

# **Drumagog 5**

---

## **Getting Started Guide**

Information in this document is subject to change without notice and does not represent a commitment on the part of WaveMachine Labs, Inc. The software described in this document is furnished under this license agreement. The software may be used or copied only under the terms of the agreement. It is against the law to copy the software on any medium except as specifically allowed in the license agreement.. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording, for any purpose without the express written permission of WaveMachine Labs, Inc.

Copyright © 2010 WaveMachine Labs, Inc. All rights reserved.

Drumagog is a registered trademark of WaveMachine Labs, Inc. Other company and product names are trademarks of their respective owners.

Visit us on the web: [www.drumagog.com](http://www.drumagog.com)

## **Table of Contents**

<b>GETTING STARTED .....</b>	<b>4</b>
INSTALLATION .....	4
SAMPLE LIBRARY .....	5
ACTIVATION .....	6
<b>CONTACTING TECH SUPPORT .....</b>	<b>13</b>
<b>NEW USER TUTORIAL .....</b>	<b>14</b>
PLUGIN WINDOW LAYOUT .....	16
<b>NEW FEATURES .....</b>	<b>28</b>
NEW TRIGGERING ENGINE .....	29
AUTO ALIGN 2.0 (PRO & PLATINUM) .....	29
BLEED REDUCTION (PRO & PLATINUM).....	30
AUTO HI-HAT TRACKING (PLATINUM ONLY).....	31
CONVOLUTION REVERB (PLATINUM ONLY).....	33
MORPH ENGINE (PLATINUM ONLY).....	34
PLUG-IN HOSTING (PLATINUM ONLY).....	36

# 1

## Getting Started

---

Thank you for purchasing Drumagog 5, the latest drum replacement plugin from WaveMachine Labs. Version 5 includes a number of new features and exciting changes, and the goal of this guide is to help familiarize users with the new developments.

Another way to use this guide is as a supplement to the Drumagog 4 User Manual (available for download at [www.drumagog.com](http://www.drumagog.com)). A complete Drumagog 5 User Manual is on the way and will also be available through the website.

### INSTALLATION

Installation of Drumagog 5 is a relatively straight-forward process (either via download or DVD).

#### DOWNLOADABLE VERSION

If you purchased Drumagog through our website (or just want the latest version), visit the My Account section of [www.drumagog.com](http://www.drumagog.com) to find your download (Mac and PC). Download the latest installer for your specific OS and simply double-click on the finished download to start the install.

#### DVD VERSION

If you purchased Drumagog through a retail store, insert the DVD into your DVD drive, open the folder labeled for your OS and run the appropriate installer.

NOTE: The Drumagog 5 DVD contains both the Pro and Platinum editions. You must select your purchased version when installing, or else the subsequent authorization process will fail.

The actual install itself is very simple, as the Drumagog installer will automatically copy the necessary components into their default locations. For those who wish to install into custom locations options are available to do so during the install.

## **SAMPLE LIBRARY**

### **DVD INSTALLATION**

The full Drumagog 5 Sample Library is contained on the installation DVD, and can be installed immediately after installing the plugin itself:

### **PC USERS**

The Drumagog 5 DVD installer will automatically prompt you to install the included Gog Files. Simply click “NEXT” to have the installer automatically copy the library to your hard drive.

### **MAC USERS**

Inside the “MAC” folder, alongside the plugin installer, is a folder called “Gog Samples”. Simply copy (or drag) this folder onto your hard drive. The default location is inside the Drumagog 5 folder (inside the “Applications” folder), but with the new FILE BROWSER section of Drumagog 5 the sample folder can be located wherever you choose.

### **DOWNLOAD INSTALLATION**

The entire Drumagog 5 Sample Library is available to all registered Drumagog 5 users via [www.drumagog.com](http://www.drumagog.com). Visit the Downloads page (found in the Support section) to find the full list of sample installers. The library is divided into smaller downloads for easier transport.

Each download contains a number of Gog Files compressed in ZIP format. After downloading a particular file, simply unzip the file into the “Drumagog 5/Gog Files” folder (found in the “Applications” folder for Mac, Program Files for PC). The ZIP files will create new folders where needed.

NOTE: Using the new FILE BROWSER section, the Sample Library can be installed in any location you prefer, as you can easily just browse to the samples’ location.

## ACTIVATION

Drumagog 5 introduces iLok support, for those who prefer it to the previous unlock process. We have also included an updated Challenge/Response system for those who prefer the older system. New in version 5.1 is the License File authorization process.

When purchasing Drumagog through our web store or registering a store-bought copy, there will be a choice for which copy protection system to use.

### iLOK USERS

There will be a field in the online Shopping Cart/Registration form where you can designate an iLok Account Name (User ID). A Drumagog 5 license will then be automatically deposited into that account and made available for download to the user’s iLok (through [www.ilok.com](http://www.ilok.com)). Once the license is deposited the authorization process is complete, and any system the iLok is connected to will allow Drumagog 5 to run.

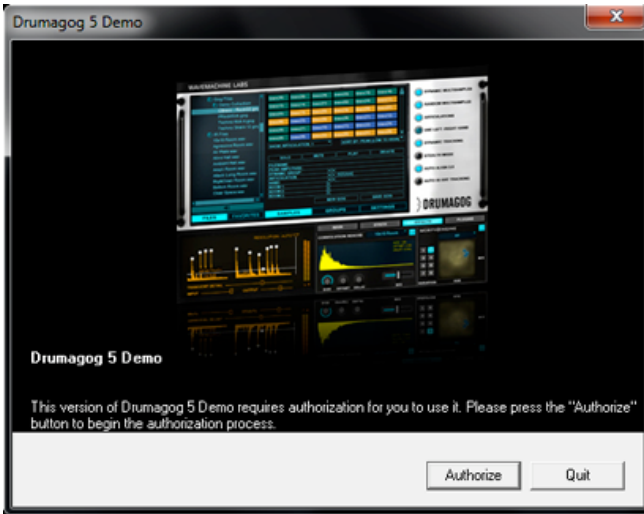
### LICENSE FILE

If you do not own an iLok (or otherwise prefer not to use one), Drumagog 5 can be unlocked via a License File system.

Once a customer has either purchased Drumagog 5 through [www.drumagog.com](http://www.drumagog.com), or registered a retail copy purchased through

a store, a special License File page will be accessible through the My Account section of [www.drumagog.com](http://www.drumagog.com).

The first-time Drumagog 5 is opened without an iLok present (or with an iLok present without a valid Drumagog 5 license) a window will appear on-screen:



*Authorization Window*

Press the "AUTHORIZE" button to continue. On the next screen, UNCHECK the "USE ILOK" box and press NEXT to continue.

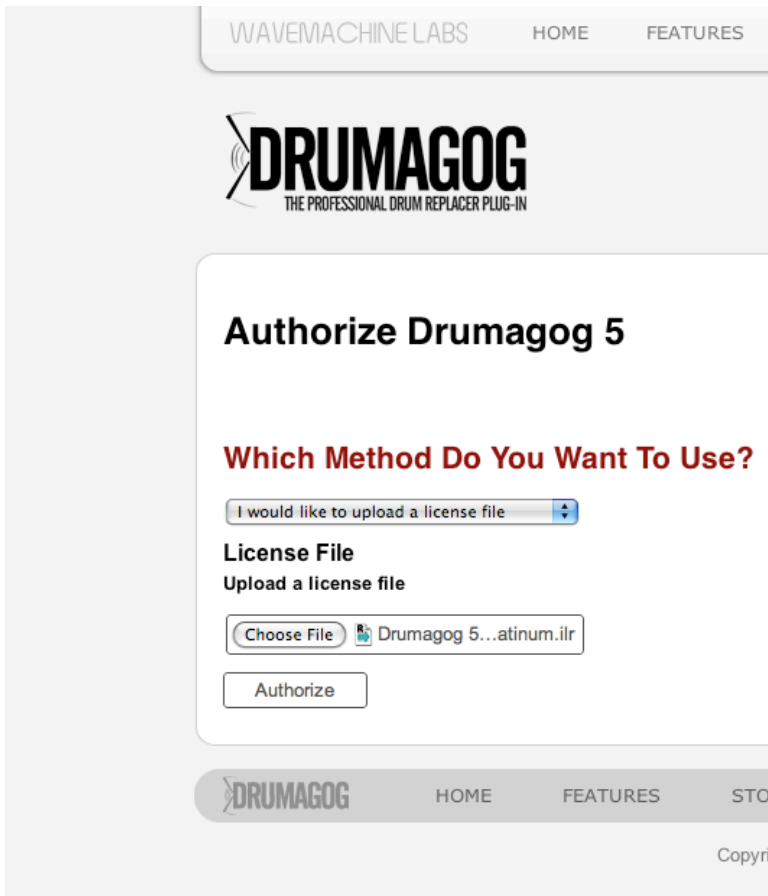
The next window will present the License File section:



*License File Section*

Drumagog 5 will present a button to SAVE LICENSE REQUEST. Click this button to create a License Request File that will be saved to your system. Take note of where the file is saved, so you can browse to it in a few moments.

Browse to [drumagog.com](http://drumagog.com) and visit the “My Account” section (by logging-in through the upper-right hand corner). Your copy of Drumagog will appear in the list of registered products, and will include an “AUTHORIZE THIS PRODUCT” link. You will then be given a choice to authorize via iLok or License File. Select License File to bring up the following page:



[www.drumagog.com](http://www.drumagog.com) License File Page

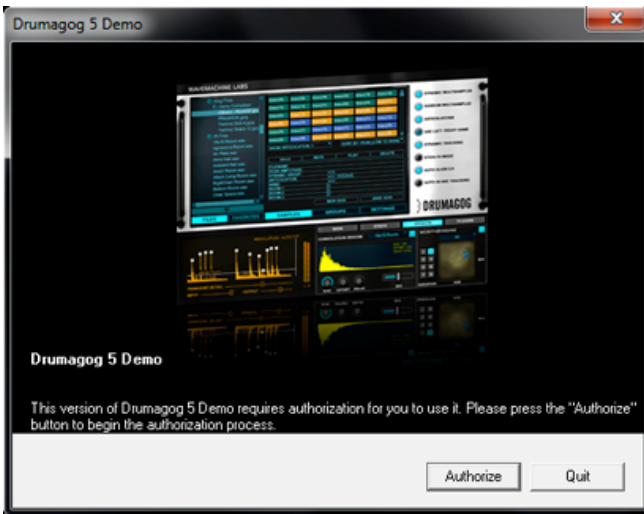
Click the CHOOSE FILE button to upload your saved License Request File to the server. Click the AUTHORIZE button. After a slight pause while the drumagog.com website contacts the PACE/iLok servers, a License Response File will be generated and you will see an “OK” message. Click the link below the message to download the License Response File. Back in Drumagog, click the READ LICENSE button. Select the License Response File that was saved to your system to complete the License File authorization process.

## CHALLENGE/RESPONSE

If you do not own an iLok (or otherwise prefer not to use one), Drumagog 5 can be unlocked via a Challenge/Response system similar to the one used in Drumagog 4.

Once a customer has either purchased Drumagog 5 through [www.drumagog.com](http://www.drumagog.com), or registered a retail copy purchased through a store, a special Challenge/Response page will be accessible through the My Account section of [www.drumagog.com](http://www.drumagog.com).

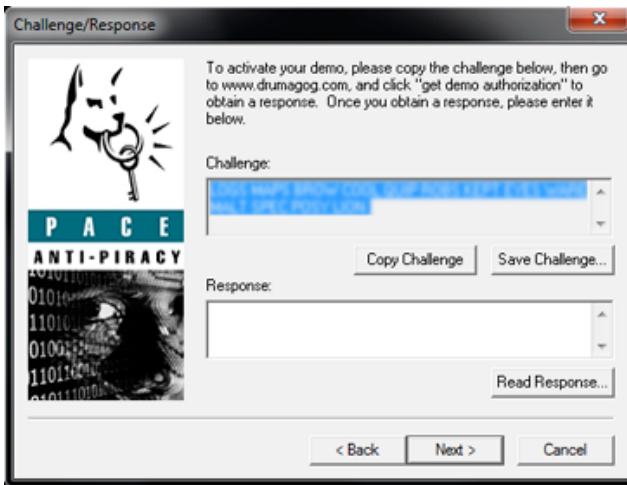
The first-time Drumagog 5 is opened without an iLok present (or with an iLok present without a valid Drumagog 5 license) a window will appear on-screen:



*Authorization Window*

Press the “AUTHORIZE” button to continue. On the next screen, UNCHECK the “USE ILOK” box and press NEXT to continue.

The next window will present the Challenge/Response section:



*Challenge/Response*

Drumagog 5 will present a series of words displayed in the CHALLENGE section of the window. Press “COPY CHALLENGE” to copy the challenge code to the clipboard for easy pasting later.

Browse to [drumagog.com](http://drumagog.com) and visit the “My Account” section (by logging-in through the upper-right hand corner). Your copy of Drumagog will appear in the list of registered products, and will include an “AUTHORIZE THIS PRODUCT” link. You will then be given a choice to authorize via iLok or Challenge/Response. Select Challenge/Response to bring up the following window:

The screenshot shows the 'Authorize Drumagog 5' window on the website. At the top, there is a navigation bar with 'WAVEMACHINE LABS', 'HOME', and 'FEATURES'. Below this is the Drumagog logo with the tagline 'THE PROFESSIONAL DRUM REPLACER PLUG-IN'. The main heading is 'Authorize Drumagog 5'. Underneath, it asks 'Which Method Do You Want To Use?' with a dropdown menu currently set to 'I would like to use challenge / response'. Below that, it says 'Challenge / Response' and 'Enter the 'Challenge' displayed to you by Drumagog 5'. There is a text input field for the challenge code and an 'Authorize' button. At the bottom, there is another navigation bar with 'DRUMAGOG', 'HOME', 'FEATURES', and 'STORE', along with a 'Copyright' notice.

[www.drumagog.com](http://www.drumagog.com) Challenge/Response Window

Paste the CHALLENGE code into the above field and click “AUTHORIZE”. After a slight pause while the drumagog.com website contacts the PACE/iLok servers, a RESPONSE code will be displayed. Copy the RESPONSE code and switch back to Drumagog 5, and finally paste the RESPONSE into the corresponding field. Press NEXT to complete the Challenge/Response authorization process.

# 2

## Contacting Tech Support

---

We're always glad to answer any questions you may have about using Drumagog. Please don't hesitate to contact us by:

E-mail: [support@drumagog.com](mailto:support@drumagog.com)

Phone: (877) 318-WAVE (9283)

US Mail: WaveMachine Labs, Inc.  
4256 N. Ravenswood Ave  
Suite 111  
Chicago, IL 60613

Our web site at: <http://www.drumagog.com> contains support information, FAQ's, and other tips.

Also, our user's forum has many helpful questions and answers from other users. Posting your question on the forum usually results in a quick answer. To visit the forum, visit the Support page at [drumagog.com](http://drumagog.com) and click on "Forum" at the top of the page.

# 3

## New User Tutorial

---

For those new to using Drumagog (or drum replacement in general), please follow along with this basic overview to jump in and begin enhancing your drum sound!

Open your preferred audio application (Pro Tools, Cubase, Logic, SONAR, etc) and find an individual audio drum track. Try it with a kick or snare track at first, as these are usually easier to replace than a tom or cymbal (though it certainly is possible!). Add Drumagog 5 to an insert point on that track, and the Drumagog 5 plugin window will open.

By default Drumagog will have one of its stock “DEMO COLLECTION” sounds loaded, indicated by a filename being highlighted (selected) in the FILE BROWSER window on the left-hand side of the plugin window. We’ll stick with the pre-selected sound for now. Press play in your audio application’s transport to begin playback.

As soon as your drum track begins, Drumagog 5 will display the incoming audio in the bottom-left corner’s VISUAL TRIGGERING window. The louder the audio, the higher the audio is on the display. Drag the horizontal SENSITIVITY slider down until white circles begin appearing superimposed on the audio display. You should now be hearing Drumagog trigger its samples on every hit. Adjust the SENSITIVITY slider until all the wanted drum hits are above the slider (i.e. louder than the threshold), but the bleed-thru from the other drums are below the slider. Adjust the TRANSIENT DETAILS slider if needed: move

it right if Drumagog is missing quick flams, blast beats, ghost notes, etc, or move it left if Drumagog is adding extra hits (i.e. double triggering).

Look at the MAIN window, in the center of the bottom section, for a mixer section. Find a fader that says “St Room”, and begin raising the level of the fader. You are now adding a stereo room to your chosen drum sound (if the faders are grayed out then you don’t have Drumagog 5’s default Gog File loaded). Add as much or as little of the two available ROOM SAMPLES faders as you like.

Watch the SAMPLES window, found at the top of the plugin window. This section lists the individual samples that make up the currently loaded Gog File, and will light up as each one plays. Watch how Drumagog randomly chooses from the sample pool, one of the ways Drumagog achieves the most natural drum sound possible.

# 4

## Interface Layout

---

Drumagog 5 contains many new and exciting features. This chapter will explain each one individually.

### PLUGIN WINDOW LAYOUT

The first change most users will notice is the all-new plugin window. Drumagog 5 uses a much larger interface with more useful information available at once.

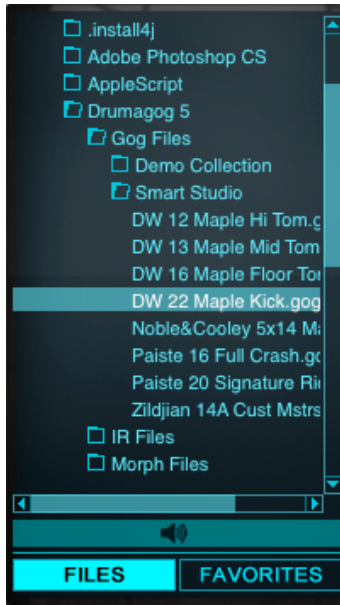


*Drumagog 5 Plugin Window*

The new plugin window is divided into several sections:

1. FILE BROWSER
2. SAMPLES/GROUPS/SETTINGS
3. OPTIONS PANEL
4. VISUAL TRIGGERING
5. MAIN/SYNTH/EFFECTS/PLUGINS

# FILE BROWSER



*File Browser*

Drumagog 5 has an entirely new browser window designed to show your entire file system at once; no more need to keep all your Gog Files in just one location, or using the old Browse option to find your samples. Every hard drive (local or network) appears in the File Browser at all times, so navigating large sample libraries is simpler than ever. With the added support for “drag and drop” and shift-click (selecting multiple files at once), moving samples into your sample pool is a breeze.

## FILES

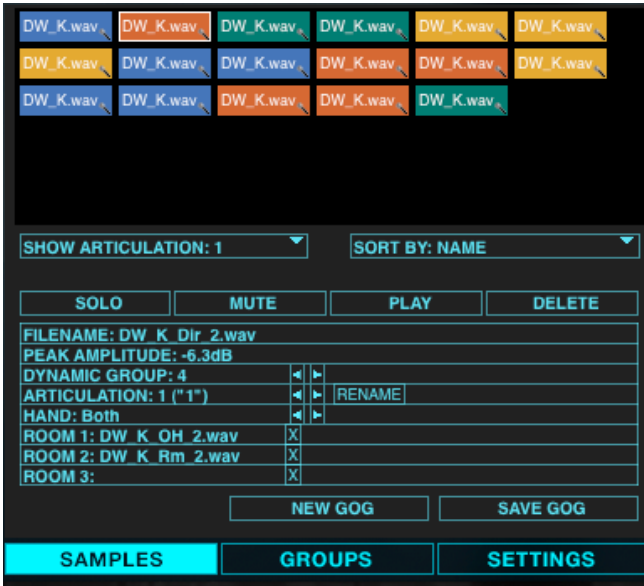
Each drive is listed alphabetically by drive name, and each folder, sub folder, and file is also sorted by name. To expand a folder left-click the folder once, and click a second time to close; to load a Gog File double-click on the filename.

## FAVORITES

Often used Gog Files can be stored in a separate “Favorites” list, making them easily accessible even on the largest hard drives. Click “FAVORITES” to switch to this view. To add a file to your Favorites list, just right-click on the Gog File and select “ADD TO FAVORITES”.

Additional file functions are accessible through right-clicking: “DELETE”, which deletes the selected file, and “RENAME”, which renames it.

## SAMPLES/GROUPS/SETTINGS

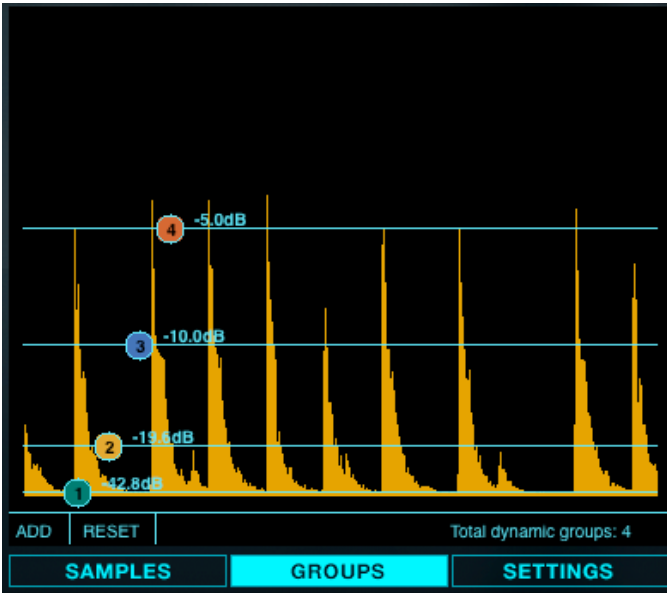


*Samples Window*

The SAMPLES window contains most of the same information as Drumagog 4, but now with more information displayed at once. Clicking on a sample in the top pool window will display that sample’s specific details: FILENAME, PEAK AMPLITUDE, DYNAMIC GROUP, ARTICULATION GROUP, LEFT/RIGHT HAND, and the new ROOM SAMPLES information.

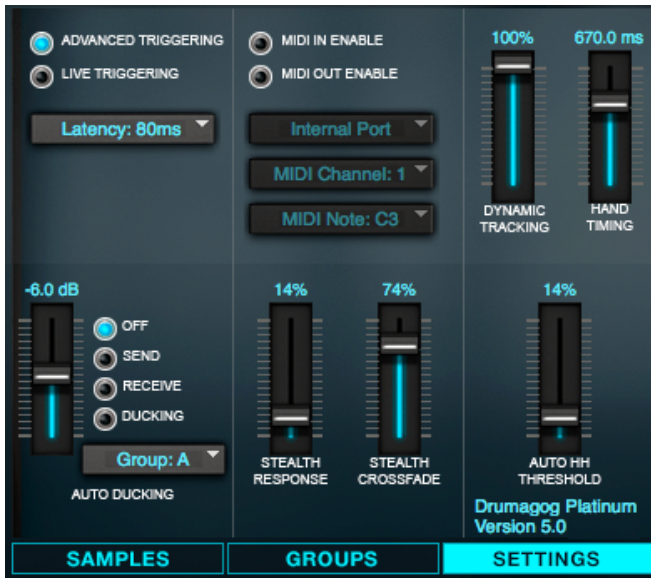
There is a new SORT option in Drumagog 5, accessed through the “SORT BY” drop-down list. The sample list can be sorted either alphabetically (by name), by peak dynamic level (i.e. loudness), or by DYNAMIC GROUP.

NOTE: ARTICULATIONS has replaced POSITIONS (used in version 4), and simply represents a change in name to better coincide with other drum software packages.



*Groups Window*

The GROUPS window remains unchanged from version 4. Just slide the horizontal lines (one for each DYNAMIC GROUP) to adjust the dynamic-level break points between each group.



*Settings Window*

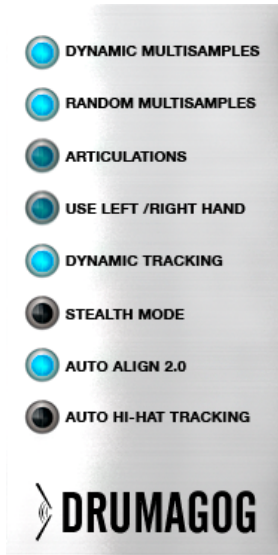
The SETTINGS window has been re-designed, but contains most of the same information as in version 4. There are some changes, however:

ADVANCED and LIVE TRIGGERING MODE switches between Drumagog 5's two different engines. ADVANCED TRIGGERING mode is the default, and is the appropriate setting for all mixing scenarios. LIVE MODE is a low-latency mode designed for live use.

LATENCY adjusts the overall, total latency through Drumagog 5 (except for any caused by AUTO HI-HAT TRACKING. For more information see that section). The default setting is 80ms, and should be left as is in most situations. However, for those users who prefer lower total latency (like Pro Tools HD users using Plugin Delay Compensation) other lower settings are available, however use of these lower latencies may result in lowered accuracy.

NOTE: Changing the above settings alters Drumagog’s total latency, and will require restarting the plugin (and in some cases the audio host) to take affect.

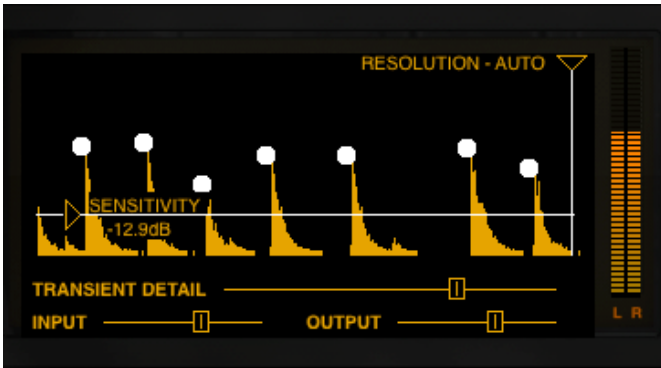
## OPTIONS PANEL



*Options Panel*

The OPTIONS PANEL, which resides on the far-right side of the plugin window, contains ON/OFF buttons for many of Drumagog’s most common features. This panel is mostly unchanged from previous versions with the exception of the “AUTO HI-HAT TRACKING” button, which enables that new feature. For more information check the AUTO HI-HAT TRACKING chapter.

# VISUAL TRIGGERING



*Visual Triggering Window*

Drumagog uses a visual triggering interface that streamlines the adjustment of the related controls. A scrolling, real-time waveform display is shown with the controls superimposed on top. This provides a visual indication of exactly how the various controls interact with the incoming audio. For example, the sensitivity control is represented as a horizontal line that can be moved up or down, and as the incoming audio scrolls past it's easy to see which audio impulses will trigger Drumagog and which will not. All the audio above the line will cause a trigger, and the audio below it will be ignored. The incoming audio that scored a "hit" is displayed as a white dot, making it easy to see a history of Drumagog's triggered hits.

## SENSITIVITY

Adjusting Drumagog using the VISUAL TRIGGERING window is quite intuitive. As seen above, the SENSITIVITY control is represented by a horizontal line; any peak above this line will trigger Drumagog. If there is background noise or bleed from other instruments present in the audio track just raise the horizontal line above the noise floor. Simply adjust the line above the noise floor and below the softest drum hits.

## RESOLUTION

The RESOLUTION control is represented by a vertical line; moving this line right or left adjusts how long Drumagog must wait before triggering again. If your track doesn't contain any hits closer than 1 second apart, just set the resolution to 1000ms. This way Drumagog will ignore all audio for 1000ms after each hit, even if it's above the Sensitivity threshold. The default setting is "AUTO", the quickest response with no additional wait time.

## TRANSIENT DETAIL

This slider changes the amount of detail Drumagog detects when triggering. If the slider is set to the right, Drumagog will pick up all the tiny nuances of a drum hit, including "ghost notes", etc. However, if the slider is set too far to the right it might pick up too much detail and falsely trigger. Moving the slider to the left reduces the amount of detail, useful for noisy tracks. The default setting in the middle is good for most tracks, but some adjustment may be necessary.

## TRIGGERING CIRCLES

Drumagog displays a white circle above each peak that triggered. This is useful in determining if Drumagog is triggering on the desired hits, or if mis-hits are occurring.

NOTE: The height of the drum circle represents Drumagog's actual output volume level. If dynamic tracking is turned off, the circles will always be drawn at the same height. If the calculated output level is higher than 0dB the circles will be drawn above the waveform. This provides an accurate picture of Drumagog's output volume in relation to the original track.

# MAIN



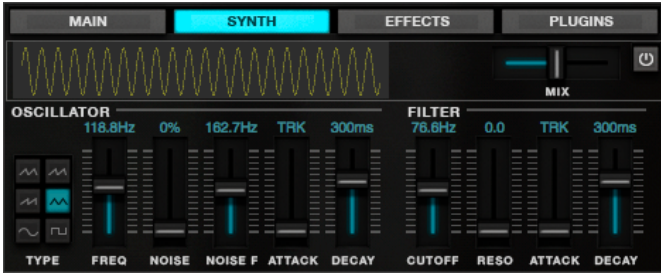
*Main Window*

The MAIN window contains controls for some of the most basic elements in Drumagog 5. This is where many of the knobs found in Drumagog 4 have been moved, and now are controlled via faders.

The PITCH and TRIGGER FILTER sections remain unchanged. The ARTICULATIONS fader has replaced the POSITION knob and performs the same function, switching between Open/Closed Hi-Hats, etc.

New to version 5 are the ROOM SAMPLES faders, three new controls found in the mixer section of the MAIN window. In the above example the loaded Gog File contains two separate slots (O/H and St Room), so the first two ROOM SAMPLES faders are enabled while the third is grayed out (as the third slot has no room samples). To use them just raise the corresponding fader to start utilizing the ambient sounds.

# SYNTH



*Synthesizer*

Drumagog 5 includes a more powerful synthesizer section than previous versions. Utilizing the OSCILLATOR and FILTER options, additional waveforms can be added to the drum sound, allowing a vast amount of control to enhance the resulting sound.

To use the synth, first press the “SYNTH” button to bring up the synth window. Various waveforms are available in a menu on the left-hand side, including sine, square, and saw-tooth. A real-time waveform is displayed at the top of the window, showing the overall waveshape of the resulting output.

The OSCILLATOR section has the following controls:

FREQ sets the fundamental frequency of the selected waveform.

NOISE determines the total amount of additional complex noise that is added to the waveform.

NOISE F sets the fundamental frequency of the noise.

ATTACK sets the oscillator’s envelope attack, expressed in milliseconds. A long attack time creates more of a swell, or gradual onset of the synth.

DECAY adjusts the oscillator’s envelope decay time, again in milliseconds. A short decay can be used to just add an additional emphasis to a drum transient.

The FILTER section is a brand-new feature in Drumagog 5: a true resonance filter. Think of old analog synths. Again, just like every control, this can be automated to create a dynamic, changing drum track.

CUTOFF sets the low-pass cutoff frequency, which allows for control of how much high frequency content is present.

## **EFFECTS/PLUGINS**

Each of the various effects (CONVOLUTION REVERB, MORPH|ENGINE) and the included PLUGIN HOSTING capability has its own detailed section found later in this guide.

# 5

## New Features

---

### ROOM SAMPLES

The Gog sample format has been extended to include room and mic samples: Simply dial in the amount of room desired using the new mixer interface. Drumagog 5 comes with an updated Gog sample library to take advantage of this powerful new feature.

ROOM SAMPLES are essentially additional samples attached to specific direct samples. Take a snare drum as an example: the primary sample is the close-mic'd, or “direct” sample; a recording of an up-close mic right on the snare, with little to no ambience. Attached to this direct sample can be up to three more samples, allowing for three different room or ambient sounds.

Drumagog 5 allows sample makers the ability to designate specific room samples for every hit, and does not use a “generic” sample for every hit. This is not only for phase-accuracy, but it creates a more realistic sound, as the original hit’s dynamics are 100% reproduced in the room sounds.

At the bottom of Drumagog 5’s MAIN tab is a new mixer window, where each of these additional room sounds will appear on individual faders. Drumagog 5 comes with new Gog Files that contain both an “O/H” slot (stereo Over-Heads) and a “St Room” slot (Stereo Room). Simply slide the fader higher on the mixer to add these new ambient mics to Drumagog’s playback. Some GOG

files can also have a “DIRECT” fader. This controls the amount of direct or “close-mic” in a GOG file.

Adding room samples to your own library is easy: Find and drag the desired room sample file from the FILE BROWSER window (on the left-side of the plugin window) and simply drop it on the corresponding direct sample; a pop-up window will appear requesting which Room Slot the room sample should correspond to. Once the first room sample is added to a slot the corresponding fader will activate in Drumagog’s mixer. To re-name the slot just double-click the “Room #” label at the bottom of the fader.

## **NEW TRIGGERING ENGINE**

Drumagog's already powerful triggering engine has been improved to more accurately track the most demanding drum tracks. Even complicated rolls and flams are no match for Drumagog 5's new triggering engine.

The “TRANSIENT DETAIL” slider has been moved from the SETTINGS page into the VISUAL TRIGGERING window, making it much easier to adjust for complicated flams, rolls, blast beats, etc. See the VISUAL TRIGGERING section for more information on this control.

## **AUTO ALIGN 2.0 (PRO & PLATINUM)**

A collaboration between WaveMachine Labs and Fraunhofer (inventors of the MP3 format) has resulted in a revolutionary new alignment algorithm. Drums hits are perfectly aligned and sample accurate. Drumagog now has the most accurate sample alignment algorithm available anywhere.

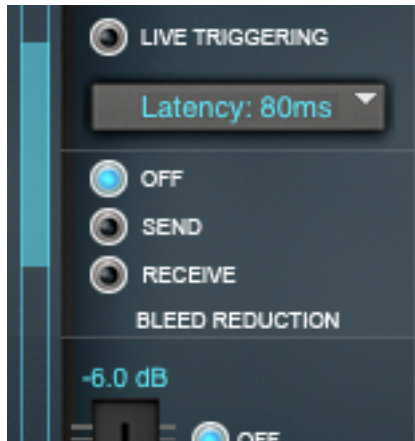
Drumagog 5 features two distinct alignment modes: AUTO ALIGN and PEAK. To switch between the two modes simply press the “AUTO ALIGN 2.0” button on the right-hand panel; turning off (i.e. the light is off) AUTO ALIGN enables PEAK mode, and vice-versa.

The default setting in Drumagog 5 is AUTO ALIGN, which usually results in the closest and tightest alignment of the original and new drum hits. This algorithm takes into account a number of factors when aligning the hits, including phase accuracy. This mode analyzes the whole drum hit, not just the initial transient, when aligning.

In PEAK mode Drumagog 5 uses a simpler approach, and aligns the initial transient peaks of the two hits. This mode usually works best on tracks where the original and new drum sounds are fairly similar.

## BLEED REDUCTION (PRO & PLATINUM)

BLEED REDUCTION allows Drumagog 5 to eliminate other drums from bleeding into a track and adding unwanted triggering. If, for example, the kick drum was bleeding into the snare drum mic, BLEED REDUCTION mode will prevent Drumagog from playing snare hits caused by the kick.



*Bleed Reduction Section*

The BLEED REDUCTION controls are found in the upper left-hand corner of the SETTINGS section. To use BLEED REDUCTION insert an instance of Drumagog 5 onto the track causing the bleed (i.e. the kick track, in our example above) and

another instance to the track where you wish to remove the bleed (i.e. the snare track). On the track causing the bleed, click the SEND button. On the track where you wish remove the bleed, click the RECEIVE button. When you play back the project any bleed from the kick track will be completely removed from the snare track, eliminating those unwanted triggers!

NOTE: BLEED REDUCTION can send from multiple Drumagog instances, but only one track can be set to RECEIVE.

## AUTO HI-HAT TRACKING (PLATINUM ONLY)

One of Drumagog 5's new features is an exciting breakthrough in drum replacement, AUTO HI-HAT TRACKING. Now Drumagog will recognize different hi-hat pedal articulations, like fully closed, fully open, half-open, etc, and then automatically play back those articulations.

To use AUTO HI-HAT TRACKING, first insert Drumagog 5 onto a hi-hat track, and then load a hi-hat Gog file that contains multiple articulations (i.e. open, half-open, closed, etc). Next, click the "AUTO HI-HAT TRACKING" button in OPTIONS PANEL (see figure) to enable the tracking.



*Auto Hi-Hat Tracking*

When you press play in your DAW, Drumagog will automatically begin following the detected pedal articulations. The “ARTICULATIONS” slider will begin moving during playback showing how Drumagog is following the changes.

#### AUTO HH THRESHOLD

To control how sensitively the tracking algorithm determines the differences between the track’s various articulations, use the “AUTO HH THRESHOLD” slider in the SETTINGS tab. Moving the slider down causes Drumagog to favor closed hits, and moving it higher favors open hits. Adjust this slider until Drumagog is choosing the appropriate articulations in relation to your source track.

#### AUTO HH CHOKE

This control adds an additional crossfade when switching from one hi-hat articulation to another. The default level of 100% adds no additional crossfade time, but may be adjusted to taste in order to smooth transitions from one articulation to another.

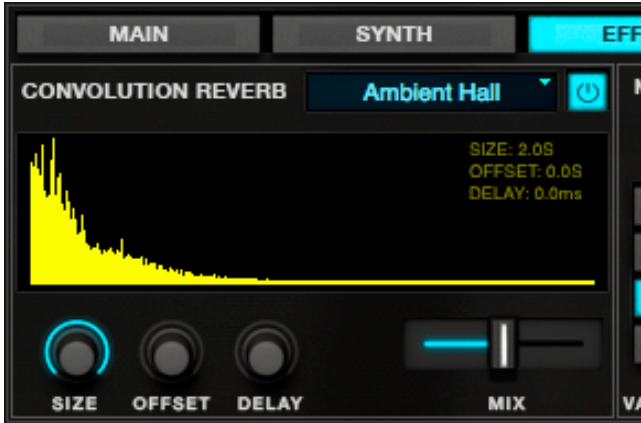
#### MIDI/PLUG-IN HOSTING

When using Auto Hi-Hat, Drumagog will transmit MIDI continuous controller data (CC#4) via both its MIDI Out and Plug-in Hosting. This can be enabled in plug-ins, like BFD, to control hi-hat articulations

**PLEASE NOTE:** Once Drumagog is correctly following the hi-hat track there is one minor correction that must take place. In order for Drumagog to accurately analyze the incoming audio and determine which articulation is which, Drumagog’s incoming audio buffer needs more time to analyze the source track. This results in an extra amount of delay through the plugin, which will cause a slightly delayed output that is NOT automatically corrected by Plugin Delay Compensation. The simplest way to correct for this is to move the hi-hat track EARLIER in time; you will find the exact amount of time shift needed displayed just below the AUTO HI-HAT TRACKING button in Drumagog’s right-hand panel. Just slide the hi-hat track exactly that much

earlier in the timeline and your resulting track will sound perfectly in time.

## CONVOLUTION REVERB (PLATINUM ONLY)



*Convolution Reverb Window*

Drumagog 5 now includes a pro-quality convolution reverb. This reverb features adjustable room size, offset, delay and more. It comes complete with an IR library custom-tailored for use with Drumagog samples. If you have an existing IR library, the reverb also reads standard 16 or 24-bit IR files.

To enable Drumagog 5's Convolution Reverb, first press the "EFFECTS" button to bring up the appropriate controls, then press the ON button to turn on the reverb. Select an IR file from the drop-down menu at the top of the reverb section, and then just adjust the "MIX" control to create the right balance of drum and reverb.

The following controls offer more adjustable parameters:

**SIZE** adjusts the overall size of the acoustical space, expressed in seconds (i.e. length of the reverb tail).

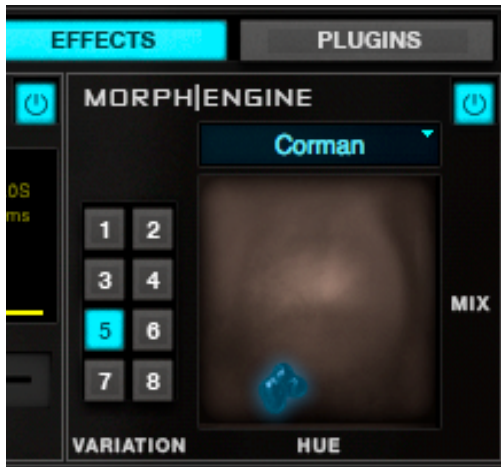
**OFFSET** moves the start of the reverb further back in the IR; in other words it moves the listener forward or back inside the

acoustical space. Increasing the OFFSET will lessen the early reflections captured at the beginning of the IR, creating a more diffuse sound, albeit with a shorter reverb tail.

DELAY shifts the entire reverb later in time, creating “dead space” before the start of the reverb. This control is the same as the pre-delay control found in most reverbs.

MIX simply adjusts the balance between the original “dry” drum sound and the “wet” reverb.

## MORPH|ENGINE (PLATINUM ONLY)



*Morph|Engine Window*

In collaboration with MoReVoX sound designer Sabino Cannone, Drumagog 5 includes an entirely new way to process drums. Morph|Engine is a dynamic morphing processor which shapes your drums in a way never heard before. Snare drums take on an organic "growl", bass drums sound like they have liquid skins. Unlike traditional processing, Morph|Engine is fluid and dynamic, changing with the dynamics of every beat.

To use the new Morph|Engine, click the “EFFECTS” button in the Drumagog 5 interface, and enable the engine by pressing the ON button. First select a Morph (the basic element of the engine) from

the drop-down list at the top of Morph|Engine window. Then try the eight included variations of this Morph by selecting the corresponding numbered buttons on the left-side of the window. Each variation makes some slight changes to the overall Morph, allowing a great number of combinations.

Finally, grab the “Blob”! Click and drag the “Blob” around the window to shape and mold the resulting sound: Moving the “Blob” left and right adjusts the “MIX” (or balance) of the original vs. Morphed drums, while up and down adjusts the color “HUE” (or frequency spectrum). Like all Drumagog controls these parameters can be automated for precision changes to your settings.

## PLUG-IN HOSTING (PLATINUM ONLY)



*Plug-In Window*

One of the biggest new features in Drumagog 5 Platinum is Plug-In Hosting, which is the ability for Drumagog to now “host” another VSTi Virtual Instrument (VSTi). This allows Drumagog to trigger the VSTi’s selected sound without using any cumbersome (and less accurate) MIDI routing. Drumagog will trigger the VSTi in real-time, and even supports virtual instruments through the new PLUGIN OUTPUT MIXER.

To use Plugin Hosting, first press the “PLUGINS” button to switch to this view. The first pull-down menu is labeled “SELECT”, and contains several different options:

UNLOAD PLUGIN does exactly that and un-instantiates the loaded VSTi.

REFRESH PLUGIN LIST will re-scan your VST Plugins folder. Use this whenever a new VSTi is installed onto the system (otherwise it won’t appear in the list).

SET PLUGIN FOLDER changes the folder location where Drumagog looks for installed VSTi’s. By default this is set to the default VST Plugins folder.

Below the above options will be the detected VSTi list. Double-clicking on something from the list will load that specific VSTi into Drumagog.

There are a few additional parameters available in this section that need to be set when hosting a VSTi:

MIDI CHANNEL and MIDI NOTE assigns the specific MIDI channel and note values Drumagog sends to the VSTi. Both the note name and MIDI note value are displayed, as in “C3 (60)”, as not all VSTi’s use the same MIDI standard to designate octaves.

MIX simply adjusts the level between Drumagog’s selected Gog File and the hosted plugin. This allows users to layer two simultaneous drum sounds at once!

Finally, the OUTPUT MIXER allows for VSTi’s with multiple outputs to be mixed inside Drumagog 5.

PLEASE NOTE: Drumagog 5 works by hosting the selected VSTi in an individual instance of Drumagog, using Steinberg’s VST hosting. The VST hosting spec does not contain a system for multiple hosts to access the same VSTi at once, which means that if a project has three different Drumagogs instantiated, and the user wants each one to trigger a VSTi, then each Drumagog instance must host its own VSTi; there is no way to load only one instance of the VSTi. The good news is that as long as only the needed sound(s) is loaded in the VSTi, memory usage won’t be appreciably higher running several smaller instances of a VSTi over running one larger instance.

Manual Revision 1.0

© 1999 - 2010 WaveMachine Labs, Inc.

Mac and Mac Logo are trademarks of Apple Computer, Inc.

Pro Tools and Digidesign are registered trademarks of Digidesign, a division of Avid Technology, Inc.

VST, Nuendo and Cubase are trademarks of Steinberg Media Technology AG

Digital Performer is a trademark of Mark of the Unicorn, Inc.

Windows XP is a trademark of Microsoft Corporation.

Cubase and Halion are registered trademarks of Steinberg A.G.

SONAR and Cakewalk are registered trademarks of Twelve Tone Systems, Inc.

BFD is a trademark of FXpansion Audio UK, Ltd.

EZ Drummer and Superior Drummer are registered trademarks of Toontrack Music