



 **sonote beat re:edit**

Owner's Manual

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What is sonote beat re:edit?

sonote beat re:edit is a VSTi plug-in software and employs the special proprietary “sonote technology,” which Yamaha has developed. The software is compatible with Steinberg’s VST 3 technology and can be used as a VST3 plug-in with Cubase 7 / Cubase Artist 7. This new sonote technology automatically extracts and categorizes characteristic segments of sound from audio data. These segments of sound are individually called “sonote.” Each sonote has multiple characteristics in addition to the waveform data, and they are automatically categorized according to their characteristic patterns.

In conventional audio editing, special know-how and/or great effort is needed to search for desired sounds from audio data, and then extract it and trim it. Now, “sonote beat re:edit” solves and simplifies these issues, by detecting “sonote” segments from audio data through its easy-to-use interface. Also, once sonotes have been detected, different sonotes with similar characteristics in the currently selected database are automatically assigned to each sonote, letting you replace them by a simple mouse click. This “re:edit” operation lets you replace a part of the audio data (a “sonote”) with a slightly different sound, or with a completely different one or loop—much more quickly and intuitively than in the past. How you re:edit depends on your personal preferences and esthetic sense.

Although “sonote beat re:edit” provides a preset database, you can create your original database by loading various audio files. Since audio files also in the original database will be used for sonote detection, you can create your own unique loops with your favorite sounds and phrases. Constructing your original databases limitlessly expands the creative possibilities and enjoyment of “sonote beat re:edit.”

We hope that you enjoy the convenience and ease of “re:editing” your sounds and come up with ever more creative loops and beats by effectively using “sonote beat re:edit.”

Sincerely,
The sonote beat re:edit development team

■ sonote beat re:edit website

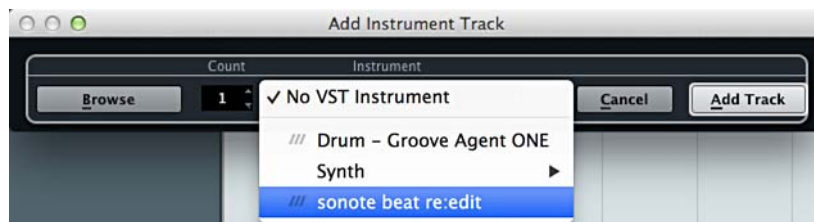
<http://www.steinberg.net/sonote/>

Tutorial

Tutorial 1: Loading and re:editing audio

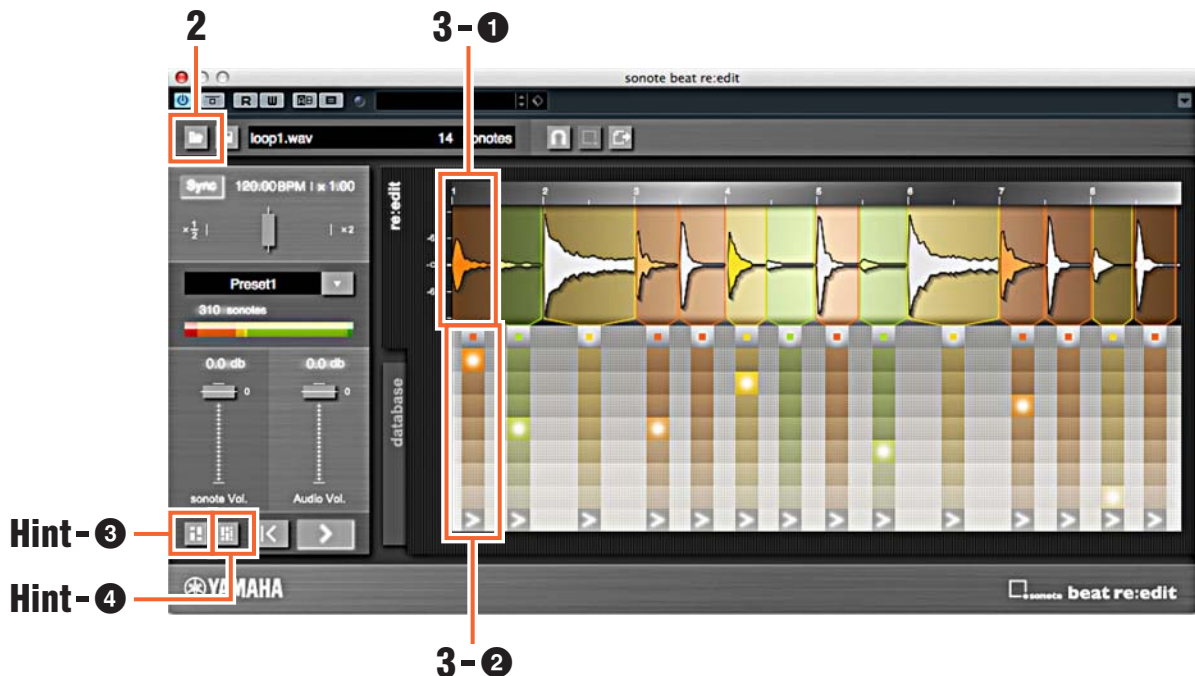
sonote beat re:edit is a brand new concept audio loop editing application that can detect characteristic sounds in audio data (when converted to sonote) and easily replace them with similar sonotes. Let's start by re:editing an audio loop, so you can easily grasp the software's operating methods and features, while getting first-hand experience in what kinds of things it can do.

1 Insert sonote beat re:edit and open the editor screen of sonote beat re:edit.



2 Click the file open button then select the desired audio file.

For optimum results here, it's probably best to first select a short drum loop.



3 When the audio data has been loaded and the waveform is displayed in the window, click the play button in Cubase.

The audio loop which has been loaded plays back.

The color-coded parts indicate sonote format parts.

In this example, let's replace the sonote at ❶ (the first red part) with a similar sonote.

Eight square buttons are shown under the waveform. At ❷, the highest one is the original sonote, and the seven below it are sonotes with similar characteristics. Click on one of these seven to replace the sonote.

In this way, you can edit your favorite loop phrases with sonote beat re:edit, and play it back while tweaking the sound and changing the characteristics of the loop.



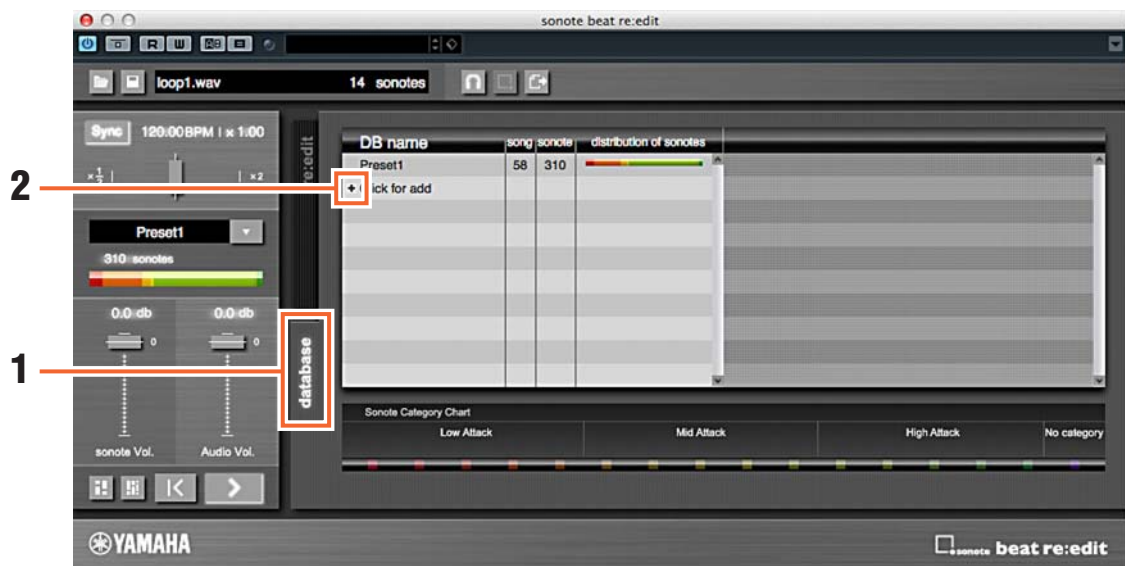
Using the Random buttons

- In addition to selecting and replacing one sonote at a time, you can randomly change all selected sonotes at the same time using the random buttons, (small) ❸ and (large) ❹. Try randomly replacing the sonote parts by clicking on these buttons, repeatedly if you want, until you come upon a combination you like.
- The Random button (small) changes among the sonotes within a single category. You can change the nuance without changing the basic structure of the rhythm. The Random button (large) randomly changes not only the sonote but also the category, sometimes making dramatic and dynamic changes to the basic rhythm.

Tutorial 2: Creating an original database

Similar sonotes which are in “standby” during re-edit can be called out of the currently selected database. In addition to using the preset database, you can create and use your own unique, original database — compiled from your favorite one-shot sounds, phrases and your own songs, etc.

- 1 Click the database tab (in the Window Select tabs) to call up the database window.**



- 2 Add a new database.**

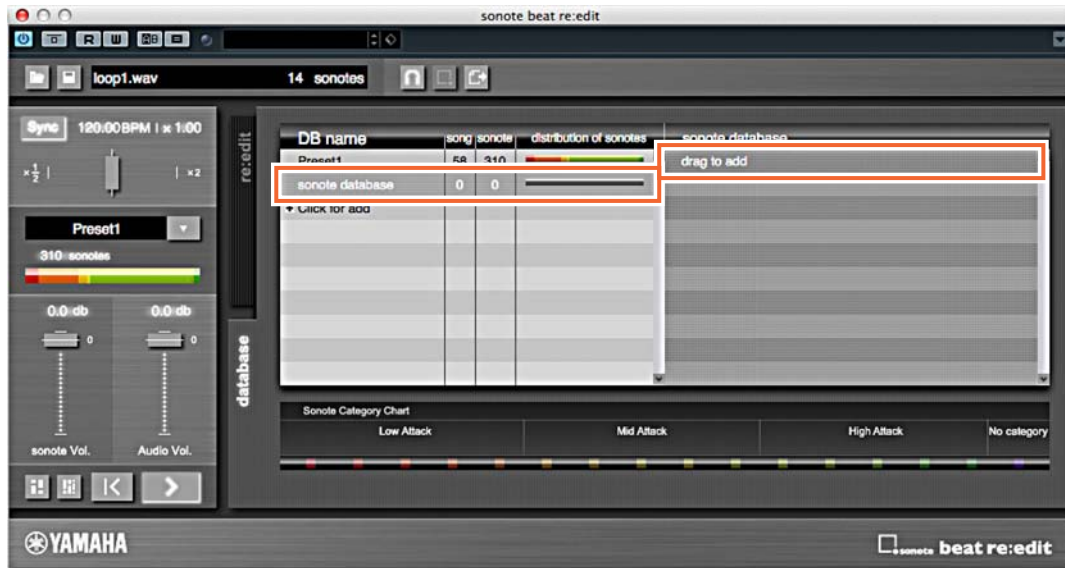
Click “+” next to “Click for add,” which is the lowest entry in the database list.

- 3 Enter a name for the new added database.**

In the example above, enter “sonote database” as the database name then press the ENTER key to actually create the database.

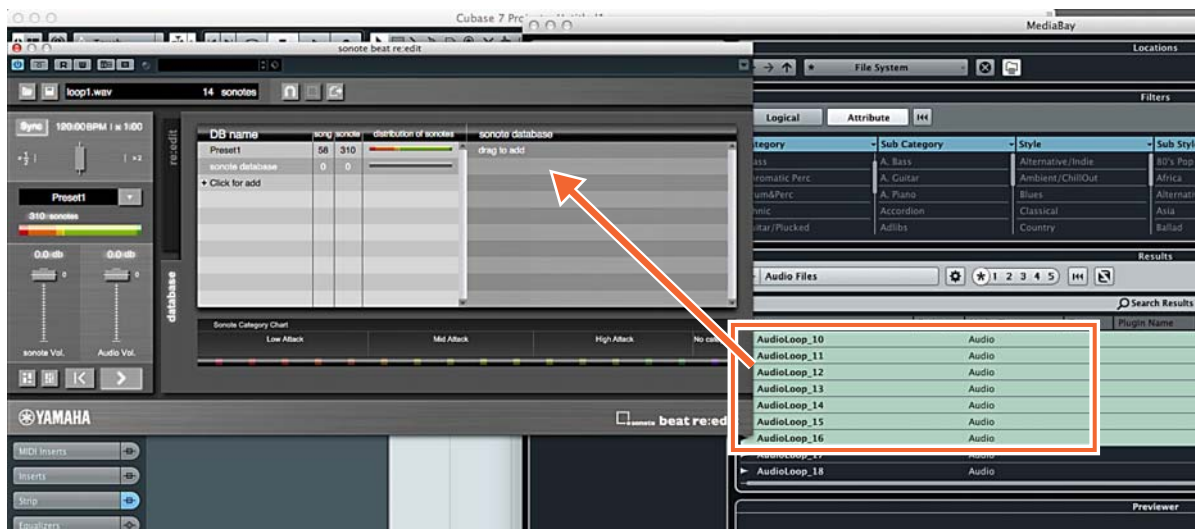
4 Click the new database name.

The indication “drag to add” appears in the audio file list.



5 Drag the desired audio data on the Media Bay or in a folder, then drop it to the “drag to add” indication.

The audio data will be added to the database.



6 After the database creation is completed, try using the newly added data to re:edit audio loops.

NOTE

- The audio data will be added to the database only when sonote segments are detected.
- If no sonote segments are detected, the corresponding audio data will not be added to the database.

Interface

File Control Section



1 File open button

This selects the audio file for loading to sonote beat re:edit

Audio data that has been loaded is handled as a loop. If the length of audio is four seconds or less, the entire file is loaded. If the length is greater than four seconds, a range which can be used as a loop is automatically cut from the beginning. After an audio file is loaded, sonotes are automatically detected, divided into categories according to characteristics, and then color-coded according to categories. A maximum of 24 sonotes can be detected in one audio file.

NOTE

- To load an audio file, you can also drag&drop an audio file from Media Bay or an Audio track, as well as using the File Open button.
- Audio formats which can be used on this application are compatible with mono or stereo audio formats supported by Cubase (the host).

2 File save button

This saves audio edited by sonote beat re:edit as a file.

3 File name and number of sonotes detected

This displays the names of audio files which have been loaded and the number of sonotes which have been detected from the audio.

4 Preview button

This determines whether or not changing the similar sonote/category/play mode will trigger the corresponding sonote sound during playback of the entire audio data. When set to on, the corresponding sonote sound will be triggered even during playback. When set to off, the corresponding sonote sound will be triggered only when playback is stopped.

5 Add sonote button

If fewer than 24 sonotes have been detected from the audio file which was loaded, you can add a sonote. If you drag and select a waveform part other than a sonote in the waveform display area, the sonote add button is activated. If you click this button, the selected waveform part is added as a sonote, and can be handled like a sonote.

NOTE

A section longer than one second cannot be selected. If the selected section is too short, you may be unable to add it as a sonote.

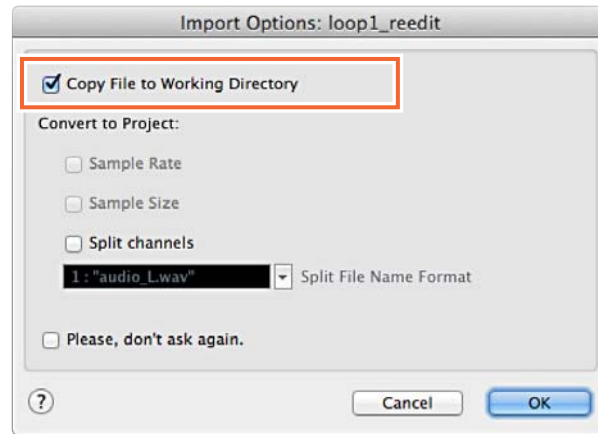
⑥ Export button

When this button is clicked, an icon appears in the Waveform display area. Dragging and dropping this button exports the current audio file entirely to an audio track or specific folder.

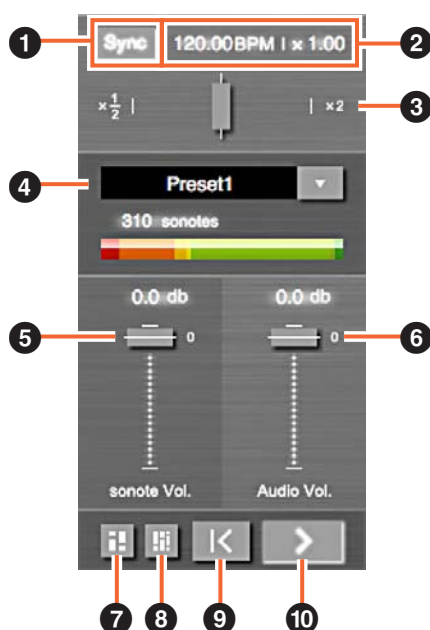
NOTE

The following dialog appears when dragging and dropping the Audio Export icon. Make sure to checkmark the “Copy File to Working Directory” checkbox, and click OK.

If not checked, exported data to the audio track cannot be handled correctly when the plug-in is removed.



Sync/Database/sonote Control Section



1 Sync button

This synchronizes playback with the host application (Cubase). When this is set to on, the play/pause and other transport functions are operated from the host application (Cubase).

2 BPM

If audio is loaded, the BPM (tempo) of the audio is automatically detected and displayed. If you want to revise the value of BPM which was automatically detected, you can input the desired values after turning off the Sync button 1.

NOTE

The usable BPM range for audio in sonote beat re:edit is 60 to 180. BPM outside the range are automatically adjusted by the synchronization function.

3 Speed slider

This changes the audio playback speed. The speed range is from 0.5 (half speed) to 2 (double speed).

4 Database selection

This is a drop-down menu used to select the database. Below the menu is a color bar, which shows the number of sonotes included in the database and the sonote category trends.

5 sonote volume slider

This adjusts the volume of the audio parts detected as sonotes.

⑥ Audio volume slider

This adjusts the volume of the audio parts not detected as sonotes.



⑤ and ⑥ are convenient for adjusting the volume difference between the sonote segments and other segments, when the volume of sonote segments in the database is generally low, for example.

⑦ Random button (small)

This lets you replace all sonote segments with similar ones randomly in one shot. The category of each sonote is not changed.

⑧ Random button (large)

This lets you replace all sonote segments with similar ones randomly in one shot. Also, the category of each sonote is will be changed randomly.

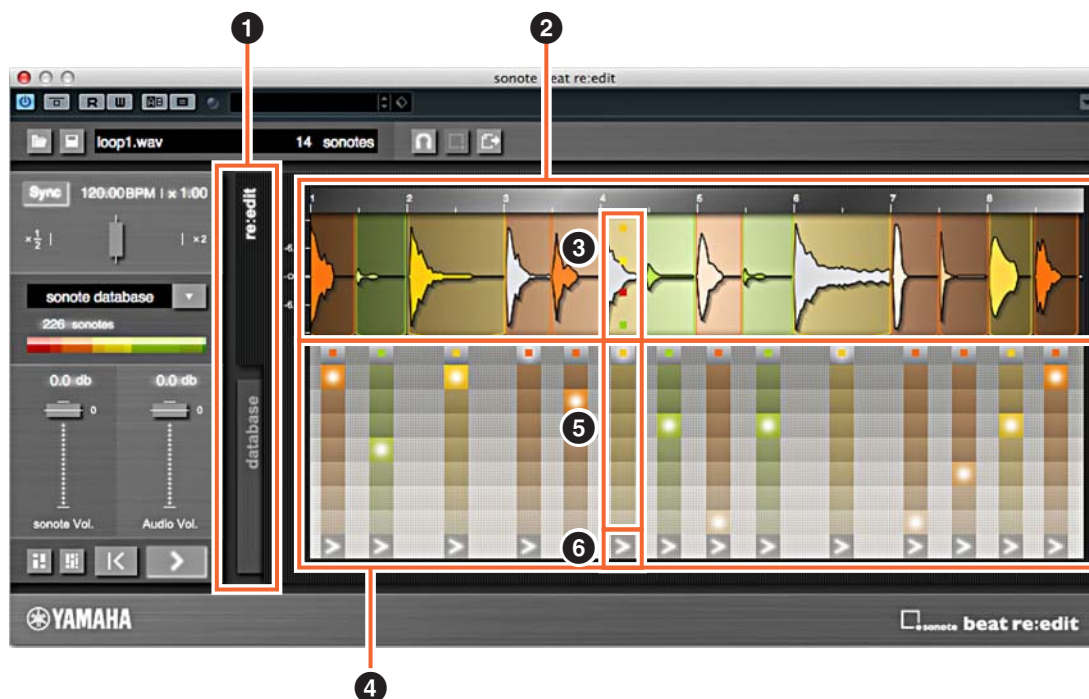
⑨ Rewind button

This returns the playback position of the current audio file to the top. This is available only when the Sync button ① is set to off.

⑩ Play button

This starts/pauses playback of the current audio file. This is available only when the Sync button ① is set to off. When the Sync button ① is set to on, this button switches to playback standby. When it is set to on and playback is started on the host, playback syncs with the host. When set to off, playback cannot be started on the host.

re:edit window



❶ Window selector

Switches between the re:edit window and the database window.

❷ Waveform display area

Indicates the entire waveform of the current audio file. Each sonote segment is registered to a different category, and is shown in this area in a color unique to the corresponding category.

❸ sonote category selection buttons

This “sonote” area features four different Category buttons which are shown only while the mouse cursor is located on the area. Click one of the small square buttons to change the category to which similar sonotes (shown in columns below this area) belong.

❹ sonote re:edit area

The operation area for ❺ and ❻. Each vertical line corresponds to each sonote segment.

❺ Similar sonote selection button

Indicates the eight buttons for selecting eight different sonote segments. Click one of these buttons to replace the current sonote with the corresponding one. The top button corresponds to the original sonote of the current audio file while the other buttons (up to seven buttons) correspond to similar sonote segments detected from the category selected in ❸. The higher the location, the higher the similarity to the original sonote.

NOTE

If not enough similar sonote segments are included in the database, fewer than seven buttons may be shown here.

⑥ Play mode selection button

This selects the play mode — play, reverse play, or mute — for the corresponding sonote. Clicking this toggles among the play modes, and automatically plays back so you can hear it.

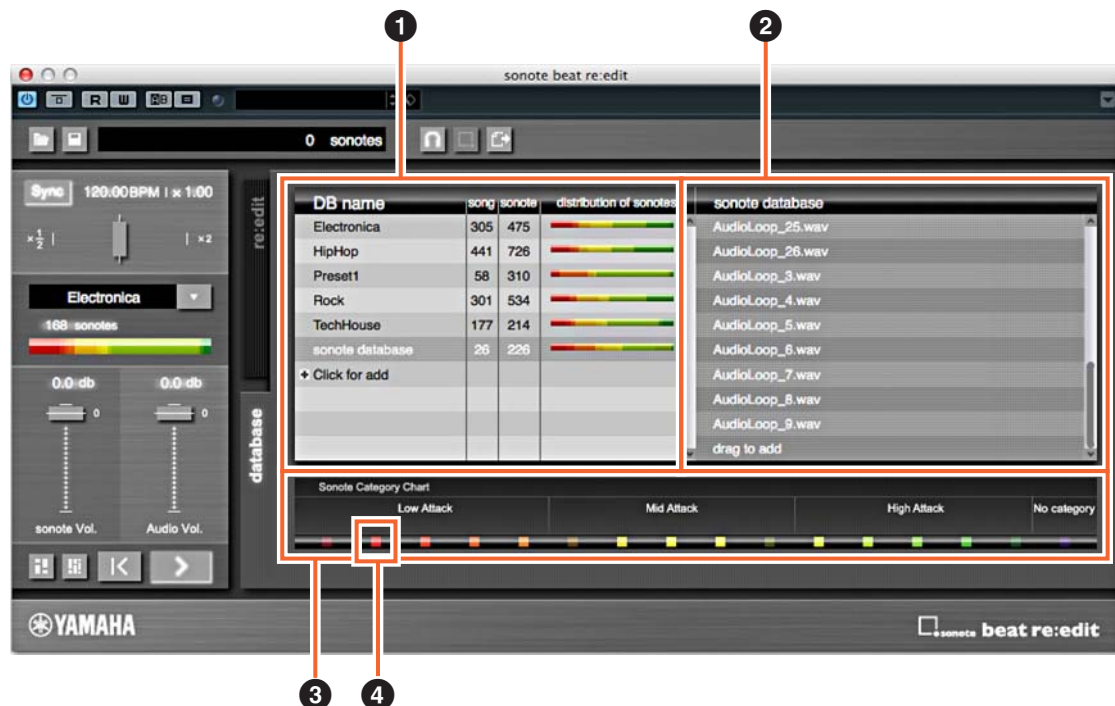
Exporting a sonote as an audio file

By dragging and dropping a similar sonote selection button, you can save the corresponding sonote to an audio track or a certain folder as an audio file.

NOTE

- The Play mode setting is not be applied to the exported one shot audio file.
- When you drag a similar sonote selection button, the VST window goes out of focus. To restore the focus, click again within the VST window.

Database window



1 Database list

Each line shows the database name, the number of audio files contained in the database, the number of sonote segments, and the color bar indicating the trends of the categories to which the sonote segments belong.

2 Audio file list

Indicates the audio files contained in the current database.

3 sonote category chart

Indicates the sonote categories in the selected database.

When the selected database contains sonote, the categories are displayed in bright colors. When the selected database does not contain any sonotes, the categories are displayed in dark colors.

4 Category preview button

By clicking one of the small square buttons in the 3 sonote category chart, you can listen to the typical sonote contained in the corresponding category in the selected database.

■ Adding a new database

At the bottom of the database list, “+ Click for add” is shown. By clicking this “+” then entering the name, you can add a new database. You can register various audio files to a new created database by dragging and dropping them from Media Bay or a specific folder.

* For detailed instructions, see Tutorial 2 ([page 6](#)).



NOTE

- The preset database cannot be deleted.
- You may not be able to add an audio file of large size, depending on the memory size of your computer.
- Depending on how much computer resources are being used by the host Cubase and other applications, the length and time of an audio file which can be analyzed may vary. When adding an audio file to the database, it is recommended that you decrease the load on your computer's resources.

■ Other database management functions

Removing a user database

If you move the cursor over the database list area, a button with an [x] mark appears to the left of the database name. Click on this to remove the database.



Removing a file

If you move the cursor over the file name area, a button with an [x] mark appears to the left of the file name. Click on this to remove the file.



Changing the database name

If you click the database name and wait a little while, the name can be edited. To change the name, enter the desired database name and press the enter key.



Others

MIDI message control

By transmitting MIDI messages to sonote beat re:edit, you can control the functions listed below.

Function	MIDI message	Value	Descriptions
sonote playback	Note On	C0 - B1 (2 octaves)	The Note On message (C0 - B1) triggers the corresponding sonote of the current audio data. Each of note numbers (C0 - B1) is assigned to each sonote in sequence from the left.
sonote selection	Note On	C5 - B6 (2 octaves)	The Note On message (C5 - B6) selects the corresponding sonote of the current audio data. The selected sonote will be subject to change MIDI sonote similarity, sonote category, playback mode. Each of the note numbers (C5 - B6) is assigned to each sonote in sequence from the left.
Degree of sonote similarity	Control Change 016	0 – 7 (assigned sequentially to equally divided ranges within 0-127)	Equivalent to the Click operation of the Similar sonote selection button (page 12).
sonote category selection	Control Change 017	1 – 4 (assigned sequentially to equally divided ranges within 0-127)	Equivalent to the Click operation of the sonote category selection buttons (page 12).
Play mode selection	Control Change 018	Play, reverse play and mute (assigned sequentially to equally divided ranges within 0-127)	Equivalent to the Click operation of the Play mode selection button (page 13).
Play	Note On	C2	Equivalent to the Play button (page 11), which starts playback of the audio data. When Sync is set to on, this sets playback standby to on.
Pause	Note On	D2	Equivalent to the Play button (page 11), which pauses playback of the audio data. When Sync is set to on, this sets playback standby to off.

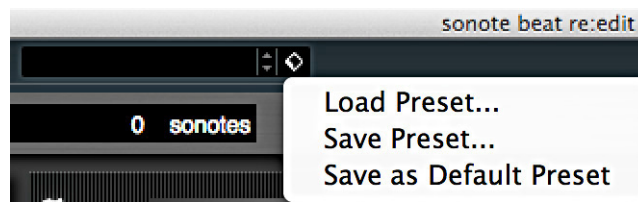
Function	MIDI message	Value	Descriptions
Preview	Note On	G2	Equivalent to the Preview button (page 8). The MIDI message toggles the on/off status.
Random (small)	Note On	A2	Equivalent to the Random button (small) (page 11).
Random (large)	Note On	A#2	Equivalent to the Random button (large) (page 11).
Sync	Note On	B2	Equivalent to the Sync button (page 10). The MIDI message toggles the on/off status.
BPM	Control Change 009	60 – 180 (assigned sequentially to equally divided ranges within 0-127).	Equivalent to the BPM (page 10). This is available only when the Sync button (page 10) is set to off.
Database selection	Control Change 012	Existing databases are assigned sequentially to equally divided ranges within 0-127; differs depending on the number of databases.	Equivalent to the Database selection (page 10).
Play speed	Control Change 013	0.5 – 2 (assigned sequentially to equally divided ranges within 0-127)	Equivalent to the Speed slider (page 10).
sonote volume	Control Change 014	0dB for value of 64	Equivalent to the sonote volume slider (page 10).
Audio volume	Control Change 015	0dB for value of 64	Equivalent to the Audio volume slider (page 11).

NOTE

- Note that realtime operations cannot be done regarding operations other than sonote playback, Play and Pause. The response time to the MIDI message reception will differ depending on the environment of the computer.
- If the number of databases is large, a different database may be selected even when the same MIDI value is received.

VST Preset

You can store and load the edited data as a VST preset in Cubase.



NOTE

- When saving the edited data as a VST preset, also the similar sonote segments are saved. Since this may result in large data size, it may take a long time to save or load.
- When loading the data, the database status at the time the data was saved will be restored, even if the status was changed at the time of saving. In such a case, the database name is enclosed in brackets ([]).

Automation

Automation is applied to the following parameters.

- Play speed
- Database selection
- sonote volume
- Audio volume
- Sync on/off
- sonote similarity
- sonote category
- Play mode
- Play

NOTE

Note that realtime operations cannot be done regarding operations other than Play.

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