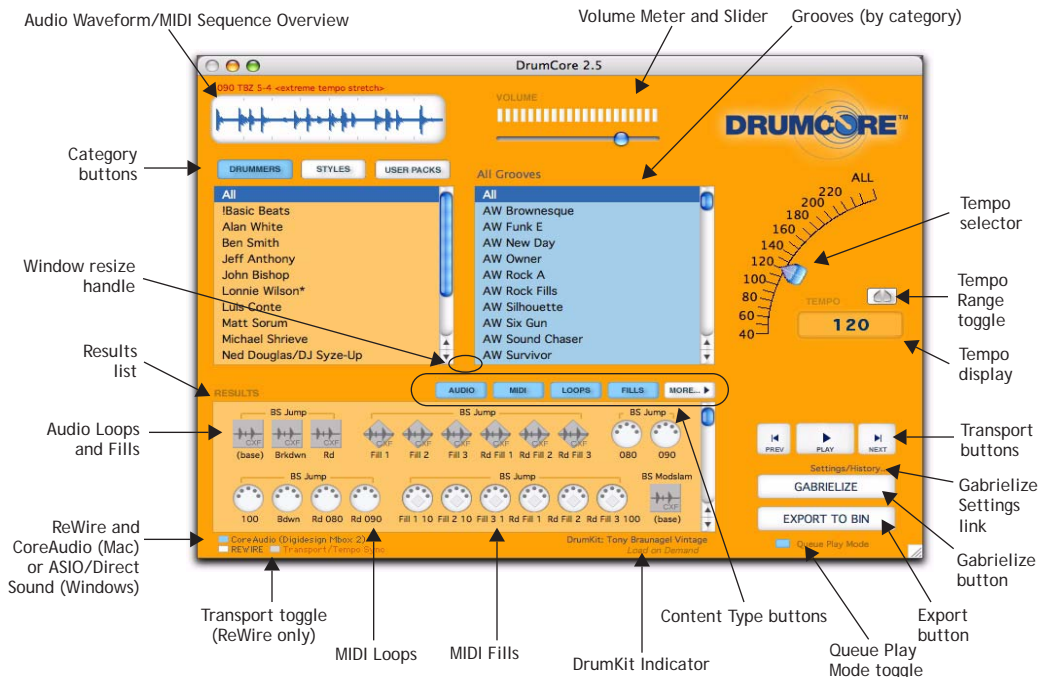
The MIDI Out pop-up menu lets you specify the DrumCore DrumKit module (listed as DrumCore-App in the pop-up menu) or another available MIDI port or device in your MIDI setup. The DrumCore-App is selected by default so that DrumCore will playback MIDI files using its own DrumKit playback sampler. However, if you have another MIDI device in your studio you would like DrumCore to use for MIDI playback, select the desired MIDI port or device from the MIDI Out pop-up menu. For example, if you really want to hear DrumCore's MIDI sequences play back using your vintage Simmons SDS9, you can choose to do so with this preference.

Chapter 3: Using DrumCore

You can use DrumCore as a stand-alone application to search DrumCore's extensive database of audio and MIDI grooves, and playback the groove of your choice using ASIO or DirectSound on Windows, or Apple's CoreAudio on Macintosh (see "Configuring Audio MIDI Setup" on page 8). Simply launch DrumCore and DrumCore will playback the first groove in the first category of its rhythm database.

DrumCore Interface

DrumCore provides immediate access to the most commonly used search controls, a browser-like interface to the database, playback and volume controls, and the Gabrielize and Export buttons.



DrumCore User Interface

Audio Waveform/MIDI Sequence Overview

The Audio Waveform/MIDI Sequence Overview displays an overview of the currently selected audio or MIDI file for visual reference only.

Volume Meter and Slider

Use the Volume slider to attenuate DrumCore's main output volume. The Volume meter provide a VU display of DrumCore's main output.

Category Buttons and List

Use the Category buttons to select the search category (Drummers, Styles, or User Packs). Select the desired Drummer, Style, or User Pack from the Category List. You can create your own Drummer, Style, and User Packs categories as well by editing the metadata for current audio and MIDI files or when you import files (see "Editing Metadata" on page 33).

Grooves List

Select the desired groove from the Grooves list. Grooves are typically grouped as a collection of beats and fills that work together (for example, in different parts of a song arrangement).

Tempo Selector

Use the Tempo selector to find grooves at a specific tempo, or within a tempo range. When you select a new tempo, only audio files recorded at the selected tempo, or that can be played back at the selected tempo, appear in the Results list. There may be subtle differences in the same groove at different tempos since drummers tend to play differently at different tempos.

Tempo Range Toggle

Enable the Tempo Range toggle to search for grooves within a range of tempos.

Tempo Display

The Tempo Display displays the currently defined tempo (as indicated by the Tempo Selector). You can also click the Tempo Display to type the desired tempo or tempo range (to a fine resolution of up to three decimal places).

Window Resize Handle

Click and drag the Window Resize handle to adjust the size of the Category, Grooves, and Results lists.

Results List

The Results list displays the results of a search. All search criteria work together, so if you apply too many search criteria (including extreme tempos), your search may return no results.

Content Type Buttons

Use the Content Type buttons to search for Audio or MIDI files, and Loops or Fills. The More button reveals an Advanced Search Criteria pane that provides even more search criteria (see "Advanced Search Criteria" on page 22).

Transport Buttons

Use the Transport buttons to start and stop playback, or to play the next or previous item in the Results list.

Gabrielize Button and Settings/History Link

Click the Gabrielize button to "Gabrielize," the selected file. Click the Settings/History link to open the Gabrielizer window.

Export Button

Click the Export button to export the selected file to a folder or to your favorite DAW.

ASIO/DirectSound or CoreAudio, ReWire, and Transport/Tempo Sync Toggles

On Windows, click the ASIO/DirectSound (DrumCore will display the name of the audio device currently selected in the DrumCore Preferences dialog) or ReWire toggles to have DrumCore play back through ASIO/DirectSound or ReWire.

On Macintosh, click the CoreAudio (DrumCore will display the name of the audio device currently selected in AMS) or ReWire toggles to have DrumCore play back through CoreAudio or ReWire.

If ReWire is enabled, click the Transport/Tempo Sync toggle to link the DrumCore transport with the transport of the ReWire host. With a compatible ReWire host (such as Pro Tools), DrumCore also synchronizes to the Bar|Beat location of the host's time line.



For more information on using DrumCore with ReWire host applications, see "Chapter 5: Using DrumCore with ReWire."

DrumKit Indicator

The DrumKit Indicator displays the currently selected DrumKit. Click the DrumKit Indicator to open the DrumKit Editor. For more information on the DrumKits Editor, see "Chapter 4: The DrumKit Editor."

Queue Play Mode

The Queue Play Mode toggle enables (or disables) Queue Play Mode. When Queue Play Mode is enabled, you can select a second file (Audio or MIDI Loop or Fill) to start playback as soon as the currently selected file finishes playing. When Queue Play Mode is disabled, any newly selected file begins playing immediately, cutting off playback of the previously selected file.

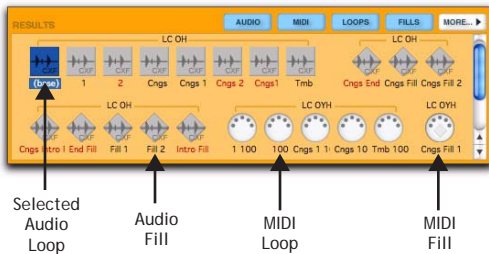
A Note about DrumCore's Content

DrumCore's extensive database of drum loops were recorded with world-class drummers in state of the art studios. Most grooves include variations and fills in addition to the basic beats. Every groove was recorded at multiple tempos so that you get the groove you want at the tempo you want, with all of the artist's nuance at each tempo and without artifacts that can be introduced by common time-compression and expansion algorithms. All audio files are 24-bit, 48 kHz stereo in DrumCore's proprietary file format (.czf).

Most grooves in DrumCore's database also have a MIDI version, which provides an even greater degree of flexibility in conjunction with DrumCore's DrumKits. All MIDI files are stored in DrumCore's proprietary file format (.cmf).

DrumCore's content is organized according to the most relevant metadata. You can search and sort DrumCore's content by Drummer, by Style, or by User Pack, and by tempo and groove. You can also search and sort grooves for the audio or MIDI version, as well as for loops and fills.

DrumCore’s grooves are divided into audio loops and fills, and MIDI loops and fills. Audio loops are displayed with a square icon, audio fills are displayed with a diamond icon. MIDI loops are displayed with a circle icon, and MIDI fills have a diamond within the circle icon.



Audio and MIDI Loops and Fills

In addition to being able to use DrumCore’s catalog of grooves at the tempos they were originally recorded, most of DrumCore’s grooves can be exported as REX, AIFF, SD II, or WAVE files at virtually any tempo you want.

Factory DrumCore grooves that can be exported as REX files are indicated by “CFX” on the groove icon. Any custom REX files that you have imported into DrumCore are indicated by “REX” on the groove icon. Custom ACID files that you have imported into DrumCore are indicated by “ACID” on the groove icon. Any other file formats (AIFF, SD II, or WAVE) are not uniquely identified.



Content from earlier versions of DrumCore (including your own custom loops or version 1.x DrummerPacks) do not support stretchy tempos and cannot be exported as REX files. These appear in the Results list without the “CFX” indication. If you select one of these grooves, it will only play back and can only be exported at its original tempo. Consequently, playback will be out of sync with a ReWire host application if the host’s tempo differs from the selected groove.

You can also search individual hits from DrumCore’s sampled DrumKits. Hits are displayed with an octagonal icon. To search for hits, use DrumCore’s advanced search criteria, Single Hit (see “Advanced Search Criteria” on page 22).



Selected Audio Hit

Audio Hits

Searching the Database

The first thing you will want to do with DrumCore is search the database to find the right groove. You can choose to search by Category (Drummers, Styles, or User Packs) and Tempo, and you can choose to search for audio or MIDI loops and fills. You can even import your own audio or MIDI files and provide your own metadata for quick search and retrieval.

To search DrumCore:

- 1 Click the desired Category button: Drummers, Styles, or User Packs.
- 2 Based on the selected Category, choose the desired Drummer, Style, or User Pack from the Category list. For example, Drummers > Sly Dunbar.



- 3 Based on the selected Drummer, Style, or User Pack, select the desired groove from the Grooves list. For example, Styles > Alternative > JA Psycho.



4 For audio loops and fills, use the Tempo selector to dial-in grooves recorded at the desired tempo, or within a range of tempos. (All of DrumCore's audio loops and fills were recorded at multiple tempos to retain the individual drummer's artistic nuance at different tempos.)

For CFX files and MIDI grooves, use the Tempo selector to control the playback tempo of the selected CFX file or MIDI sequence.



Tempo selector



For more information about the Tempo selector, see "Tempo Selector" on page 20.

5 Select the desired Content Type buttons to find Audio or MIDI (or both) Loops or Fills (or both). For example, if you only want to find audio loops, select the Audio and Loops buttons, and deselect the MIDI and Fills buttons.



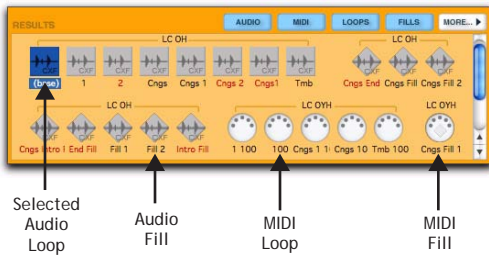
Content Type buttons, Audio and Loops selected




If neither Audio or MIDI is selected, or if Audio is selected and neither Loops or Fills are selected, any search will generate no results.


6 Click the More button for advanced search criteria (see “Advanced Search Criteria” on page 22).

7 Select the desired Audio Loop, Hit, or Fill, or MIDI sequence from the Results list. Audio Loops appear as square icon with a waveform, Audio Fills appear as a diamond icon with a waveform, and MIDI sequences appear as five-pin DIN circle icons (like a standard MIDI cable connector).



Search Results: Audio and MIDI Loops and Fills=

 Use the Up and Down or Left and Right Arrow keys to select the previous or next item in the Category, Groove, or Results lists.

 Use the Tab key to navigate between the Category, Groove, or Results lists.

As a visual reference, the waveform for the selected audio file, or a piano roll-style representation of the selected MIDI file, will be displayed in the Audio Waveform/MIDI Sequence Overview.




Audio Waveform Overview



MIDI Sequence Overview

By default, Audio and MIDI Loops and Fills play back when selected in the Results list or when a new search returns a result. You can start and stop playback of any selected item using the Transport controls (see “Playback Controls” on page 22).

 Press the Spacebar to start and stop playback.

Once you have found the groove you want, you can simply play along with it, modify it using the Gabrielizer, or export it for use in another audio or MIDI application.

Tempo Selector

Use the Tempo selector to find an audio loop or fill at a specific tempo, or within a specified tempo range. For CFX and MIDI files, the Tempo selector determines the playback tempo of the CFX file or MIDI sequence.

The Results list will display all items in the database that match the search criteria for the specified tempo or tempo range. DrumCore always lists audio files with the closest matching tempo (rounding up). CFX audio (which can be exported as REX or ACID files) plays back at the selected tempo. If a tempo range is selected, CFX audio plays back at the original tempo if it falls within the specified range.


Non-CFX audio (which cannot be exported as REX or ACID files) plays back at its originally recorded tempo. These files (AIF, WAV, or SD II) only appear in the Results list if there is an exact tempo match.

MIDI sequences play back at the selected tempo. If a tempo range is selected, MIDI plays back at the original tempo if it falls within the specified range.

To specify a tempo:

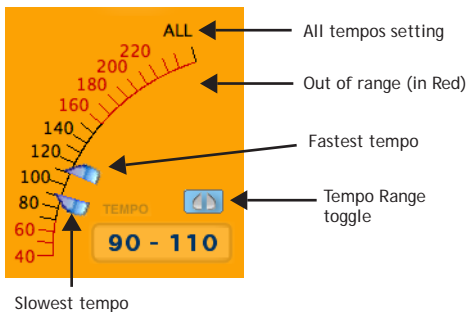
- Click and move the Tempo selector.
- or -

Click the Tempo display and type the desired tempo to as many as three decimal places (e.g., 133.333).

 *Alt+“+/-” on Windows, or Command+“+/-” on Macintosh, increments or decrements the tempo by single digits.*

To specify a tempo range:

- 1 Enable the Tempo Range toggle. The Tempo selector will split.



Tempo selector, Tempo Range toggle enabled

- 2 Set the slowest tempo and the fastest tempo of the desired tempo range.
- or -

Click the Tempo display and type the desired tempo range (e.g., “112-118”).

All Tempos Setting

The All tempos setting displays all items in the database that match the search criteria at all available tempos. When the All tempos setting is selected, audio files and MIDI sequences play back at the originally recorded tempo. For example, if the selected audio file or MIDI sequence was originally recorded at 120 bpm, it will playback at 120 bpm.


Out of Range Tempos

DrumCore supports exporting REX and ACID files, which can be exported at any tempo from 40 to 240 bpm. To achieve the highest possible sound quality, DrumCore will always use the nearest original tempo for the REX or ACID file to be exported. However, some tempos may be far from any available original tempo and consequently might not have the best possible sound quality at the selected tempo. For example, you may want a specific type of groove at 180 bpm, but based on the selected search criteria, the closest tempo match for that groove may be 120 bpm. In that case, if you export the groove as a REX file at 180 bpm, it may not provide as good a sound quality as if you were to export the file at 123 bpm for example. Tempos that are out of range are indicated in red on the tempo selector, and in the file name above the Waveform display and in the Results list.

For grooves in DrumCore’s database that are not stored as CFX or ACID files (such as version 1.x DrummerPacks), only those files that exactly match the selected tempo appear in the Results list.

Advanced Search Criteria

In addition to the essential search criteria provided in the main DrumCore window, you can click the More button to reveal an additional pane of advanced search criteria.



Advanced Search pane

The Advanced Search pane lets you search by Feel (e.g., Shuffle or Triplet), Single Hit (e.g., Kick or Snare), File Type (e.g., AIF), File Name, Comment, or Meter (e.g., 4/4 or 6/8). These search categories are part of the metadata associated with every file in DrumCore’s database. For more information on creating and editing metadata for audio and MIDI files in DrumCore, see “Editing Metadata” on page 33.

To search by advanced criteria:

- 1 Click the More button in the DrumCore window to reveal the Advanced Search Criteria pane.
- 2 Select the desired criteria from one of the pop-up menus, or type a keyword in the File Name or Comment fields.

All matching results are displayed in the Results list.

Playing Back Audio and MIDI

DrumCore plays back audio files using ASIO or DirectSound on Windows, or CoreAudio on Macintosh, or ReWire. DrumCore can play back MIDI files using its own sampled DrumKits or other MIDI devices. For more information on using DrumCore’s sampled DrumKits, see “Chapter 4: The DrumKit Editor.”

Playback Controls

DrumCore provides the necessary playback controls for auditioning your search results. By default, the first item in the Results list plays back automatically. The Autoplay on new search feature can be disabled (or enabled) in the DrumCore Preferences dialog (see “DrumCore Preferences” on page 8).



Previous, Play, and Next buttons

To start or stop playback:

- 1 Search for the desired audio or MIDI file (see “Searching the Database” on page 19).
- 2 Select the desired item in the Results list.
- 3 Click the Play button (or press the spacebar).

To audition the preceding item in the Results list:

- Click the Previous button (or press the Left or Down arrow).

To audition the next item in the Results list:

- Click the Next button (or press the Right or Up arrow).

Volume Controls

DrumCore provides volume controls to make sure you get the right balance when playing back audio loops and the MIDI DrumKit sample player, as well as control over the main output.

Volume

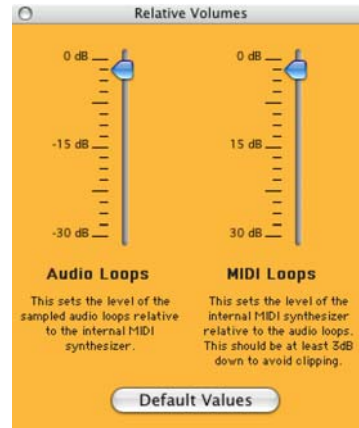
Use the Volume slider in the DrumCore window to attenuate DrumCore's main outputs.



Volume slider and VU meter

Relative Volumes

Use the Relative Volumes window (Windows > Set Relative Volumes) to attenuate the playback volumes of audio loops and fills, and the MIDI DrumKit sample player. This way you can make sure that the MIDI DrumKit sample player plays back at the same volume as DrumCore's audio loops. The default attenuation is -3 dB for both.



Relative Volumes window



It may be possible to overdrive the output of DrumCore's MIDI DrumKit when using custom imported samples. Attenuate the MIDI Loops Relative Volume fader to avoid distortion (clipping).

ASIO/DirectSound/CoreAudio/ReWire Toggles

DrumCore lets you toggle between ASIO/DirectSound in Windows, or CoreAudio on Macintosh, and ReWire. You can also toggle DrumCore's transport and tempo synchronization with a ReWire host application (such as Pro Tools).



ASIO/DirectSound, ReWire, and Transport/Tempo Sync toggles on Windows



CoreAudio, ReWire, and Transport/Tempo Sync toggles on Macintosh

To use DrumCore with ASIO or DirectSound (Windows Only):

- 1 Verify that the ASIO or DirectSound driver for your built-in or third-party audio interface is installed and configured according to the manufacturer's instructions.
- 2 Launch DrumCore.
- 3 If it is not already enabled, enable the ASIO/DirectSound toggle the lower-left hand corner of the DrumCore window.

- or -

In the DrumCore Preferences dialog (Edit > Preferences), select the ASIO or DirectSound driver for your audio interface from the Audio Output Device pop-up menu. Click OK to save your preferences and close the dialog.

To use DrumCore with CoreAudio (Macintosh Only):

- 1 Verify that the Apple Audio MIDI Setup application is correctly configured for your Mac's built-in audio or third-party CoreAudio-compatible audio interface.
- 2 Launch DrumCore.
- 3 If it is not already enabled, enable the CoreAudio toggle the lower-left hand corner of the DrumCore window.

To use DrumCore with ReWire:

- 1 Verify that your ReWire-host application is correctly installed and running (e.g., Pro Tools).
- 2 Launch your ReWire-compatible host application.

Some applications, such as Pro Tools, will launch DrumCore as a ReWire client automatically when you select DrumCore as a plug-in insert in the application.

Other applications, such as Digital Performer, require that you launch DrumCore separately.

- 3 If it is not already enabled, enable the ReWire toggle the lower-left hand corner of the DrumCore window.



Enable the ReWire (when available) option in the Preferences dialog if you regularly use DrumCore with ReWire.

To start and stop DrumCore's transport from a ReWire host application:

- If it is not already enabled, enable the Transport/Tempo Sync toggle the lower-left hand corner of the DrumCore window.



For more information on using DrumCore with a ReWire-compatible host application (e.g., Pro Tools, Digital Performer, or Logic), see "Chapter 5: Using DrumCore with ReWire."



The first time DrumCore plays back a CFX file with ReWire Transport/Tempo Sync enabled, there may be a slight delay before playback begins so that the file can load into memory. When playback starts, it will be synchronized to the current tempo and bar/beat location in your DAW.

Gabrielize

DrumCore's Gabrielizer provide a powerful tool for creating new rhythms from existing audio and MIDI grooves. One click of the Gabrielize button and DrumCore intelligently shuffles beats to come up with completely new and exciting rhythms. For more control, use the Gabrielizer window to let you quickly and easily create anything from subtle variations of the original rhythm to completely scrambling it beyond recognition.

To "Gabrielize" a groove:

- 1 Conduct a search according to your desired criteria.
- 2 Select an audio or MIDI file from the Results list.

- 3 Click the Gabrielize button (press Ctrl+L on Windows or Command+L on Macintosh).



Gabrielize button with Settings/History link

Based on the Gabrielize settings, the rhythmic pattern of the selected audio or MIDI file will be reshuffled, or "Gabrielized."

Gabrielizer Window

For more control over the Gabrielize function, open the Gabrielizer window.



Gabrielizer window

To open the Gabrielizer window:

- Choose Window > Show Gabrielizer Window (press Ctrl+Shift+G on Windows or Command+Option+G on Macintosh).

- or -

Click the Settings/History link above the Gabrielize button in the DrumCore window.

Settings

The Gabrielizer window provides controls over the application of the Gabrielizer's internal rules for intelligent beat shuffling. You can apply any one of thirteen rules specifically, or choose to apply any one to eight rules randomly.

To adjust the Gabrielizer Settings:

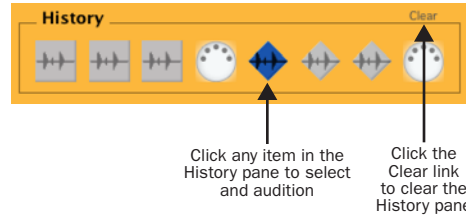
- 1 Open the Gabrielizer window (Window > Show Gabrielizer Window).
- 2 Select the Apply Specific Rule Each Time option or the Apply Random Rules Each Time option.
- 3 Adjust the corresponding slider to apply any one of thirteen specific rules, or to randomly apply any one to eight rules.

History

The Gabrielizer window provides a history of up to last eight Gabrielized grooves. As soon as you Gabrielize a ninth time, the first item in the history is overwritten. The Gabrielizer History will continue to cycle through the eight slots each time you Gabrielize.

To select one of up to eight of the last Gabrielized grooves:

- 1 Open the Gabrielizer window (Window > Show Gabrielizer Window).
- 2 In the History pane, click the desired item.



Gabrielizer History pane

Clearing a Gabrielized File

If you Gabrielize a file and decide the result is not really what you want, you can clear the Gabrielized file and return to the original file. However, note that the Gabrielized version will remain in the Gabrielizer's History.

To clear a Gabrielized file:

- Choose Window > Clear Gabrielized File.

Saving and Importing or Exporting

In the Gabrielizer window you can save the current Gabrielized groove and import into DrumCore's database. you can also export the current Gabrielized groove for use in third-party audio or MIDI application.



Gabrielized files cannot be imported or exported as REX files.

To save and import a Gabrielized groove:

1 Choose Window > Save Gabrielized File (or press Ctrl+S on Windows or Command+S on Macintosh). The Save Gabrielized File dialog opens.

- or -

Open the Gabrielizer window (Window > Show Gabrielizer Window) and do the following:

- If necessary, select the desired Gabrielized groove in the History pane.
- Click the Save/Import button. The Save Gabrielized File dialog opens.



Save Gabrielized File dialog

2 Enter or edit the metadata for the Gabrielized file and click Save. (For more information on creating and editing metadata for audio and MIDI files in DrumCore, see “Editing Metadata” on page 33.)

The Gabrielized file will be saved and imported into the DrumCore database. You will be able to search for the Gabrielized file based on the metadata save with the file.

To export a Gabrielized groove:

- Choose Window > Export Gabrielized File.
- or -

Open the Gabrielizer window (Window > Show Gabrielizer Window) and do the following:

- If necessary, select the desired Gabrielized groove in the History pane.
- Click the Export button.

The Gabrielized file is exported to the default Export location as specified in the DrumCore Preferences (see “DrumCore Preferences” on page 8).

Exporting Audio and MIDI

Once you have found the groove you want, or created a new one using the Gabrielizer, you will probably want to export it for use in your DAW. DrumCore’s export behavior depends on the settings in DrumCore’s preference (see “DrumCore Preferences” on page 8). The Export button updates to show whether the file will be exported to a folder or to another application. For example, if the DrumCore preferences are set to export to a folder, the Export button will display “EXPORT TO FOLDER.” If the DrumCore preferences are set to export to Logic, the Export button will display “EXPORT TO LOGIC.”

Files are exported in the file format, sample rate, and bit-depth specified in the DrumCore Preferences.

Exported files include the tempo at beginning of file name. For example, if you export a file at 92 bpm, the exported file is named "092<file-name>." If the tempo is not already part of the file name, DrumCore adds it automatically. However, REX and ACID files will always have their own native tempo, which may not correspond to the selected tempo in DrumCore. Consequently, DrumCore does not prepend the tempo to REX and ACID file names.

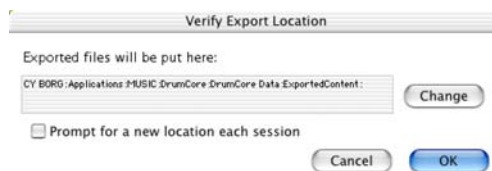
To export an audio or MIDI file from DrumCore:

- 1 Set the DrumCore export preferences as desired (see "DrumCore Preferences" on page 8).
- 2 Search for and select the desired file.
- 3 Click the Export button (or press Ctrl+E on Windows or Command+E on Macintosh).

The selected file is exported to the folder designated in the DrumCore Preferences. By default, this will be the ExportedContent folder in the DrumCore Data folder. In addition to changing the directory location for exported files in the DrumCore using the Preferences dialog, you can use the Set Export Location from the Export menu.

To change the export location:

- 1 Choose Export > Set Export Location. The Verify Export Location dialog opens.



Verify Export Location dialog

- 2 Click the Change button.
- 3 In the resulting Open dialog, create a new folder, or navigate to an existing folder, and click Choose.
- 4 In the Verify Export Location dialog, click OK.



When exporting REX or ACID files from DrumCore to Pro Tools (Pro Tools 7.0 or later only), be sure to export them to the Pro Tools Regions List or drag and drop to a Tick-based track.

Export by Drag and Drop

DrumCore also supports drag and drop for export of audio and MIDI files. You can easily drag and drop a file from the Results list to the desktop or to an application that supports drag and drop for import, such as Sonar or Digital Performer. When dragging and dropping to your DAW, DrumCore will first export the file to the default export location (as specified in the Preferences dialog).



Figure 1. Drag and drop from DrumCore to Digital Performer

Importing Audio and MIDI

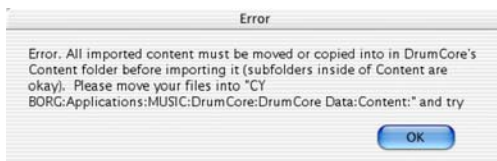
In addition to using the content that comes with DrumCore, you can also import your own content. So if you already have your own library of samples and loops, you can import them into DrumCore and take advantage of DrumCore's search engine and ReWire integration.

DrumCore lets you import AIF, WAV, SD II (16- and 24-bit), and REX 2 and ACID files. The internal tempo of imported REX or ACID files is used within DrumCore, and is maintained on export. User imported REX and ACID files are indicated in the Results list by "REX" or "ACID" on the groove icon.

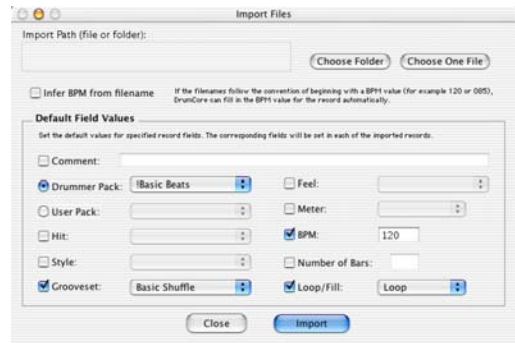
To import an audio or MIDI file into DrumCore:

- 1 Move or copy the audio or MIDI files (or a folder containing multiple audio or MIDI files) that you want to import into DrumCore's Content folder.

If you try to import files that are *not* in DrumCore's Content folder, you will encounter an error message informing you that you need to copy the files to DrumCore's Content folder.



- 2 Choose File > Import Files (or press Ctrl+I on Windows or Command+I on Macintosh). The Import Files dialog opens.



Import Files dialog

- 3 If the files you want to import follow the naming convention of starting with a bpm value (e.g., 120filename or 092filename), DrumCore can infer the bpm value for each file.

- 4 Click the Choose Folder button to select a folder containing all the files to be imported.

- or -

Click the Choose One File button to select a single file for import.

- 5 In the resulting Open dialog, navigate to and select the folder or file you want to import and click Choose.

- 6 Enable the corresponding checkbox for each field you want to edit.

- 7 Enter or select the relevant metadata to be associated with the imported files.

8 If a particular item is not available within one of the pop-up menus, you can select New from the pop-up menu to add the required information. For example, if you have a loop that is one bar of 13/16:

- Select New from the Meter pop-up menu.
- Type “13/16” in the New Value dialog.
- Click OK.



New Value dialog

9 Once you have entered all the necessary information, click the Import button.

10 The Importing Files Progress window will appear and displays whether or not the import was successful. Once the import has completed successfully, click OK.



New Value dialog

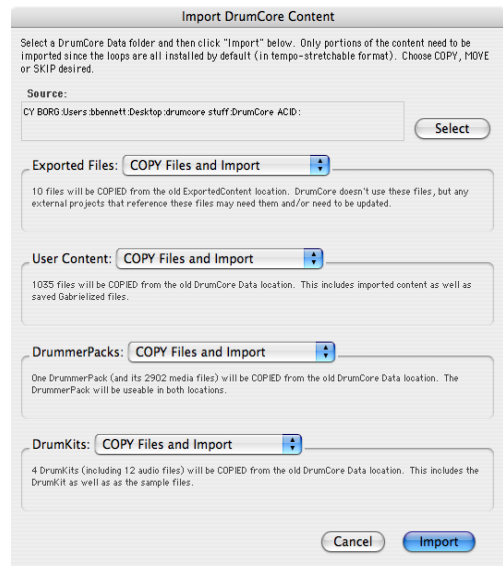
Each imported file is added to DrumCore’s database, and you will be able to search for any imported file based on DrumCore’s standard criteria and the file’s associated metadata.

Importing DrumCore Databases

Use the Import DrumCore Database command to import content from other DrumCore databases. For example, if you are upgrading your version of DrumCore from an earlier version of DrumCore, you may want to import some of your old content (such as custom content or version 1.x DrummerPacks).

To import DrumCore content:

1 Choose File > Import DrumCore Database. The Import DrumCore Content dialog opens.



Import DrumCore Content dialog

2 Click the Select button to navigate to the directory containing the desired DrumCore content.

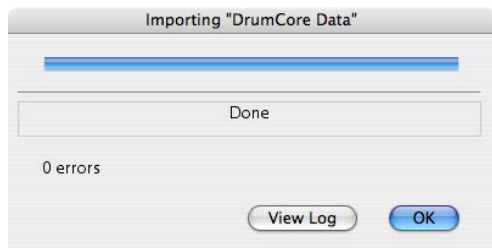
3 Select the desired directory and click Choose.

4 In the Import DrumCore Content dialog, select one of the following from the pop-up menu for Exported Files, User Content, DrummerPacks, and DrumKits as necessary:

- COPY Files and Import
- MOVE Files and Import
- IGNORE (Do Not Import)

5 Click Import.

The Importing “DrumCore Data” dialog report the progress of the import.



Importing “DrumCore Data” dialog

6 When the import is done, click OK.

Deleting Items

DrumCore lets you permanently delete database files from the DrumCore database. This ensures that the file will not show up in any search. However, deleting an item only purges it from the database; it does not delete any audio or MIDI files from disk.

To delete any selected item from the DrumCore database:

- 1 Search for the item you want to delete from the DrumCore database.
- 2 Select the item in the Results list.



In the Results list, you can Shift-click to select multiple contiguous items, or Ctrl-click on Windows or Command-click on Macintosh to select multiple discontinuous items.

- 3 Choose Edit > Delete Selected Items.
- 4 In the resulting Delete Records dialog, click Yes.



Delete Records dialog

The selected item will be deleted from the DrumCore database.

Editing Metadata

DrumCore's database and search engine rely on metadata associated with each file in the database to help you find the desired file quickly and easily. You may want to edit the metadata for certain files to help you streamline your workflow and refine your searches. You can create new metadata for files you import (see "Importing Audio and MIDI" on page 30), or you can add or edit metadata for files already in DrumCore's database.

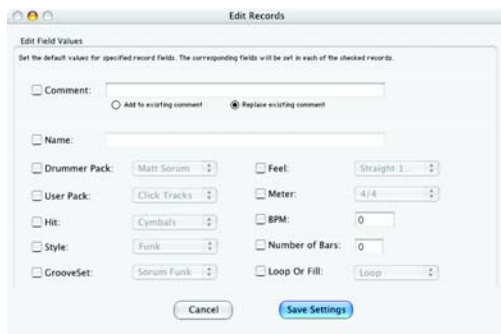
To edit metadata for a file:

1 Conduct a search and select the file you want to edit in the Results list.



In the Results list, you can Shift-click to select multiple contiguous items, or Ctrl-click on Windows or Command-click on Macintosh to select multiple discontinuous items.

2 Choose Edit > Edit Selected Item (press Ctrl+M on Windows or Command+M on Macintosh). The Edit Records dialog opens.



Edit Records dialog

3 Enable the corresponding checkbox for the each field you want to edit.

4 Enter or select the relevant metadata.

5 If a particular item is not available within one of the pop-up menus, you can select New from the pop-up menu to add the required information. For example, if you have a loop in a hard rock style and you want to categorize the feel as "heavy:"

- Select New from the Feel pop-up menu.
- Type "heavy" in the New Value dialog.
- Click OK.



New Value dialog

6 Once you have entered all the necessary information, click the Save Settings button.

7 You will be prompted to confirm your changes. Click Yes to save your changes and permanently alter the record, or click No to cancel.

Drummer Biographies

DrumCore provide biographical information on each of its drummers, and even includes short video clips of the artist. If you are unfamiliar with any of the drummers in DrumCore, you can read their bio.

To view DrumCore biographies:

1 Choose Windows > Show Video Window. The Bios window opens.



Bios window (Michael Shrieve)

2 Select the desired artist from the Artist pop-up menu.

You can view video of the selected artist using standard QuickTime video controls, read biographical information on the selected artist, and you can learn more about the selected artist by clicking the link to their personal Web site.

CHAPTER 4: THE DRUMKIT EDITOR

In addition to its extensive library of audio loops and fills by some of the world’s best drummers, DrumCore provides a MIDI drum module with multiple sampled kits of the same Drummers. DrumCore’s MIDI groove library plays these kits by default. In addition to using DrumCore’s “factory” DrumKits, you can edit them or even create your own custom kits.

DrumCore’s DrumKits were created by the original drummer’s strikes using the same or similar drums used in their audio loops. DrumKits have been optimized to work with various drummer’s MIDI grooves (included in their respective User Packs). Be sure to select the corresponding DrumKit to match a drummer’s MIDI grooves. You can also try switching kits for some interesting variations (such as playing Tony Braunagel’s Vintage kit with one of Sly Dunbar’s MIDI grooves).

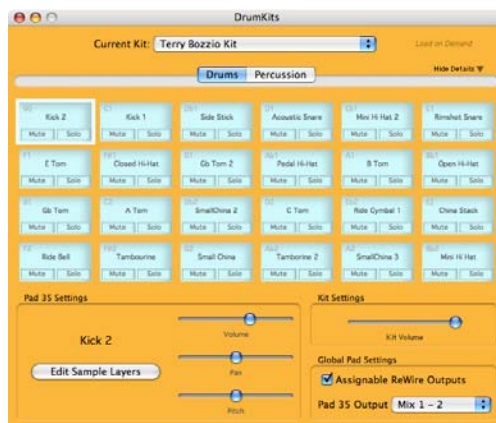
You can play DrumCore’s MIDI DrumKits using a ReWire-compatible MIDI sequencer. You can also play DrumCore’s MIDI Drum module with an external MIDI controller either routed through a ReWire mixer application or stand-alone. When using ReWire, you can also assign DrumCore’s DrumKits to multiple output assignments for independent mixing and audio processing in your ReWire-mixer application.

To play DrumCore’s MIDI Drum module with an external MIDI controller, simply select the corresponding MIDI port or device in the MIDI In pop-up menu in the DrumCore Preferences window (see “MIDI In” on page 13).

DrumKits

To open the DrumKits window:

- Choose Windows > DrumKit Editor. The DrumKits window opens.



DrumKit Editor window (Drums tab)

To select a DrumKit:

- Select the desired DrumKit from the DrumKits menu.
- or -

Open the DrumKits window and select the desired DrumKit from the Current Kit pop-up menu.



Current Kit pop-up menu

DrumCore loads the samples for the selected DrumKit into RAM, so, depending on the speed of your CPU and your RAM, this can take several seconds. As soon as you switch DrumKits, DrumCore purges the previous kit from RAM and load the new one.

In the DrumCore Preferences, you can choose to have DrumCore preload the current DrumKit on start up or when selected, as well as keep it loaded in RAM when switching between kits (see “DrumCore Preferences” on page 8).

DrumCore indicates that a DrumKit is loading into RAM by a progress bar under the DrumKit Indicator in the main DrumCore window.



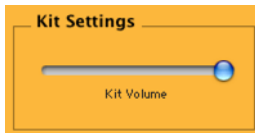
Loading DrumKit progress bar



It is recommended that you do not play DrumCore’s MIDI DrumKit while a DrumKit is loading.

Kit Settings

DrumCore’s DrumKits window provides a volume slider for attenuating the main output of the DrumKit.



Kit Settings, Kit Volume slider

Playing DrumCore DrumKits

You can play the DrumCore DrumKit in any one of three ways:

- DrumCore’s MIDI files will playback using the DrumCore DrumKit by default.
- Assign MIDI track outputs in your ReWire-compatible host application to play DrumCore’s DrumKit (see “Chapter 5: Using DrumCore with ReWire”).
- Play DrumCore’s MIDI DrumKits as a stand-alone MIDI module with an external MIDI controller. Simply assign the MIDI port or device for your controller in DrumCore’s Preferences (see “MIDI In” on page 13).



Audio does not play back until a DrumKit or pad is loaded. If your computer is fast enough and has enough RAM, enable the Preload DrumKit on Startup or Select preference (see “DrumKit Options” on page 12). This makes it easier to quickly audition MIDI as well as audio content.

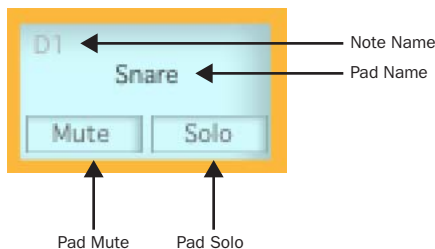
DrumKit Pads

The DrumKits window displays the “pad” assignments for the selected kit as Pad Settings and Kit Settings. There are two pages of pads: Drums (MIDI note numbers 35–58) and Percussion (MIDI note numbers 59–82). Click either the Drums or Percussion tabs to display the corresponding set of Pads.



DrumKits window (Percussion tab)


Each Pad represents a specific drum or sound in the kit. Each Pad displays the note name that triggers the Pad, the Pad name, and Mute and Solo buttons for the Pad.



DrumKit Pad

To select an individual Pad:

- Click a any Pad to select it.

 Use the Up, Down, Left, and Right Arrow keys to select the corresponding adjacent Pad.

To play an individual Pad:

- Play any Pad by clicking it.

- or -

Play the corresponding MIDI note on your MIDI controller.

- or -

If a Pad is selected, press Ctrl+Spacebar on Windows, or Control+Spacebar on Macintosh.

To mute or unmute an individual Pad:

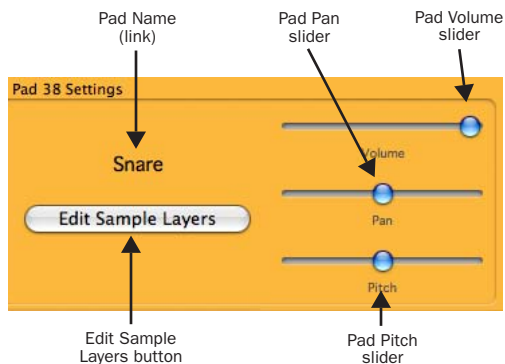
- Click the Pad’s Mute button.

To solo or unsolo an individual Pad:

- Click the Pad’s Solo button.

Pad Settings

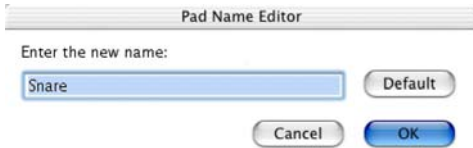
You can change the name, attenuate the volume, adjust the pan, change the pitch, or edit the sample layers for any selected Pad.



Pad Settings

To change the name of a Pad:

- 1 Select the desired Pad.
- 2 Click the Pad Name in the Pad Settings pane. the Pad Name Editor dialog opens.



Pad Name Editor dialog

- 3 Type the new Pad name and click OK.

To attenuate the volume of a Pad:

- 1 Select the desired Pad.
- 2 In the Pad Settings pane, adjust the Pad Volume slider to the desired level.

To adjust the panning of a Pad:

- 1 Select the desired Pad.
- 2 In the Pad Settings pane, adjust the Pad Pan slider to the desired level.

Panning to a stereo output pans between the left and right output channels. Panning to a mono output mixes between the left and right channels of stereo DrumCore samples.

To change the pitch of a Pad:

- 1 Select the desired Pad.
- 2 In the Pad Settings pane, adjust the Pad Pitch slider to the desired level.



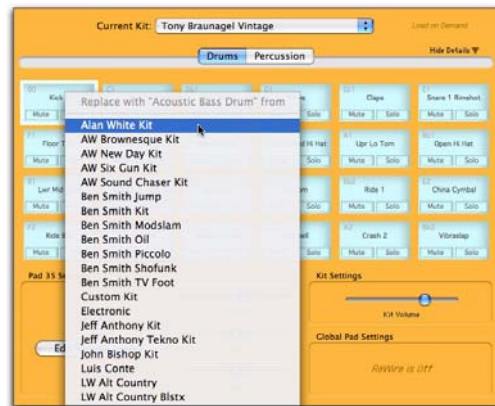
For Volume, Pan, and Pitch, you can click the name of the control to restore the default setting.

Pad Swapping

You can quickly and easily swap pads between DrumKits. For example, let's say you want to use Terry Bozzio's snare in one of Alan White's kits, simply right-click the snare pad in Alan White's kit and select Terry Bozzio's snare.

To swap a Pad from another DrumKit:

- 1 Select the DrumKit with which you want to start.
- 2 Right-click the Pad you want to swap out.
- 3 From the Right-click pop-up menu, select the DrumKit whose pad you want to use.



Right-click pop-up menu for Pad swapping

Pad Sample Layers

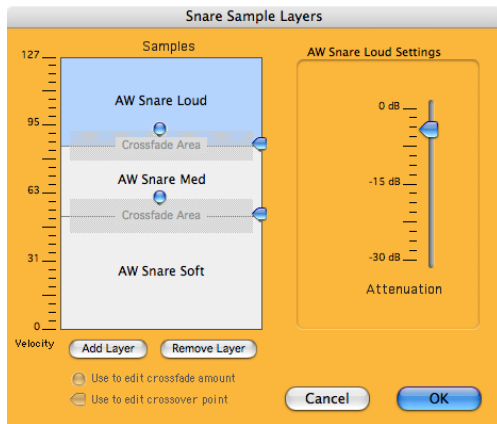
Every pad consists of one to ten sample layers (typically, only seven layers are used at most). Each sample layer is triggered by a specified range of MIDI velocities, and each can be cross-faded with the next layer. This allows for much more realistic and nuanced acoustic dynamics than simply increasing or decreasing the sample playback volume according to different MIDI velocities. For example, a snare drum played loudly has a very different distribution of energy across the acoustic spectrum than does a snare drum

that is played softly. DrumCore's "factory" DrumKits provide various sample layers for each Pad to provide the most acoustically viable MIDI playback possible.

In the Edit Sample Layers dialog, DrumCore provides a great deal of control over the configuration of sample layers for each Pad. Edits are not applied until you close the Edit Sample Layers dialog.

To edit the sample layers for a Pad:

- 1 Select the desired Pad.
- 2 Click the Edit Sample Layers button (or press Enter). The Edit Sample Layers dialog opens.



Edit Sample Layers dialog

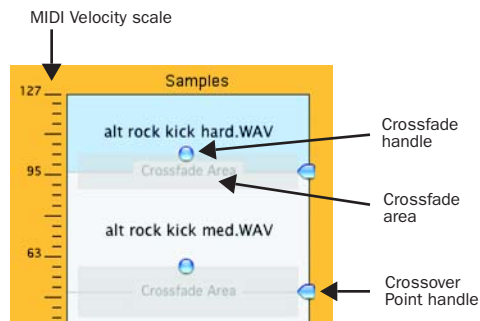
- 3 Click any Sample Layer to select it.
- 4 If desired, move the Attenuation slider to adjust the playback volume of the selected Sample Layer.

5 To audition a sample layer, simply click it.

- or -

To audition a sample layer or crossfade played at a particular velocity, click the Velocity scale to the left of a sample layer or crossfade.

6 If desired, click and drag the Crossfade Amount handle to adjust the length of the equal-power crossfade between any two adjacent Sample Layers. The area of the crossfade between the two Sample Layers will increase or decrease according to whether you move the Crossfade handle up or down.



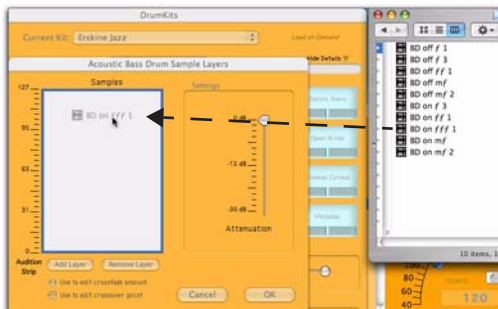
Sample Layers with crossfades

7 If desired, click and drag the Crossover Point handle to adjust the MIDI velocity range for triggering the Sample Layer.

8 If desired, click the Add Layer button to add new Sample Layer to the Pad. Navigate to and select the desired audio file (AIFF, SD II, or WAVE), and click Choose. The new Sample Layer will be added following the selected Sample Layer, or after the last (softest) Sample Layer if no Sample Layer is selected.

- or -

You can drag and drop samples from the desktop to create new sample layers.



Dragging and dropping an audio file from the Desktop to a sample layer in DrumCore

9 If necessary, you can drag sample layers within the Edit Sample Layers dialog to reorder them.

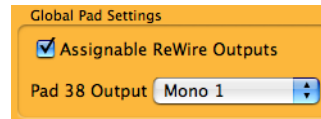
10 If desired, click the Remove Layer button to remove the selected Sample Layer from the Pad.

11 When you have finished editing the Sample Layers for a Pad, click the OK button.

Global Pad Settings

When using ReWire, you can assign DrumCore's MIDI DrumKit to multiple output assignments for independent mixing and audio processing in your DAW. DrumCore outputs appear in your DAW as "DC-1 through DC-32" for mono, and "DC1-2 through DC31-32" for stereo. Pad output assignments are applied by pad number across all kits.

If you are transferring your work with DrumCore between projects or systems, enable or disable the Assignable ReWire Outputs option as necessary. For example, if you work on a Pro Tools|HD system in the studio with Assignable ReWire Outputs enabled, you may want to disable this option if you transfer your session to your Pro Tools LE session at home.



Global Pad Settings

To assign DrumCore's DrumKit to multiple outputs:

- 1 Ensure that DrumCore is using ReWire.
- 2 In the DrumKit Editor window, select the Pad you want to assign to a specific output.
- 3 Enable the Assignable ReWire Outputs option under Global Pad Settings.
- 4 From the Pad Output pop-up menu, select the desired output assignment (e.g., Mono 1).
- 5 Repeat the preceding steps for each Pad as desired.



Depending on the extent of ReWire support in your DAW you may not see all DrumCore outputs as being available. For example, your DAW may only display stereo outputs.

Creating Custom DrumKits

DrumCore's DrumKit Editor is vital to anyone used to working with drum machines or drum sample libraries. DrumCore's DrumKit Editor provides an easy way to manage and recall your entire drum sample library from your computer, conveniently organized as DrumCore DrumKits.

To create your own DrumKit:

1 Select DrumKits > New. The New DrumKit dialog opens.



New DrumKit dialog

2 Type the name for the DrumKit in the New Name field.

3 Select New Empty DrumKit to start from scratch.

- or -

Select Existing DrumKit and the desired DrumKit from the pop-up menu to work from an existing DrumKit.

4 Click Save to save your changes to the current DrumKit.

5 Edit the DrumKit as desired.

6 Choose DrumKits > Save As to save your edits as a new DrumKit.

- or -

Choose DrumKits > Save to save your changes to an existing DrumKit.

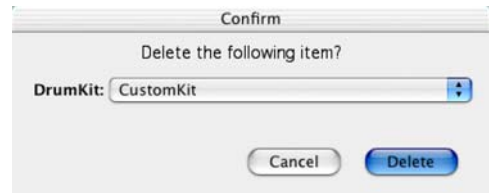
Deleting Custom DrumKits

DrumCore lets you delete any custom created DrumKits.

To delete a DrumKit:


1 Select DrumKits > Delete.


2 In the resulting dialog, select the DrumKit you want to delete from the DrumKit pop-up menu.



Deleting a DrumKit

3 Click the Delete button.

 *DrumCore will not let you delete factory DrumKits. All factory DrumKits are greyed out in the DrumKit pop-up menu.*

 *Drum samples are not deleted when a DrumKit is deleted. DrumCore will only let you delete the DrumKit database file.*

Chapter 5: Using DrumCore with ReWire

DrumCore is a ReWire client that can work in perfect harmony with ReWire-host applications (also called ReWire-mixer applications), such as ACID, Digital Performer, Garage Band, Fruity Loops, Live, Logic, Pro Tools, or Sonar. ReWire, developed by Propellerhead software, lets you route computer-generated audio from a ReWire client, such as DrumCore, directly into an audio track in a ReWire-host application (e.g., Pro Tools or Cubase). You can also play DrumCore's sampled DrumKits from MIDI sequences in your ReWire-host application and record the audio to multiple channels back into your DAW all in real-time.

Using ReWire, DrumCore becomes a virtual studio drummer that streams its audio output into your ReWire-compatible DAW. Depending on the ReWire implementation of your DAW, you can launch DrumCore, and hear and record DrumCore's audio output right into your DAW. You can also use your MIDI sequencer to play DrumCore's MIDI Drum module (DrumKits). Best of all, whether you're using DrumCore as a ReWire client or as a stand-alone application, you can easily export DrumCore's content for import into your DAW.



For more information on using ReWire with your DAW, refer to the manufacturer's documentation.



For more information on ReWire, see www.propellerheads.se.



When using DrumCore with ReWire, be sure to launch the ReWire-host application first (e.g., Pro Tools or Logic) before launching DrumCore.



All DrumCore factory content is sampled at 48 kHz. When streaming audio via ReWire to a ReWire-host application that is at another sample rate (e.g., 44.1 kHz), DrumCore automatically converts the sample rate to match. To ensure the correct sample rate conversion, you should set the ReWire-host application to the desired sample rate before launching DrumCore.



If you are new to ReWire, you should know that you can hear DrumCore even if you can't see it. The way ReWire works, DrumCore's playback engine is loaded into the ReWire-host application. If you close DrumCore while it is "ReWired" into your DAW, it will still playback as long as it selected as an insert or channel input.

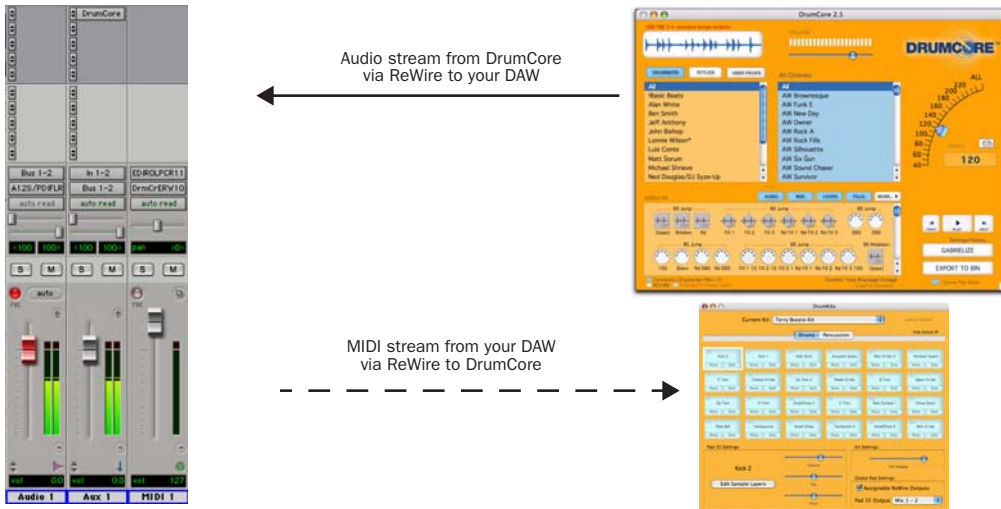


Figure 1. Virtual signal flow via ReWire between DrumCore (ReWire client) and your DAW (ReWire host)—Pro Tools shown

A Note About Tempo

DrumCore contains real drummers’ performances recorded at multiple tempos to minimize any time stretching or beat-slicing audio distortions. To ensure that file playback matches the exact tempo you want, DrumCore 2.0 makes extensive use of “stretchy” file formats (i.e., CFX, REX, and ACID file formats).

DrumCore content that is not stored as a CFX, REX, or ACID file when used with a ReWire client may not synchronize to the tempo of the ReWire-host application. For example, if your ReWire-compatible DAW is set to a tempo of 123.5 bpm and the selected non-CFX, REX, or ACID groove in DrumCore is at 120 bpm, the beats won’t synchro-

nize. You can either change the tempo in your DAW to match DrumCore, or import the DrumCore audio into your DAW and apply time compression or expansion (available in most DAWs).



As a ReWire client, DrumCore only receives tempo and meter synchronization from ReWire-host applications if the Transport/Tempo Sync option is enabled in DrumCore.

Using DrumCore with Cubase and Nuendo

Using ReWire, DrumCore integrates seamlessly with Steinberg's Cubase or Nuendo. ReWire provides real-time audio and MIDI streaming between DrumCore and Cubase or Nuendo, with sample accurate synchronization and common transport functionality. Using ReWire, either Cubase or Nuendo can both send MIDI to DrumCore and receive audio back from DrumCore.

Configuring DrumCore for Cubase or Nuendo

To use DrumCore with Cubase or Nuendo, you will want to configure the DrumCore preferences accordingly.

To configure DrumCore's preferences for Cubase or Nuendo:

- 1** Launch DrumCore.
- 2** Choose DrumCore > Preferences (or press Command+;). The DrumCore Preferences dialog opens.
- 3** Select Cubase or Nuendo from the Export To pop-up menu. DrumCore's Export button will update to reflect the selected Export To preferences (see "Export To" on page 9).

4 Set the Export File Format options to match the File Type, Sample Rate, and Sample Format of your Cubase or Nuendo session (e.g., AIFF, 44.1 kHz, 24-bit). If the File Type, Sample Rate, or Sample Format doesn't match your Cubase or Nuendo session, Cubase or Nuendo can copy and convert the files to match.



When importing a file into Cubase or Nuendo, the Import Options dialog opens. The Import Options dialog include options to copy a file to the Working Directory, convert to project sample rate, bit depth, etc. These are options Cubase and Nuendo that you can set based on your needs. They do not directly affect audio export from DrumCore.

- 5** On Windows, enable the Notify Cubase or Nuendo option and click the Set Cubase or Nuendo Path button to locate and select the Cubase or Nuendo application.
- 6** Enable or disable the Export MIDI files as multi-track as desired.
- 7** Enable the ReWire (when available) option.
- 8** If desired, enable the ReWire Transport/Tempo Sync option to synchronize the DrumCore Transport to Cubase or Nuendo and visa-versa.
- 9** If desired, enable the Reset ReWire host to zero on play option to ensure that Cubase or Nuendo plays back from the beginning when the DrumCore Transport is used to initiate playback.

Hearing DrumCore in Cubase or Nuendo

You can hear DrumCore in Cubase or Nuendo by selecting it as the input on a stereo or mono ReWire track.

To hear DrumCore in Cubase or Nuendo:

- 1 Launch Cubase or Nuendo and open an existing project or create a new project.
- 2 Launch DrumCore.
- 3 In DrumCore, verify that the ReWire toggle is enabled and, if desired, enable the Transport/Tempo Sync toggle.
- 4 Search for the desired groove at the desired tempo (the tempo of your session).
- 5 Switch back to Cubase or Nuendo.
- 6 Select Devices > DrumCore.
- 7 If they are not already enabled, click the button to enable the desired DrumCore ReWire channels (e.g., DC 1-DC 2).
- 8 Adjust the level of the Rewire Channel to which DrumCore is assigned to in Cubase's or Nuendo's mixer.

If DrumCore is currently playing back an audio or MIDI file, you will hear it playing back through Cubase or Nuendo.

Drag and Drop Audio and MIDI to Cubase or Nuendo

You can simply drag and drop audio or MIDI files directly from DrumCore to Cubase or Nuendo.

To drag and drop from DrumCore to Cubase or Nuendo:

- Click and drag an audio or MIDI file from DrumCore's Results List and drop it onto the Pool window or the time line in Cubase or Nuendo.



MIDI files must be dropped on a MIDI track. Audio files must be dropped on an audio track. If you drag onto a blank space that has no track assigned, the correct track type (audio or MIDI) will be created.

When dragging a MIDI file into Cubase or Nuendo, two or more MIDI tracks are required.

- If the Export MIDI as Multitrack preference is enabled, a new MIDI Track is created for each instrument (i.e., kick, snare, high-hat, etc.).
- If the Export MIDI as Multitrack preference is not enabled, only two MIDI tracks are created.

Exporting Audio and MIDI for Import into Cubase or Nuendo

You can export an audio or MIDI file (loop or fill) from DrumCore for import into Cubase or Nuendo. This gives you the flexibility to arrange audio files from DrumCore's extensive database in Cubase or Nuendo any way you want. It's a great way to quickly and easily compose complete, professional rhythm parts for a whole song or to just work with a scratch track to come up with new ideas.

To export and import into Cubase or Nuendo:

- 1** Launch Cubase or Nuendo and open an existing project or create a new project.
- 2** Configure Cubase or Nuendo for monitoring DrumCore (see “Hearing DrumCore in Cubase or Nuendo” on page 46).
- 3** Launch DrumCore.
- 4** In DrumCore, search for the desired groove at the desired tempo.
- 5** On Windows, click the Export button (or press Ctrl+E). DrumCore will export the selected audio or MIDI file to Cubase’s or Nuendo’s Pool window.

- or -

On Macintosh, click the Export button (or press Command+E):

- DrumCore will export the selected audio or MIDI file to the folder specified in DrumCore’s Export To preference (see “Export To” on page 9). The default folder is /DrumCore Data/ExportedContent/.
- Switch back to Cubase or Nuendo.
- Select File > Import > Import Audio File or select File > Import > Import MIDI File.
- In the Import dialog, locate and select the exported file and import.
- Cubase or Nuendo inserts the file into the currently selected track at the current transport location.

Playing DrumCore’s MIDI Drum Module with Cubase or Nuendo

DrumCore’s MIDI Drum module can be played directly from Cubase or Nuendo, and monitored in Cubase or Nuendo. This gives you access to DrumCore’s world-class sampled DrumKits, while providing you with the flexibility of being able to do your own drum programming in Cubase or Nuendo.

To play the DrumCore MIDI Drum module with Cubase or Nuendo:

- 1** Launch Cubase or Nuendo and open an existing project or create a new project.
- 2** Configure Cubase or Nuendo to monitor DrumCore (see “Hearing DrumCore in Cubase or Nuendo” on page 46). Use multiple tracks for multiple outputs from DrumCore if the Assignable ReWire Outputs option is enabled (see “Global Pad Settings” on page 40).
- 3** Launch DrumCore, if it is not already running.
- 4** In DrumCore, disable the Transport toggle and make sure that DrumCore is not playing back.
- 5** Select the desired DrumKit from the DrumKit menu (see “DrumKits” on page 35).
- 6** Switch back to Cubase or Nuendo.
- 7** Create one or more new MIDI tracks (or use existing MIDI tracks).
- 8** Select DrumCore Engine Via ReWire as the output of the selected MIDI track.

Any MIDI data from the assigned tracks will play the currently selected DrumKit in DrumCore.

Recording DrumCore in Cubase or Nuendo

You may want to record DrumCore in Cubase or Nuendo to take advantage of the mixing, processing, and editing capabilities of Cubase or Nuendo as you continue to work on your project.

To record DrumCore to an audio track in Cubase or Nuendo:

- 1 Solo the DrumCore track (also solo any MIDI tracks you may be using to play DrumCore's MIDI Drum module).
- 2 Select File > Export > Audio Mixdown.
- 3 In the resulting Export Audio Mixdown dialog, select the following:
 - location where the file will be saved
 - sample rate.
 - bit depth
 - number of channels (e.g., mono, stereo, etc.)
- 4 You can also select the Import to Pool and Import to Audio Track option to automatically re-import the audio to the Pool or a new audio track respectively.
- 5 Click Save.

Using DrumCore with Digital Performer

(Macintosh Only)

Using ReWire, DrumCore integrates seamlessly with Mark of the Unicorn's Digital Performer (version 4.0 or later). ReWire provides real-time audio and MIDI streaming between DrumCore and Digital Performer, with sample accurate synchronization and common transport functionality. Using ReWire, Digital Performer can both send MIDI to DrumCore and receive audio back from DrumCore.

Configuring DrumCore for Digital Performer

To use DrumCore with Digital Performer, you will want to configure the DrumCore preferences accordingly.

To configure DrumCore's preferences for Digital Performer:

- 1 Launch DrumCore.
- 2 Choose DrumCore > Preferences (or press Command+;). The DrumCore Preferences dialog opens.
- 3 Select Digital Performer from the Export To pop-up menu. DrumCore's Export button will update to reflect the selected Export To preferences.
- 4 Set the Export File Format options to match the File Type, Sample Rate, and Sample Format of your Digital Performer project (e.g., AIFF, 44.1 kHz, 24-bit). If the File Type, Sample Rate, or Sample Format doesn't match your Digital Performer project, Digital Performer will copy and convert the files to match.
- 5 Enable or disable the Export MIDI files as multi-track as desired. (MIDI files must be exported to a folder and then dragged and dropped into Digital Performer.)

- 6** Enable the ReWire (when available) option.
- 7** If desired, enable the ReWire Transport Sync option to link the DrumCore Transport to Digital Performer.
- 8** Be sure to disable the Reset ReWire host to zero on play option to be able to successfully use DrumCore and Digital Performer together.

Hearing DrumCore in Digital Performer

You can hear DrumCore in Digital Performer simply by selecting it as the input on a stereo or mono Aux or Voice track.

To hear DrumCore in Digital Performer:

- 1** Launch Digital Performer and open an existing project or create a new project.
- 2** In Digital Performer, create a new stereo or mono Aux or Voice track. Be sure that the new track has a valid output assignment.
- 3** If the track is stereo, select DrumCore: DC-L1-R2 (stereo) for the track's input. If the track is mono, select DrumCore: DC-L1 (mono) or DrumCore: DC-R1 (mono).
- 4** Launch DrumCore.
- 5** In DrumCore, verify that the ReWire toggle is enabled and, if desired, enable the Transport/Tempo Sync toggle.
- 6** Search for the desired groove at the desired tempo.
- 7** Switch back to Digital Performer.
- 8** Adjust the track's volume to the desired level for playback.

If DrumCore is currently playing back an audio or MIDI file, you will hear it playing back through Digital Performer.

Recording DrumCore in Digital Performer

You can record DrumCore's audio output right into Digital Performer, whether you are playing an audio file or DrumCore's DrumKit via MIDI.

To record DrumCore in Digital Performer:

- 1** Launch Digital Performer and open an existing project or create a new project.
- 2** In Digital Performer, create a new stereo or mono Aux or Voice track. Be sure that the new track has a valid output assignment.
- 3** If the track is stereo, select DrumCore: DC-L1-R2 (stereo) for the track's input. If the track is mono, select DrumCore: DC-L1 (mono) or DrumCore: DC-R1 (mono).
- 4** If it is a Voice track, record enable the track. If it is an Aux track, you will need to bus its output to a Voice track for recording.
- 5** Launch DrumCore.
- 6** In DrumCore, search for the desired groove at the desired tempo (the tempo of your Digital Performer project).
- 7** Switch back to Digital Performer and start recording.

Digital Performer will record the audio output from DrumCore in real-time.



To ensure that the bars and beats line up, verify that the Transport toggle is enabled in DrumCore and start recording in Digital Performer at the start of a bar.



There will be a small amount of latency when recording DrumCore into Digital Performer. You may have to manually nudge the recorded audio to adjust for this latency. The amount of latency depends on the Buffer Size setting in Digital Performer, the smaller your buffer size the shorter the latency. Use a buffer size of 512 or lower for best results.

Drag and Drop Audio and MIDI to Digital Performer

You can easily drag and drop an audio (hits, loops, or fills) or MIDI files from DrumCore's Results List to Digital Performer's timeline or Soundbites window. This gives you the flexibility to arrange audio files from DrumCore's extensive database in Digital Performer any way you want. It's a great way to quickly and easily compose complete, professional rhythm parts for a whole song or to just work with a scratch track to come up with new ideas.

When dragging and dropping audio, Digital Performer will place the audio in the target track. When dragging dropping MIDI files, if DrumCore's Export MIDI files as multitrack preference is enabled, you must have enough MIDI tracks available in Digital Performer. If DrumCore's Export MIDI files as multitrack preference is disabled, you will only need one available MIDI track in Digital Performer.

Exporting Audio to Digital Performer

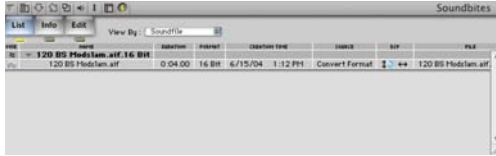
You can export an audio file (loop or fill) from DrumCore right into Digital Performer's Soundbites window. This gives you the flexibility to arrange audio files from DrumCore's extensive database in Digital Performer any way you want. It's a great way to quickly and easily compose complete, professional rhythm parts for a whole song or to just work with a scratch track to come up with new ideas.

You can also simply drag and drop audio loops, fills, or hits right from the DrumCore Results List to Digital Performer's timeline or Soundbites window.

To export audio to Digital Performer:

- 1 Launch Digital Performer and open an existing project or create a new project.
- 2 In Digital Performer, create a new stereo or mono Aux or Voice track. Be sure that the new track has a valid output assignment.
- 3 If the track is stereo, select DrumCore: DC-L1-R2 (stereo) for the track's input. If the track is mono, select DrumCore: DC-L1 (mono) or DrumCore: DC-R1 (mono).
- 4 Launch DrumCore.
- 5 In DrumCore, search for the desired groove at the desired tempo.
- 6 Click the Export button (or press Command+E). DrumCore will export the selected audio file to Digital Performer.

7 Switch back to Digital Performer. The exported file appears in the Soundbites window.



Digital Performer Soundbites window containing an audio file exported from DrumCore

Exported content is written to the folder specified in the Export Location preference (see “Export Location” on page 9). The default folder is /DrumCore Data/ExportedContent/. The exported file is also written to the Digital Performer Project’s Audio Files folder.

Exporting MIDI to Digital Performer

MIDI files exported from DrumCore can either be dragged and dropped to Digital Performer or can be manually imported into Digital Performer.

To export MIDI to Digital Performer:

- 1 Launch Digital Performer and open an existing project or create a new project.
- 2 Configure Digital Performer for monitoring DrumCore (see “Hearing DrumCore in Digital Performer” on page 49).
- 3 Launch DrumCore.
- 4 In DrumCore, search for the desired MIDI groove at the desired tempo.
- 5 Drag and drop the desired MIDI groove from DrumCore to Digital Performer.

You can now use the MIDI sequence from DrumCore verbatim, or edit to suit your needs.

Playing DrumCore’s MIDI Drum Module with Digital Performer

DrumCore’s MIDI Drum module can be played directly from Digital Performer MIDI tracks, and monitored and recorded in Digital Performer. This gives you access to DrumCore’s world-class sampled DrumKits, while providing you with the flexibility of being able to do your own drum programming in Digital Performer.

To play the DrumCore MIDI Drum module with Digital Performer:

- 1 Launch Digital Performer and open an existing project or create a new project.
- 2 In Digital Performer, create a new stereo or mono Aux or Voice track. Be sure that the new track has a valid output assignment.
- 3 If the track is stereo, select DrumCore: DC-L1-R2 (stereo) for the track’s input. If the track is mono, select DrumCore: DC-L1 (mono) or DrumCore: DC-R1 (mono).
- 4 Create one or more new MIDI tracks (or use existing MIDI tracks) and assign their outputs to DrumCore: ReWire Bus—DrumCore Engine via ReWire.
- 5 Launch DrumCore.
- 6 In DrumCore, disable the Transport toggle and make sure that DrumCore is not playing back.
- 7 Select the desired DrumKit from the DrumKit menu (see “DrumKits” on page 35).
- 8 Switch back to Digital Performer.

Any MIDI data from the assigned tracks will play the currently selected DrumKit in DrumCore.

Using DrumCore with Live

Using ReWire, DrumCore integrates seamlessly with Ableton's Live. ReWire provides real-time audio and MIDI streaming between DrumCore and Live, with sample accurate synchronization and common transport functionality. Using ReWire, Live can both send MIDI to DrumCore and receive audio back from DrumCore.

Configuring DrumCore for Live

To use DrumCore with Live, you will want to configure the DrumCore preferences accordingly.

To configure DrumCore's preferences for Live:

- 1 Launch DrumCore.
- 2 Choose DrumCore > Preferences (or press Command+;). The DrumCore Preferences dialog opens.
- 3 Select Folder from the Export To pop-up menu. DrumCore's Export button will update to reflect the selected Export To preferences (see "Export To" on page 9).
- 4 Set the Export File Format options to match the File Type, Sample Rate, and Sample Format of your Live set (e.g., WAVE, 44.1 kHz, 24-bit).



At the time of this writing, Live does not support REX files. Disable the Export REX/ACID option in DrumCore's Preferences.

- 5 Enable or disable the Export MIDI files as multi-track as desired.
- 6 Enable the ReWire (when available) option.
- 7 If desired, enable the ReWire Transport/Tempo Sync option to synchronize the DrumCore Transport to Live and visa-versa.

8 If desired, enable the Reset ReWire host to zero on play option to ensure that Live plays back from the beginning when the DrumCore Transport is used to initiate playback.

Hearing DrumCore in Live

You can hear DrumCore in Live by selecting DrumCore as the Input for any Audio track.

To hear DrumCore in Live:

- 1 Launch Live and open an existing Live Set or create a new one.
- 2 In Live, insert a new Audio track.
- 3 In Session view, select the desired DrumCore output channels in the Audio From pop-up menu on the new track (e.g., DrumCore 1-2, DrumCore 3-4, etc.).



Selecting DrumCore as the Input on an Audio track

- 4 Launch DrumCore.
- 5 In DrumCore, verify that the ReWire toggle is enabled and, if desired, enable the Transport/Tempo Sync toggle.
- 6 Search for the desired groove at the desired tempo.

7 Switch back to Live.

8 Adjust the level of DrumCore in Live.

If DrumCore is currently playing back an audio or MIDI file, you will hear it playing back through Live.

Export and Import Audio and MIDI from DrumCore to Live

You can easily drag and drop audio (hits, loops, or fills) or MIDI files from Live's browser view into the Arrange view. Simply set one of Live's File browser views to the DrumCore ExportedContent folder. This gives you the flexibility to arrange audio files from DrumCore's extensive database in Live any way you want. It's a great way to quickly and easily compose complete, professional rhythm parts for a whole song or to just work with a scratch track to come up with new ideas.

Playing DrumCore's MIDI Drum Module with Live

DrumCore's MIDI Drum module can be played directly from Live, and monitored in Live. This gives you access to DrumCore's world-class sampled DrumKits, while providing you with the flexibility of being able to do your own drum programming in Live.

To play the DrumCore MIDI Drum module with Live:

- 1 Launch Live and open an existing Live Set or create a new one.
- 2 Configure Live to monitor DrumCore (see "Hearing DrumCore in Live" on page 52).
- 3 Launch DrumCore, if it is not already running.
- 4 In DrumCore, disable the Transport toggle and make sure that DrumCore is not playing back.
- 5 Select the desired DrumKit from the DrumKit menu (see "DrumKits" on page 35).
- 6 Switch back to Live.
- 7 Create one or more new MIDI tracks (or use existing MIDI tracks) and select DrumCore as the destination from the MIDI To pop-up menu.



Selecting DrumCore as the MIDI To destination

Any MIDI data from the assigned tracks will play the currently selected DrumKit in DrumCore.

Recording DrumCore in Live

You may want to record DrumCore in Live to take advantage of the mixing, processing, and editing capabilities of Live as you continue to work on your set.

To record DrumCore to an audio track in Live:

- 1** Launch Live and open an existing Live Set or create a new one.
- 2** Configure Live to monitor DrumCore (see “Hearing DrumCore in Live” on page 52).
- 3** Launch DrumCore, if it is not already running.
- 4** In Live, record enable the Audio track with DrumCore as the assigned input.
- 5** Use the Live Transport to begin recording.
- 6** In Live, click the Stop button in the Transport or press the Spacebar.

Using DrumCore with Logic

(Macintosh Only)

Using ReWire, DrumCore integrates seamlessly with Emagic’s Logic (version 6.0 or later). ReWire provides real-time audio and MIDI streaming between DrumCore and Logic, with sample accurate synchronization and common transport functionality. Using ReWire, Logic can both send MIDI to DrumCore and receive audio back from DrumCore.



Logic cannot record the audio output of Audio Instruments, therefore you cannot record DrumCore’s audio output right into Logic. You will have to solo any DrumCore tracks in Logic and bounce to disk to convert DrumCore’s audio output to an audio file. For example, you might want to do this (instead of simply exporting and importing DrumCore content) if you are using Logic to play DrumCore’s MIDI Drum module and you want to capture the output as an audio file.

Configuring DrumCore for Logic

To use DrumCore with Logic, you will want to configure the DrumCore preferences accordingly.

To configure DrumCore’s preferences for Logic:

- 1** Launch DrumCore.
- 2** Choose DrumCore > Preferences (or press Command+;). The DrumCore Preferences dialog opens.
- 3** Select Logic from the Export To pop-up menu. DrumCore’s Export button will update to reflect the selected Export To preferences.

4 Set the Export File Format options to match the File Type, Sample Rate, and Sample Format of your Logic song (e.g., AIFF, 44.1 kHz, 24-bit).



Logic allows multiple sample rates in a project. Be sure to set DrumCore to match your Logic session because Logic does not warn you if the sample rate you are using doesn't match the project's sample rate. If the sample rates don't match and you export as AIF or WAV, the DrumCore groove may not synchronize with Logic.

5 Enable or disable the Export MIDI files as multi-track as desired. MIDI files must be exported to a folder and then manually imported (dragged and dropped) into Logic.

6 Enable or disable the Export MIDI files as multi-track option depending on how you work. You can drag and drop a MIDI file from DrumCore straight to a Logic MIDI track, or to the area underneath the tracks to auto-create the requisite MIDI tracks.

7 Enable the ReWire (when available) option.

8 If desired, enable the ReWire Transport Sync option to link the DrumCore Transport to Logic.

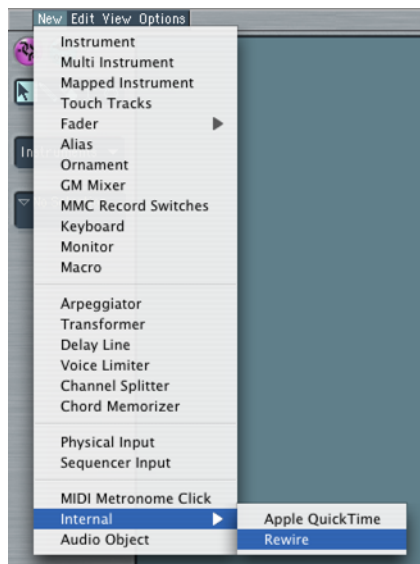
9 If desired, enable the Reset ReWire host to zero on play option to ensure that Logic plays back from the beginning when the DrumCore Transport is used to initiate playback.

Configuring Logic for ReWire

To use DrumCore as a ReWire client with Logic, verify that you have a ReWire Instrument Object available. If not, you will have to create one in the environment. This ReWire object is only required to use DrumCore's MIDI DrumKits. The ReWire object lets you route MIDI from a Logic track to DrumCore's DrumKits.

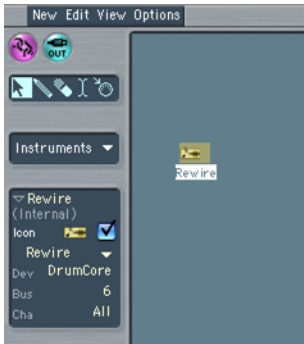
To configure Logic for ReWire:

- 1 Launch Logic and open an existing song or create a new song.
- 2 Open the Environment (Windows > Open Environment).
- 3 Select Instruments from the Objects pop-up menu.
- 4 Select New > Internal > ReWire.



Creating a new ReWire Instrument object in the Logic Environment

A new ReWire instrument object will appear in the Logic Environment.



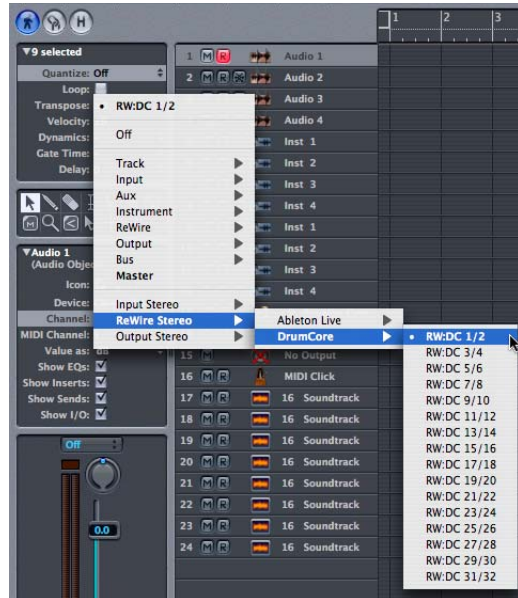
Logic Rewire object in the Environment

Hearing DrumCore in Logic

To hear DrumCore in Logic, you will first need to configure Logic for use with ReWire. For more information, refer to the manufacturer's documentation.

To hear DrumCore in Logic:

- 1 Launch Logic and open an existing song or create a new one.
- 2 Select or create a new stereo or mono Audio Instrument or Audio track.
- 3 You can monitor DrumCore in Logic using a stereo track or two mono tracks. If the track is stereo, select Channel > Rewire > RW:DC-L1-R2 (stereo) in the Arrange window. If the track is mono, select Channel > Rewire > RW:DC-L1 or RW:DC-R1.



Selecting DrumCore's audio output as a track's audio input in Logic

4 Launch DrumCore.

5 In DrumCore, search for the desired groove at the desired tempo (the tempo of your Logic song).

6 Switch back to Logic. Notice that you can now monitor DrumCore in Logic.



Monitoring DrumCore's audio output in Logic on two mono Audio Instrument tracks

7 Adjust the track's volume to the desired level for playback.

If DrumCore is currently playing back an audio or MIDI file, you will hear it playing back through Logic.

Drag and Drop Audio and MIDI to Logic

You can simply drag and drop audio or MIDI files directly from DrumCore into Logic.

To drag and drop audio from DrumCore to Logic:

- Click and drag an audio or MIDI file from DrumCore's Results List and drop it onto an audio or MIDI track in the Arrange window. You can also drag and drop audio files to Logic's Audio window.

Exporting Audio to Logic

(Logic 6 or Later Only)

You can simply drag and drop audio files from DrumCore to the Arrange or Audio window in Logic (see "Drag and Drop Audio and MIDI to Logic" on page 57). You can also export an audio file (loop or fill) from DrumCore right into Logic's Audio window. This gives you the flexibility to arrange audio files from DrumCore's extensive database in Logic any way you want. It's a great way to quickly and easily compose complete, professional rhythm parts for a whole song or to just work with a scratch track to come up with new ideas.



Logic does not support the import of REX files directly from DrumCore (using the Export to Logic command). However, you can drag and drop REX file from DrumCore to Logic.

To export audio to Logic:

- 1 Launch Logic and open an existing song or create a new one.
- 2 Configure Logic to monitor DrumCore (see "Hearing DrumCore in Logic" on page 56).
- 3 Launch DrumCore.
- 4 In DrumCore, search for the desired groove at the desired tempo (the tempo of your Logic song).

5 Click the Export button (or press Command+E). DrumCore will export the selected audio file to the Logic.

6 Switch back to Logic. The exported file appears in the Audio window.

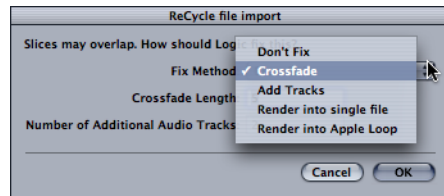


Logic's Audio window containing audio files exported from DrumCore

Exported content is written to the folder specified in the Export Location preference (see "Export Location" on page 9). The default folder is /DrumCore Data/ExportedContent/.



You can drag and drop REX files (either DrumCore's factory CFX files or custom imported REX files) and ACID files (custom imported) from DrumCore to Logic audio tracks. REX and ACID files provide significant flexibility for adjusting tempos in Logic. Logic presents a dialog for handling files on import (drag and drop). Generally, the default settings work well.



Logic's ReCycle file Import dialog for REX files

Exporting MIDI to Logic

You can simply drag and drop MIDI files from DrumCore to the Arrange window in Logic (see “Drag and Drop Audio and MIDI to Logic” on page 57). Otherwise, MIDI files exported from DrumCore must be manually imported into Logic.



When using drag and drop to import a DrumCore multitrack MIDI file into Logic 7.1 or earlier, you need to make sure there are enough MIDI tracks in Logic for each MIDI track from DrumCore, plus one extra track for the tempo and meter information.

To export MIDI to Logic:

- 1 Launch Logic and open an existing song or create a new one.
- 2 Configure Logic to monitor DrumCore (see “Hearing DrumCore in Logic” on page 56).
- 3 Launch DrumCore.
- 4 In DrumCore, search for the desired groove at the desired tempo.
- 5 Click the Export button (or press Command+E). DrumCore will export the selected MIDI file to the Logic. Logic will prompt you to make a Copy of the current Environment or a New One. If your environment is already setup for DrumCore, choose Copy current environment. Logic will open the MIDI file as a new Song.
- or -
- 6 Set DrumCore’s Export To preference to export to a Folder (see “Export To” on page 9).
- 7 Click the Export button (or press Command+E). DrumCore will export the selected MIDI file to the folder specified in the Export Location preference (see “Export Location” on page 9).

8 Locate the exported MIDI file in the Finder, and drag and drop the MIDI file onto the Arrange window in Logic.

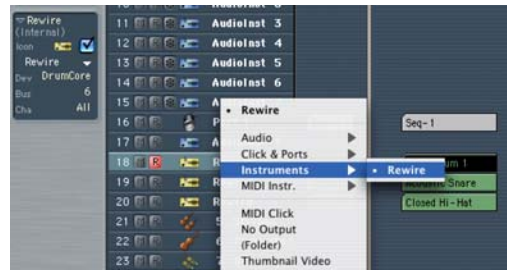
You can now use the MIDI sequence from DrumCore verbatim, or edit to suit your needs.

Playing DrumCore’s MIDI Drum Module with Logic

DrumCore’s MIDI Drum module can be played directly from Logic MIDI tracks, and monitored in Logic. This gives you access to DrumCore’s world-class sampled DrumKits, while providing you with the flexibility of being able to do your own drum programming in Logic.

To play the DrumCore MIDI Drum module with Logic:

- 1 Launch Logic and open an existing song or create a new song.
- 2 In Logic, verify that you have a ReWire Instrument Object available. If not, create one in the environment (see “Configuring Logic for ReWire” on page 55).
- 3 Select or create a new MIDI track.
- 4 Select Instruments > ReWire to assign the output for that track.



Selecting DrumCore as a ReWire instrument in Logic

- 5 Launch DrumCore.

6 In DrumCore, disable the Transport toggle and make sure that DrumCore is not playing back.

7 Select the desired DrumKit from the DrumKit menu (see “DrumKits” on page 35).

8 Switch back to Logic.

Any MIDI data from the assigned tracks will play the currently selected DrumKit in DrumCore.

Using DrumCore with Pro Tools

Using ReWire, DrumCore integrates seamlessly with Digidesign’s Pro Tools (both LE and TDM versions) version 6.1 or later. Pro Tools 6.1 and later support ReWire as an RTAS plug-in. ReWire provides real-time audio and MIDI streaming between DrumCore and Pro Tools, with sample accurate synchronization and common transport functionality. Using ReWire, Pro Tools can both send MIDI to DrumCore and receive audio back from DrumCore.



DrumCore ReWire RTAS plug-in

Pro Tools automatically detects DrumCore, and DrumCore is available in the RTAS Plug-Ins Inserts menus in Pro Tools. Selecting DrumCore from within Pro Tools automatically launches DrumCore; and DrumCore’s corresponding ReWire MIDI node will be available in Pro Tools MIDI Track Output selectors.

The Main audio output from DrumCore plays through the stereo or mono Pro Tools audio, Auxiliary Input, or Instrument track on which it is inserted.



Pro Tools 7.0 or later supports drag and drop with DrumCore.



Pro Tools 7.0 or later supports the import of REX and ACID files as Region Groups by drag and drop from DrumCore to Pro Tools tick-based tracks or to the Regions List.



Pro Tools 7.0 or later supports Instrument tracks in addition to using Pro Tools MIDI and Auxiliary Input tracks.

Configuring DrumCore for Pro Tools

To use DrumCore with Pro Tools, you will want to configure the DrumCore preferences accordingly.

To configure DrumCore's preferences for Pro Tools:

- 1 Launch DrumCore (either stand-alone or from Pro Tools).
- 2 On Windows, choose Edit > Preferences (or press Alt+;). On Macintosh, choose DrumCore > Preferences (or press Command+;). The DrumCore Preferences dialog opens.
- 3 Select Pro Tools from the Export To pop-up menu.
- 4 Set the Export File Format options to match the File Type, Sample Rate, and Sample Format of your Pro Tools session (e.g., AIFF, 44.1 kHz, 24-bit). Exported content is written to the folder specified in the Export Location preference (see "Export Location" on page 9). The default folder is /DrumCore Data/ExportedContent/.

If the File Type, Sample Rate, or Sample Format doesn't match your Pro Tools session, Pro Tools will convert and copy (to the session's Audio Files folder) the files to match.

If the File Type, Sample Rate, and Sample Format all match your Pro Tools session, the exported file may not be copied to the session's Audio Files folder.

5 On Windows, enable the Notify Pro Tools option and click the Set Pro Tools Path button to locate and select the Pro Tools application.

- or -

On Macintosh, select one of the following under Export Button Action:

- Export to Pro Tools Bin (exports audio files from DrumCore and imports into the Pro Tools Regions List).
- Export to Pro Tools Mono Track (exports mono, or the .L mono file of a stereo pair, audio files from DrumCore and imports into the first selected Pro Tools mono audio track).
- Export to Pro Tools Stereo Track (exports the .L and .R audio files from DrumCore and imports into the first selected Pro Tools stereo audio track).

DrumCore's Export button will update to reflect the selected Export To preference settings.

6 Enable or disable the Export MIDI files as multi-track as desired. (MIDI files must be exported to a folder and then manually imported into the Pro Tools MIDI Regions List or as MIDI Tracks.)

7 Enable the ReWire (when available) option.

8 If desired, enable the ReWire Transport/Tempo Sync option to link the DrumCore Transport to Pro Tools.

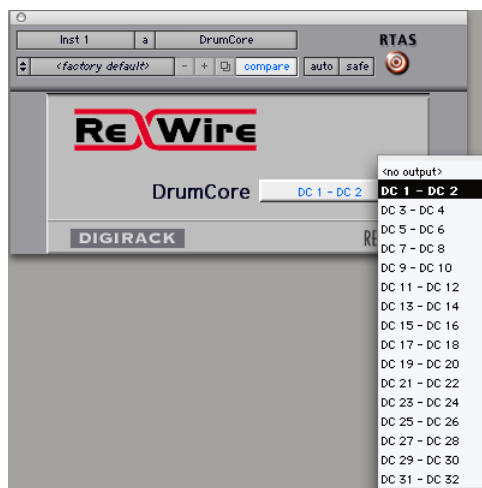
9 If desired, enable the Reset ReWire host to zero on play option to ensure that Pro Tools plays back from the beginning when the DrumCore Transport is used to initiate playback.

Hearing DrumCore in Pro Tools

You can hear DrumCore in Pro Tools simply by selecting it as an RTAS plug-in on an Auxiliary Input or audio track.

To hear DrumCore in Pro Tools:

- 1 Launch Pro Tools and open an existing session or create a new session.
- 2 Create a new stereo or mono Instrument, Auxiliary Input, or audio track.
- 3 Select DrumCore as an RTAS plug-in on the new track. The Plug-In window opens.
- 4 For a stereo track, select DC-L DC-R from the DigiRack ReWire Output pop-up menu (these are the main outs from ReWire), or DC 1-2 through 31-32 if using the DrumCore DrumKit with multiple output assignments. For a mono track, select DC-L or DC-R, or DC 1-32 if using the DrumCore DrumKit with multiple output assignments.



DrumCore ReWire RTAS plug-in, selecting DrumCore outputs (stereo track)

- 5 Adjust the track's volume fader to the desired level.

If DrumCore is currently playing back an audio or MIDI file, you will hear it playing back through Pro Tools.

After recording DrumCore in Pro Tools or exporting from DrumCore and importing into Pro Tools, you may want to mute DrumCore in Pro Tools (or disable the DrumCore ReWire Transport toggle). Otherwise DrumCore will continue to play back in Pro Tools.

Recording DrumCore in Pro Tools

You can record DrumCore's audio output right into Pro Tools, whether you are playing an audio file or DrumCore's DrumKit via MIDI.

To record DrumCore in Pro Tools:

- 1 Insert DrumCore as an RTAS plug-in on an Instrument, Auxiliary Input, or an audio track.
- 2 In DrumCore, search for the desired groove at the desired tempo (the tempo of your Pro Tools session).
- 3 In Pro Tools, bus the output of the track with DrumCore to another audio track.
- 4 Record enable the audio track receiving the bussed signal and begin recording.



Recording DrumCore in the Pro Tools Mix window

Pro Tools will record the audio output from DrumCore in real-time.



To ensure that the bars and beats line up, verify that the Transport/Tempo Sync toggle is enabled in DrumCore.

Drag and Drop Audio and MIDI to Pro Tools

(Pro Tools 7.0 or later only)

You can simply drag and drop audio or MIDI files directly from DrumCore to Pro Tools. Files dragged to the Timeline create a new track of the corresponding type (audio or MIDI) and width (mono or stereo), and the groove is spotted to the time line location where it is dropped. Files dragged to a track must match the track type (e.g., audio or MIDI) and width (e.g., mono or stereo).

To drag and drop from DrumCore to Pro Tools:

- Click and drag an audio or MIDI file from DrumCore's Results List and drop it onto the Pro Tools time line, to a track, or to the Regions List.



REX or ACID files dragged from DrumCore and dropped on the Pro Tools time line create tick-based audio tracks of the corresponding number of channels (mono or stereo). REX and ACID files appear in Pro Tools as Region Groups and are spotted to the time line location where they are dropped.

Exporting Audio to Pro Tools

You can export an audio file (loop or fill) from DrumCore right to the Pro Tools Regions List (on Windows or Macintosh), or a mono or stereo audio track (on Macintosh only). You can also drag and drop audio and MIDI files from DrumCore to Pro Tools (Pro Tools 7.0 or later only). This gives you the flexibility to arrange audio files from DrumCore's extensive database in Pro Tools any way you want. It's a great way to quickly and easily compose complete, professional rhythm parts for a whole song or to just work with a scratch track to come up with new ideas.

To export audio to Pro Tools:

- 1 Insert DrumCore as an RTAS plug-in on an Instrument, Auxiliary Input, or an audio track.
- 2 In DrumCore, search for and select the desired audio file at the desired tempo.
- 3 Click the Export button (or press Ctrl+E on Windows or Command+E on Macintosh). DrumCore exports the selected audio file to Pro Tools according to the DrumCore Export Preferences settings (see "Export Button Action" on page 10).

- or -

Drag and drop the file from DrumCore to the Pro Tools time line (Pro Tools 7.0 or later only).

- or -

On Macintosh only, choose Export > To Pro Tools Bin (or press Command+B). This command will place the selected file in the Pro Tools Regions List.

- or -

On Macintosh only, choose Export > To Pro Tools Track (or press Command+T). This command will place the file as a region starting at the insertion point in a Pro Tools track. If there is no insertion point, the region will be placed at the beginning of the first available audio track.



On Macintosh only, you can export multiple audio loops and fills in order from DrumCore to a Pro Tools audio track. In Pro Tools, place the cursor at the desired location. Switch to DrumCore and be sure that the Transport toggle is disabled. Search for and select the desired audio loop or fill and select Export > To Pro Tools Track (or press Command+T). Repeat as many times as desired. Note that if you switch to another application besides DrumCore, the Pro Tools cursor will reset to its original location.

- or -

On Macintosh only, choose Export > To Pro Tools Track Repeating (or press Command+R). The Export to Pro Tools Track dialog opens. Enter the desired number of repeats and click OK. The file will be placed as a region starting at the insertion point in a Pro Tools track and repeated the specified number of times.



Export to Pro Tools Track dialog

Exported content is written to the folder specified in the Export Location preference (see "Export Location" on page 9). The default folder is \DrumCore Data\ExportedContent\.

If the File Type, Sample Rate, or Sample Format doesn't match your Pro Tools session, Pro Tools will convert and copy (to the session's Audio Files folder) the files to match.

If the File Type, Sample Rate, and Sample Format all match your Pro Tools session, the exported file is not copied to the session's Audio Files folder.

Exporting MIDI to Pro Tools

MIDI files exported from DrumCore must be manually imported into Pro Tools.

To export MIDI to Pro Tools:

- 1 Insert DrumCore as an RTAS plug-in on an Auxiliary Input or an audio track.
- 2 In DrumCore, search for and select the desired MIDI file.
- 3 Click the Export button (or press Ctrl+E on Windows or Command+E on Macintosh). The MIDI file is exported to the folder specified in the Export Location preference (see "Export Location" on page 9). The default folder is \DrumCore Data\ExportedContent\.
- 4 In Pro Tools, choose Import MIDI from the MIDI Regions List pop-up menu, or choose File > Import MIDI to Track.
- 5 In the resulting Open dialog, navigate to DrumCore's ExportedContent folder (the default export location), select the exported MIDI file and click Open.

- or -

Drag and drop the desired MIDI file from DrumCore to the Pro Tools time line (Pro Tools 7.0 or later only).

You can now use the MIDI sequence from DrumCore verbatim, or edit to suit your needs.

Playing DrumCore's MIDI Drum Module with Pro Tools

DrumCore's MIDI Drum module can be played directly from Pro Tools Instrument and MIDI tracks, and monitored and recorded in Pro Tools. This gives you access to DrumCore's world-class sampled DrumKits, while providing you with the flexibility of being able to do your own drum programming in Pro Tools.

To play the DrumCore MIDI Drum module with Pro Tools:

- 1 Insert DrumCore as an RTAS plug-in on an Instrument, Auxiliary Input, or audio track. If using multiple Rewire outputs from DrumCore, use the corresponding number of inserts on stereo or mono tracks in Pro Tools.
- 2 In DrumCore, disable the Transport toggle and make sure that DrumCore is not playing back.
- 3 Select the desired DrumKit from the DrumKit menu (see "DrumKits" on page 35).
- 4 In Pro Tools, create one or more new Instrument or MIDI tracks, or use existing Instrument or MIDI tracks (or even MIDI sequences imported from DrumCore).
- 5 Assign the Instrument or MIDI Track Output for each track to DrumCore Engine via ReWire—Channel-10.

Any MIDI data from these tracks will now play the currently selected DrumKit in DrumCore.

Using DrumCore with Sonar

(Windows Only)

Using ReWire, DrumCore integrates seamlessly with Cakewalk's Sonar. ReWire provides real-time audio and MIDI streaming between DrumCore and Sonar, with sample accurate synchronization and common transport functionality. Using ReWire, Sonar can both send MIDI to DrumCore and receive audio back from DrumCore.

Configuring DrumCore for Sonar

To use DrumCore with Sonar, you will want to configure the DrumCore preferences accordingly.

To configure DrumCore's preferences for Sonar:

- 1 Launch DrumCore.
- 2 Choose DrumCore > Preferences (or press Command+;). The DrumCore Preferences dialog opens.
- 3 Select Sonar from the Export To pop-up menu. DrumCore's Export button will update to reflect the selected Export To preferences (see "Export To" on page 9).
- 4 Set the Export File Format options to match the File Type, Sample Rate, and Sample Format of your Sonar project (e.g., WAVE, 44.1 kHz, 24-bit). If the File Type, Sample Rate, or Sample Format doesn't match your Sonar project, Sonar will copy and convert the files to match.



At the time of this writing, Sonar does not support REX files other than with its RXP instrument (which does accept drag and drop from DrumCore). Disable the Export REX/ACID option in DrumCore's Preferences.

- 5 In the resulting Open dialog, locate and select Sonar.

- 6 Click Open.
- 7 Enable or disable the Export MIDI files as multi-track as desired.
- 8 Enable the ReWire (when available) option.
- 9 If desired, enable the ReWire Transport Sync option to slave the DrumCore Transport to Sonar and visa-versa.



Sonar does not receive tempo information via ReWire. You must always adjust the tempo in Sonar to match DrumCore when the Transport/Tempo Sync option is enabled in DrumCore.

- 10 If desired, enable the Reset ReWire host to zero on play option to ensure that Sonar plays back from the beginning when the DrumCore Transport is used to initiate playback.

Hearing DrumCore in Sonar

You can hear DrumCore in Sonar simply by inserting it as a ReWire Device in your project.

To hear DrumCore in Sonar:

- 1 Launch Sonar and open an existing project or create a new project.
- 2 In Sonar, select Insert > ReWire Device > DrumCore.
- 3 Configure Sonar's Insert Options dialog as desired.



If you select the All Synth Audio Outputs option in Sonar, one new MIDI track is created (to send MIDI out to DrumCore's MIDI instrument) and 16 stereo instrument audio input tracks (corresponding to DrumCore's 16 stereo audio outputs) are created. Only use this if you are using DrumCore as a MIDI instrument and you want to process individual drum instrument sounds

- 4 Click OK. DrumCore will launch.
- 5 In DrumCore, verify that the ReWire toggle is enabled and, if desired, enable the Transport toggle.
- 6 Search for the desired groove at the desired tempo (the tempo if your session).
- 7 Switch back to Sonar.
- 8 Adjust the level of DrumCore in Sonar.

If DrumCore is currently playing back an audio or MIDI file, you will hear it playing back through Sonar.

Drag and Drop Audio and MIDI to Sonar

You can easily drag and drop an audio (hits, loops, or fills) or MIDI files from DrumCore's Results List into Sonar's Tracks window. This gives you the flexibility to arrange audio files from DrumCore's extensive database in Sonar any way you want. It's a great way to quickly and easily compose complete, professional rhythm parts for a whole song or to just work with a scratch track to come up with new ideas.

When dragging and dropping audio, Sonar will place the audio in the target track. When dragging dropping MIDI files, if DrumCore's Export MIDI files as multitrack preference is enabled, Sonar will automatically create any necessary additional MIDI tracks if you drag and drop to the blank area in the Track view. If you drag and drop onto any audio or MIDI tracks the data from DrumCore will be added to that track.

Playing DrumCore's MIDI Drum Module with Sonar

DrumCore's MIDI Drum module can be played directly from Sonar, and monitored in Sonar. This gives you access to DrumCore's world-class sampled DrumKits, while providing you with the flexibility of being able to do your own drum programming in Sonar.



When using multiple outs from a DrumCore DrumKit, Sonar only uses stereo assignments. Mono assignments are not available in Sonar, so only use stereo pad assignments in DrumCore.

To play the DrumCore MIDI Drum module with Sonar:

- 1 Launch Sonar and open an existing project or create a new project.
- 2 Configure Sonar to monitor DrumCore (see “Hearing DrumCore in Sonar” on page 66).
- 3 Launch DrumCore, if it is not already running.
- 4 In DrumCore, disable the Transport toggle and make sure that DrumCore is not playing back.
- 5 Select the desired DrumKit from the DrumKit menu (see “DrumKits” on page 35).
- 6 Switch back to Sonar.
- 7 Create one or more new MIDI tracks (or use existing MIDI tracks) and select DrumCore as the destination.
- 8 Select DrumCore from the MIDI track’s Output pop-up menu.
- 9 Select 10: DrumCore Engine Via ReWire from the MIDI track’s Channel pop-up menu.

Any MIDI data from the assigned tracks will play the currently selected DrumKit in DrumCore.

To automatically record DrumCore in Sonar, select one or more DrumCore tracks in Sonar and choose Tracks > Freeze Synth. Any MIDI routed to DrumCore plays back and DrumCore’s audio output is recorded into Sonar.



Separate your MIDI parts into different tracks for greater control over mixing and editing. You can do this automatically by selecting the Export MIDI file as multitrack option in the DrumCore Preferences dialog.

Using DrumCore with Other Audio and MIDI Applications

DrumCore can stream audio to and receive MIDI from any ReWire-host application. For example, you may want to use DrumCore with applications like Acid®, Adobe® Audition™, Fruity Loops™, Samplitude™, Tracktion™, Garage Band™, or even MAX/MSP. Consult the manufacturer’s documentation on the application’s ReWire implementation for more information.

Likewise, DrumCore’s drag and drop export of audio and MIDI files should work with any application that supports drag and drop import of audio and MIDI. Consult the manufacturer’s documentation on the application’s drag and drop import capabilities.

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