

V5.6.0

Reference Guide







































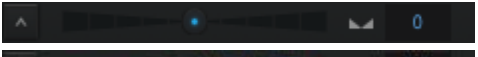

# VOCALOID™ 5


















## Editor



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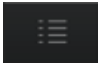

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



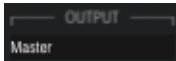











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# Precautions & Notes

- User Licensing
  - This product can only be used by customers who have agreed to the End User License Agreement.
  - Please be sure to read and agree the License Agreement before installing this product.
- Operating Environment
  - The operating environment for this product is described on the official website of the product, so be sure to review it before use.
  - Please note that we cannot guarantee proper operation if used in any other operating environment. Also, even when used in the operating environment described, it may not be possible to use it due to differences, such as the design specifications and/or usage environments peculiar to various other software and hardware in the environment.
  - Not all operations are guaranteed to work, even in an environment that meets the described conditions.
  - Please be advised that we cannot accept any returns due to problems arising from the environment etc. Please be aware of this fact.
- Support
  - Direct inquiries about this product to our dedicated support center.
  - Yamaha Products VOCALOID Customer Center (<https://www.vocaloid.com/en/support/>)
- Manual
  - This manual provides a guide on how to use VOCALOID5.

\*) Images used in this manual are based on macOS 10.13.x and Windows 10.

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# Names and Functions

## Common

### **Default Input Value of Parameter**

The value can be reset to the default value by clicking on the fader and knob + Command (Mac) or Ctrl (Win).

### **Copy Event (note, part, breakpoint)**

"Copy" can be selected by right-clicking to open the context menu.

### **Select Multiple Events**

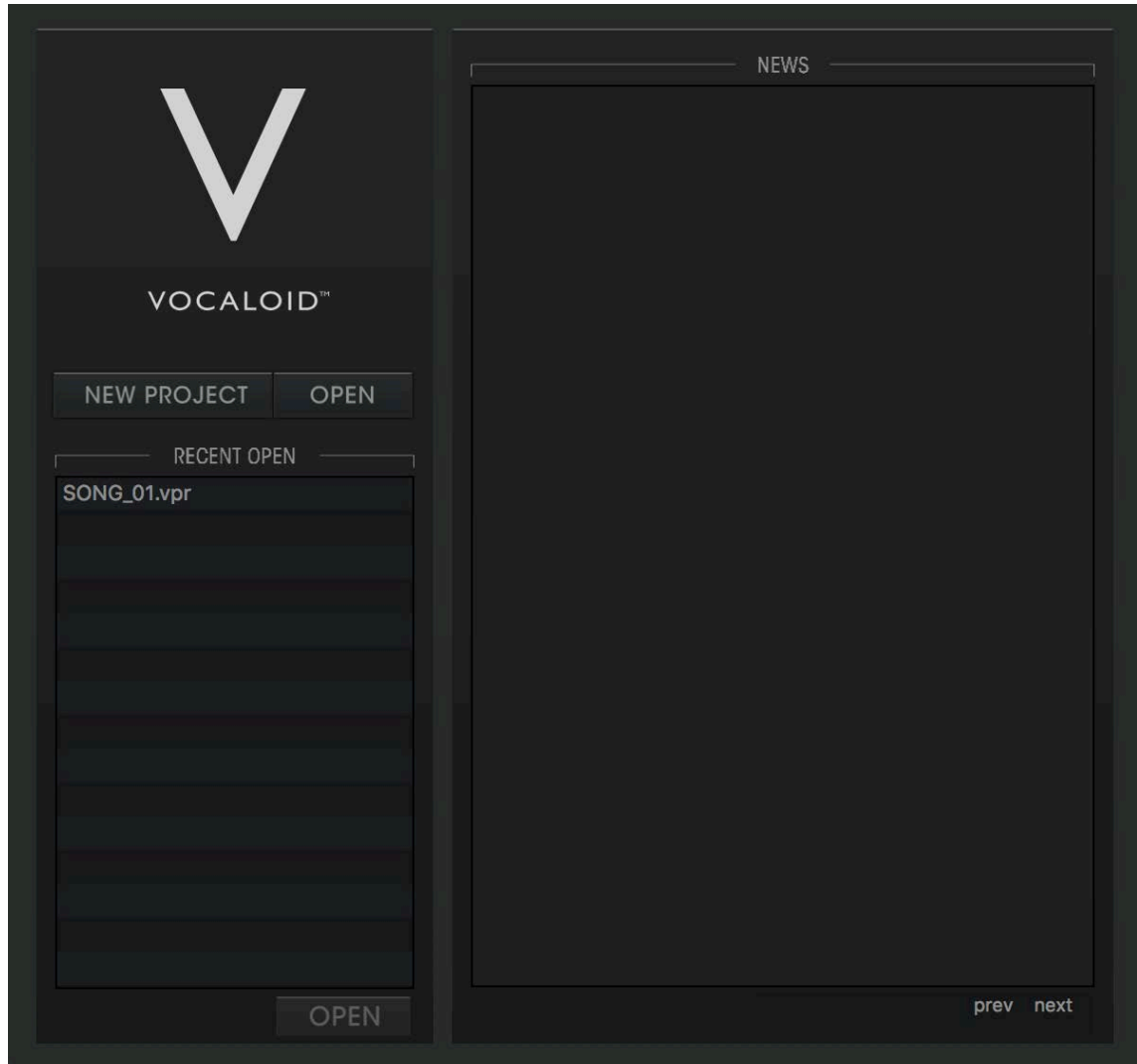
Multiple events can be selected by clicking them while holding down the Command (Mac) or Ctrl (Win) key.

### **Select Range of Events**

A range of events can be selected by selecting the rectangle.

## Function Screen of VOCALOID5 Editor

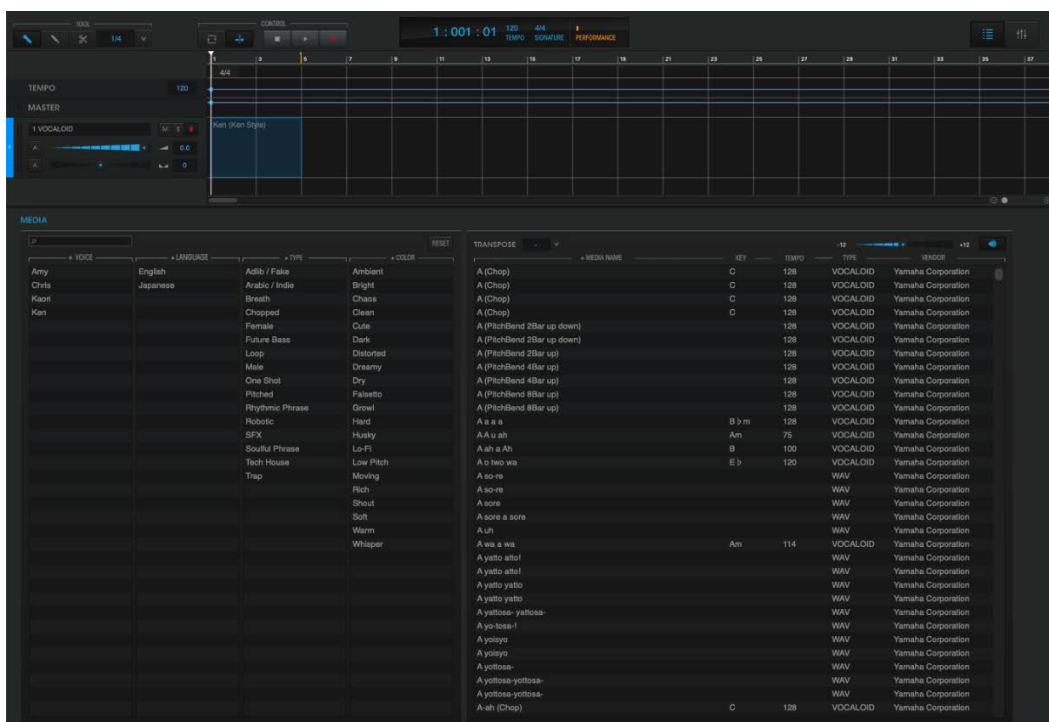
Start-up screen.



### NEW PROJECT

Creates a new VOCALOID5 sequence file.

The media screen appears after start-up.



## OPEN

Opens files created and files created with other sequencer software in the VOCALOID5 Editor.

Open the sequence file to display the following screen.

If a previously created VOCALOID 5 (.vpr) file is open, the media screen will not appear.

## RECENT OPEN

Displays a list of the files created previously. After selecting a file, the file can be opened by pressing the OPEN button at the bottom right.

## NEWS

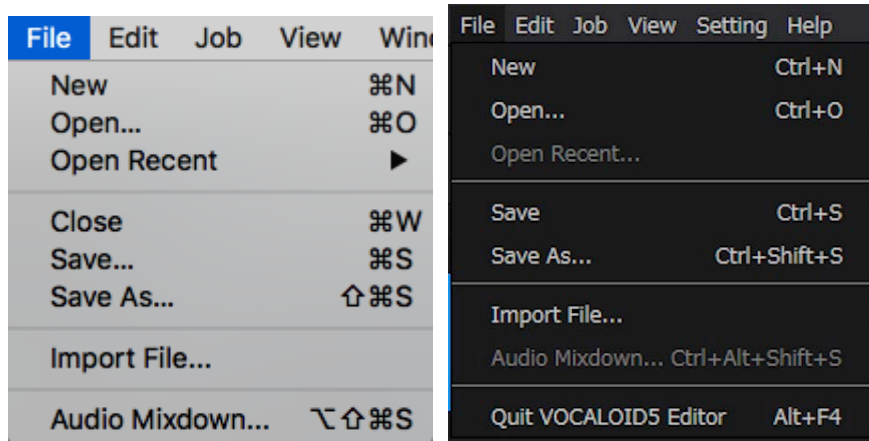
Displays the latest information on VOCALOID. You can navigate through the content displayed using the Prev/Next buttons.

## Menu Bar

The menu that can be operated with the VOCALOID5 Editor is divided into different items.

### File

Opens the menu regarding basic operations for VOCALOID5 files (files handled by the VOCALOID5 Editor).



#### **New [Command]+[N] (Mac) / [Ctrl]+[N] (Win)**

Creates a new VOCALOID5 sequence file.

#### **Open [Command]+[O] (Mac) / [Ctrl]+[O] (Win)**

Opens files created and files created with other sequencer software in the VOCALOID5 Editor.

The files that can be opened by the VOCALOID5 Editor are as follows.

- VOCALOID5 file (.vpr)
- VOCALOID4 file (.vsqx) \*1
- VOCALOID3 file (.vsqx) \*1

\*1 Only VOCALOID tracks can be read. Audio tracks will not be read.

#### **Open Recent**

The file name used (opened) most recently is displayed.

The file can be opened by clicking the file name displayed.

#### **Close [Command]+[W] (Mac)**

Closes the opened VOCALOID5 sequence file.

#### **Save [Command]+[S] (Mac) / [Ctrl]+[S] (Win)**

Saves the opened VOCALOID5 sequence file.

## **Save As [Command]+[Shift]+[S] (Mac) / [Ctrl]+[Shift]+[S] (Win)**

Saves the file under a new name.

Specify the storage location and name of the file in the dialog box which appears and click [Save].

## **Import File**

Imports another sequence file (created with VOCALOID5/4/3) or SMF (Standard MIDI File) into the currently opened VOCALOID5 sequence file to combine them.

- Imports all the tracks and parts in the file.
- Tracks and parts cannot be selected individually.
- "Import tempo and time sig?" If such a dialog box appears, select "Yes" to delete the tempo and time sig of the current project and overwrite it with the tempo and time sig inside the imported file.

## **Audio Mixdown [Command]+[Option]+[Shift]+[S] (Mac) / [Ctrl]+[Alt]+[Shift]+[S] (Win)**

Exports the opened sequence file as an audio file in the standard WAV format (.wav).

### **Track Section**

- If "Master Track" is selected, all the volume and pan automation, master volume automation, part effect, track effect and master effect settings of each track are also exported as an applied condition.
- If "Multi Channel" is selected, check the track to be exported first. The file name of each track will be [Title]\_[Track No.]\_[Track Name]. Although the part effect and track effect are applied, the master effect is exported as a bypassed condition. In addition, although the volume and pan automation setting of each track are applied, the master volume automation settings are not applied.

## **Audio Engine Output**

- The sampling frequency for internal VOCALOID operations is fixed at 44100 Hz while the quantization bit number is fixed at 16 bits.
- All effects can be bypassed and exported by selecting Bypass effect plugins.

## **Quit VOCALOID5 Editor [Command]+[Q] (Mac) / [Alt]+[F4] (Win)**

Terminates the VOCALOID5 Editor.

A confirmation dialog box with the message "Do you want to save this sequence?" appears if the sequence file opened is edited.

## Edit

Opens the Edit menu.

Edit	Job	View	Window	Edit	Job	View	Setting	Help
Undo			⌘ Z	Undo				Ctrl+Z
Redo			⇧ ⌘ Z	Redo				Ctrl+Y
Cut			⌘ X	Cut				Ctrl+X
Copy			⌘ C	Copy				Ctrl+C
Paste			⌘ V	Paste				Ctrl+V
Delete				Delete				Del
Duplicate			D	Duplicate				D
Select All			⌘ A	Select All				Ctrl+A
Add VOCALOID Track				Add VOCALOID Track				
Add Audio Track				Add Audio Track				
Join VOCALOID Parts			⌘ J	Join VOCALOID Parts				Ctrl+J

- There are also menus that can be opened by right clicking inside the respective areas and some functions that can be operated from shortcut keys.

### Undo **[Command]+[Z] (Mac) / [Ctrl]+[Z] (Win)**

Returns the last edit to the previous state. There is no limit on the number of times that Undo can be used.

### Redo **[Command]+[Y] (Mac) / [Ctrl]+[Y] (Win)**

Function to return the state carried out with "Undo" to the previous state.

After "Undo" is executed once, executing "Redo" will return the state to the previous state before "Undo" was used.

Like the "Undo" function, there is also no limit on the number of times that Redo can be used.

### Cut **[Command]+[X] (Mac) / [Ctrl]+[X] (Win)**

Cuts the selected track, part, note, or parameter.

### Copy **[Command]+[C] (Mac) / [Ctrl]+[C] (Win)**

Copies the selected track, part, note, or parameter.

### Paste **[Command]+[V] (Mac) / [Ctrl]+[V] (Win)**

Pastes the track, part, note or parameter selected using "Cut", "Copy", etc.

**Delete [Delete] (Mac/Win)**

Deletes the currently selected track, part, note, or parameter.

**Duplicate [D] (Mac/Win)**

The currently selected parts or notes will be duplicated immediately following the corresponding original event. Any selected track automation and control parameters will be simultaneously duplicated. The duplication position is determined based on the event length.

**Select All [Command]+[A] (Mac) / [Ctrl]+[A] (Win)**

Selects the data of all the notes and control parameters currently being edited inside the musical editor window.

**Add VOCALOID Track**

A new VOCALOID track is created under the selected track.

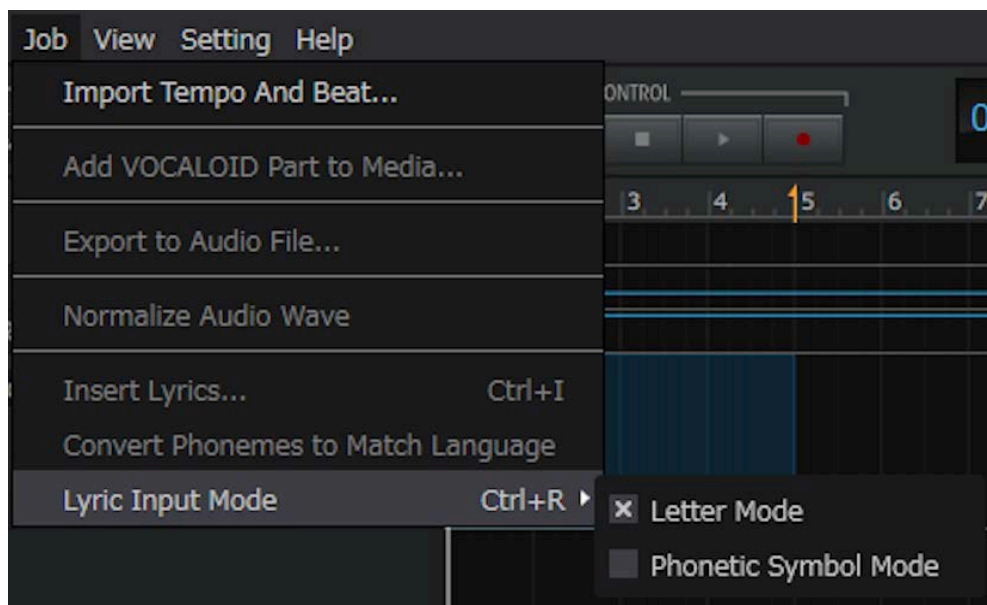
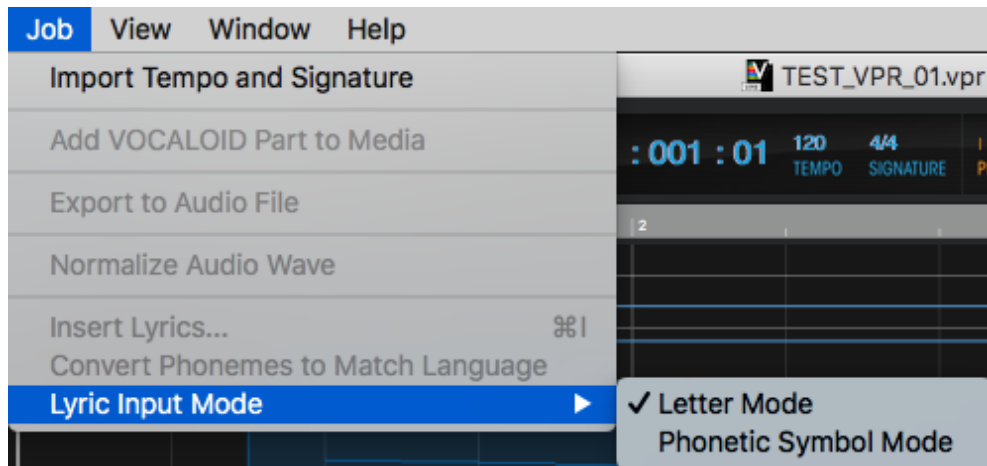
**Add Audio Track**

A new audio track is created under the selected track.

**Join VOCALOID Parts [Command]+[J] (Mac) / [Ctrl]+[J] (Win)**

Combines two continuous VOCALOID parts into a single part.

## Job



### Import Tempo and Beat

Imports the tempo and beat from the selected MIDI file into a project. The tempo and beat in the current project will be overwritten.

### Add VOCALOID Part to Media

Adds a VOCALOID part as a MIDI phrase (media). Multiple parts cannot be added at the same time.

### Export to Audio File

Exports a VOCALOID part to an audio file.

### Normalize Audio Wave

Normalizes the highest level of an audio part to 0dB FS. Multiple audio parts can be selected.

### **Insert Lyrics [Command]+[I] (Mac) / [Ctrl]+[I] (Win)**

Inserts lyrics into multiple notes together. The lyrics will be inserted using the selected note as a starting point.

### **Convert Phonemes to Match Language**

Use "Import" in the "File" menu to convert the lyrics from an imported MIDI file into data that can be vocalized by the VOCALOID5 Editor.

For example, even if the voice language is changed, the phonetic symbol of each note will not be converted automatically. Use this function to convert the phonetic symbol.

### **Lyric Input Mode [Command]+[R] (Mac) / [Ctrl]+[R] (Win)**

Switches between the following two modes.

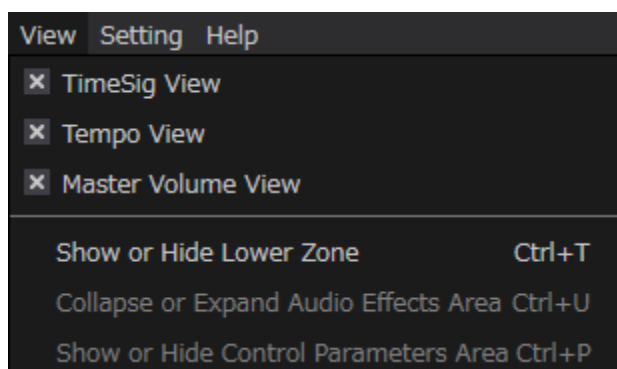
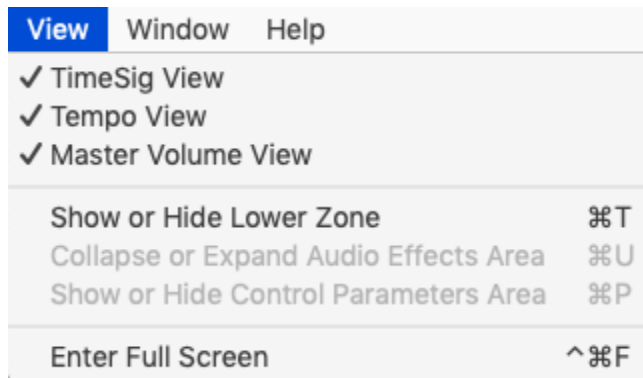
#### **Letter Mode**

Double click the lyrics under the note and enter the lyrics.

#### **Phonetic Symbols Mode**

Double click the lyrics under a note to directly edit the phonetic symbol in a text box.

## View



### TimeSig View

Displays the time signature in the ruler at the top of the track editor screen.

### Tempo View

Displays the tempo track in the track editor screen.

### Master Volume View

Displays the master volume track in the track editor screen.

### Show or Hide Lower Zone [F4], [Command]+[T] (Mac) / [F4], [Ctrl]+[T] (Win)

Show or hide the lower zone.

If the lower zone is hidden, the following lower zone which appeared previously is displayed.

- Musical editor screen
- Voice selection screen
- Style selection screen
- Style customize screen
- Audio part edit screen
- Media screen
- Mixer screen

**Collapse or Expand Audio Effects Area [Command]+[U] (Mac) / [Ctrl]+[U] (Win)**

Collapse or expand the audio effects area.

**Show or Hide Control Parameters Area [Command]+[P] (Mac) / [Ctrl]+[P] (Win)**

Show or hide the control parameters area

**Enter Full Screen [Command]+[Ctrl]+[F] (Mac)**

Display the editor screen in full screen.

**Window (Mac)**

**Minimize [Command]+[M] (Mac)**

Minimize the front window to the dock.

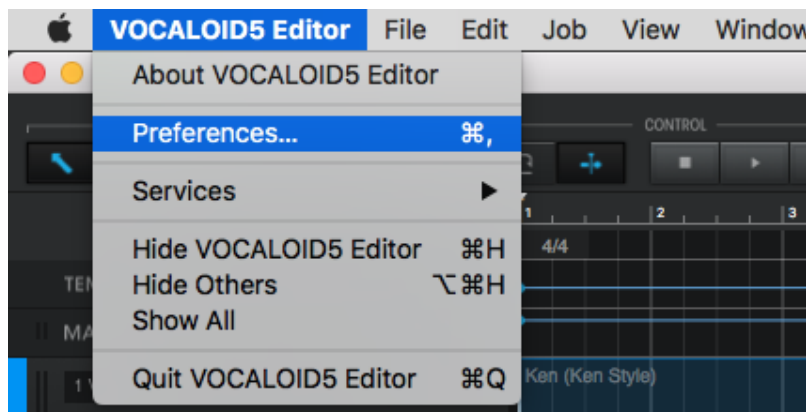
**Zoom**

Maximize the front windows. Or return to the original size

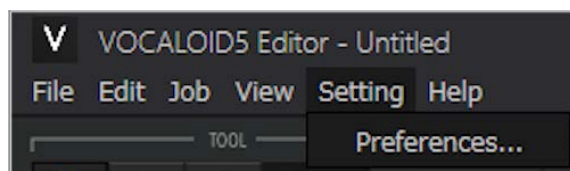
## Preference [Command]+[,] (Mac)

Opens the Setting menu.

In the Mac version, this is found under the "VOCALOID5 Editor" of the menu bar.



In the Windows version, it is found under the "Setting" of the menu bar.



There are three tabs (Audio, View, Setting) in the Preference window, allowing the respective items to be set.

### Audio \*1

- Audio Device: Selects the audio device.
- Stereo Out L: Selects the output destination of the Lch.
- Stereo Out R: Selects the output destination of the Rch.
- Buffer Size: Selects the buffer size.
- Sample Rate: Selects the sampling frequency
- MIDI Device: Displays the MIDI device.

\*1 This function is not available in the VST/AU version.

### View

- VOCALOID Track Color: Selects the VOCALOID track color from 16 colors.
- Audio Track Color: Selects the AUDIO track color from 16 colors.
- Measure Offset: Sets the starting bar number.

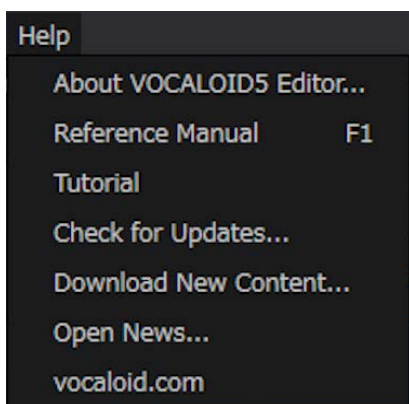
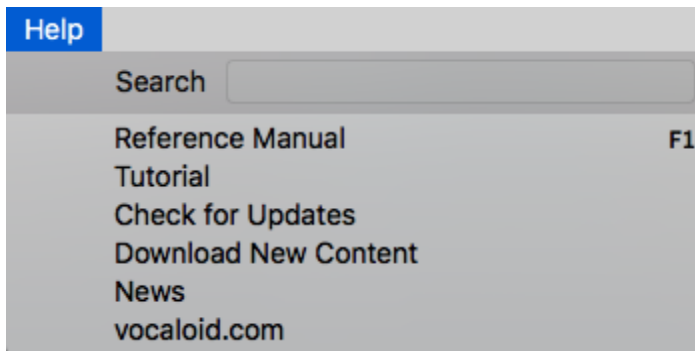
### Setting

- Default Voice: Selects the Voice to set when a part is created in a new VOCALOID track.

- Check for New Content upon Launch: Checks for the content updates when the program launches if checked.
- Check for Editor Updates upon Launch: Check for the updates when the program launches if checked.
- Timeout Wait Time (sec): Check through the Internet whether new update data has been released when starting the VOCALOID5 Editor. Set the maximum wait time. (Initial setting: 3 seconds)
- Return to Start Position on Stop\*2: When this option is enabled, the song position returns to the position at which the song starts playing when playback is stopped.  
\*2 This function is not available in the VST/AU Edition.

## Help

Opens the Help menu.



## Search (Mac)

Enter the menu item to search for first before placing the mouse pointer on top of the results for the menu item.

## About VOCALOID5 Editor (Win)

A screen containing a description of the system version of the VOCALOID5 Editor opens.



For the Mac version, this can be selected from the menu bar "VOCALOID5 Editor".

### **Reference Manual [F1]**

Opens the reference manual of the VOCALOID5 Editor in a web browser.

### **Tutorial**

Opens a tutorial of the VOCALOID5 Editor in a web browser.

### **Check for Updates**

Checks whether updated data of the new version has been released.

You need to be connected to the Internet to check for updates.

### **Download New Content**

Downloads newly distributed content.

### **News**

The latest information regarding VOCALOID is displayed.

### **vocaloid.com**

Opens the "VOCALOID™ Official Website" in a web browser.

# Track Editor

## Track Editor Tools

### **Arrow [Command]+[1] (Mac) / [Ctrl]+[1] (Win)**

This is used mainly for selecting and editing operations.

Multiple selection is also possible by combining (click while pressing) the [Command] key (Mac), [Ctrl] key (Win) etc. on the computer keyboard.

- Even when the arrow tool is selected, it will change to the pencil tool when the [Shift] key is pressed.

### **Pencil [Command]+[2] (Mac) / [Ctrl]+[2] (Win)**

This is used mainly to input a new part or volume/panpot automation and to edit the tempo or signature etc.

- The pencil tool changes automatically to the arrow tool when you move to the major ruler, menu bar or tool bar.

### **Scissors [Command]+[3] (Mac) / [Ctrl]+[3] (Win)**

Divides a part.



### **Quantize**

Automatically corrects the timing of the part input position to the value (except OFF) selected from the pull-down display list. The beginning of the part entered and moved becomes the line position of the setting value.

- Quantize can be turned OFF temporarily by operating the mouse while pressing the [Command] key (Mac) or [Ctrl] key (Win).

## Track Editor Controls

### **Repeat [C]**

Plays the section between the start marker  and end marker  inside the track repeatedly. Press Stop  to stop playing.

### **Auto Scroll [F]**

Switches the auto-scroll ON/OFF.

- When auto-scroll is ON:
  - The playback position can be checked constantly as the editor screen will follow the song position.
- When auto-scroll is OFF:
  - The screen does not follow the song position moving to the right during playback. The movement of the song position in front disappears from the edge of the screen.



### Stop / Go to Zero [Space]

Stops playback.

Return to the start by double clicking this button.



### Play [Space]

Starts playback.



### Record

Records the input MIDI events. A new part is always created when recording commences.

In addition, a piano sound is output instead of a VOCALOID sound when recording.

- Recording starts when this is pressed during playback. Recording ends when this is pressed again, returning to the playback mode.



### Time Display [/], [Num /]

Displays the current song position, tempo, and signature at the current position.



### Performance Meter

Shows the loading status of the computer.



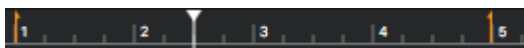
### Media [F5]

Press this button at the top right of the editor screen to open the media screen.





### Mixer [F3]

Press this button at the top right of the editor screen to open the mixer screen.



### Ruler

#### Set start or end marker to song position

The range to be played back repeatedly can be set by setting the start marker  at the start position and the end marker  at the end position.

The respective marker displayed on the major ruler can be moved by dragging and sliding it along any time axis (interval set in Quantize).

The start marker is always placed in front of the end marker.

When the position of the start marker or end marker is changed, the repeat mode turns ON automatically and the belt color of the repeat range changes.

#### **Signature Track**

The signature of the current song position appears.

The signature information can be entered using the "Pencil Tool" and edited with the "Arrow Tool".

#### **Tempo Track**

Displays the tempo information. The tempo information can be entered using the "Pencil Tool" and edited with the "Arrow Tool".

#### **Master Volume Track**

Displays the master volume information. The volume information can be entered using the "Pencil Tool" and edited with the "Arrow Tool".

## Track View Header

### **Track Color**

Select the track color from 16 colors.

When a color is selected, the track header and part itself, and in the case of a VOCALOID part, the note will also change in color.

### **Track Name**

Sets the track name.

### **Solo**

Outputs only a random track.

### **Mute**

Mutes the output from any track.

### **Recording**

Records the track. This is for VOCALOID tracks only.

### **Panpot Slider**

Moves the pan position of the track.

### **Volume Fader**

Operates the output level of the track.

## Track View

### **Zoom in/out**

**Horizontal zoom in [H]**

Adjusts the horizontal width of the track display.

**Horizontal zoom out [G]**

Adjusts the horizontal width of the track display.

**Horizontal zoom in/out wheel [Command]+[Shift]+[Wheel] (Mac) / [Ctrl]+[Shift]+[Wheel] (Win)**

Adjusts the horizontal width of the track display by pressing [Command]+[Shift]+[Wheel] (Mac)/[Ctrl]+[Shift]+[Wheel] (Win).

**Vertical zoom in [Shift]+[H]**

Adjusts the vertical width of the track display.

**Vertical zoom out [Shift]+[G]**

Adjusts the vertical width of the track display.

**Vertical zoom in/out wheel [Command]+[Wheel] (Mac) / [Ctrl]+[Wheel] (Win)**

Adjusts the vertical width of the track display by pressing [Command]+[Wheel] (Mac)/[Ctrl]+[Wheel] (Win).

**Audio part time stretch [Option] (Mac) / [Alt] (Win)+Drag**

Time stretch is possible by dragging the right end of the audio part +[Option] (Mac)/[Alt] (Win) key.

**■ Scroll Bar**

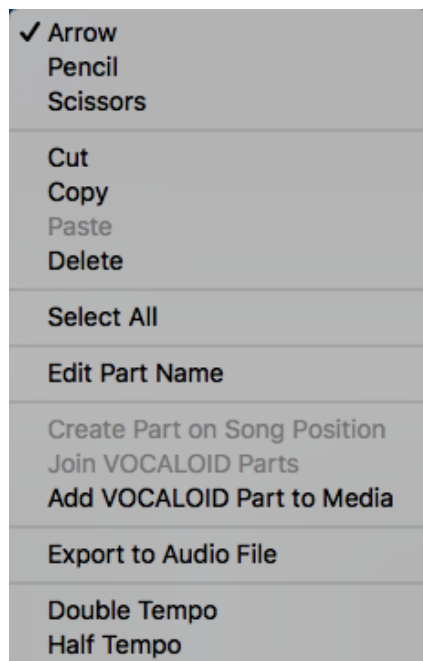
The horizontal display position of the track can be changed by dragging.

**Context Menu**

A tool can be changed, copied or pasted etc.

The functions differ for each screen.

The following screen is for VOCALOID Part.



### Add VOCALOID Part to Media

Adds a VOCALOID part to the media.

The following dialog screen will be displayed and other than the media name and tag (type/color), the key and tempo settings can be configured.

Media Name

Key None

Tempo

Type

- Adlib / Fake
- Breath
- Chopped
- Female
- Loop
- Male
- One Shot
- Pitched
- Rhythmic Phrase
- Robotic

Add New Type

Color

- Ambient
- Bright
- Chaos
- Clean
- Cute
- Dark
- Distorted
- Dreamy
- Dry
- Falsetto

Add New Color

Cancel OK

- Select "None" if you are not going to set a key.
- The tempo can be set up to the second decimal place.

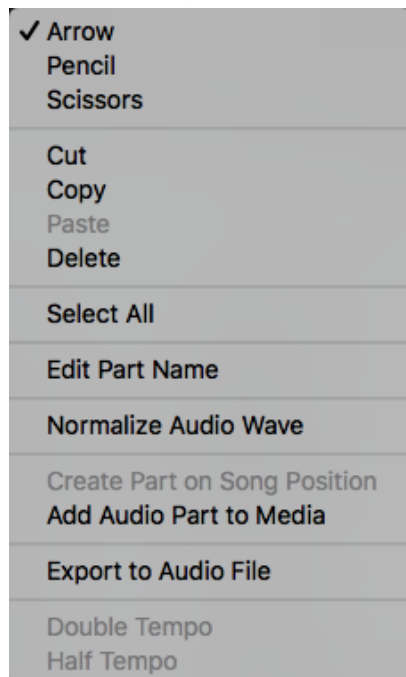
### Double Tempo

The part length of the selected VOCALOID part is halved. An effect that seems to double the tempo can be obtained.

### Half Tempo

The part length of the selected VOCALOID part is doubled. An effect that seems to halve the tempo can be obtained.

The following screen is for audio part.



### Add Audio Part to Media

Adds an audio part to the media as a WAV file.

The following dialog screen will be displayed and the media name and tag (type/color) settings can be configured.

A dialog box with a grey background. At the top, there is a label 'Media Name' followed by a white text input field with a blue border. Below this, there are two columns. The left column is titled 'Type' and contains a list of audio tags: Adlib / Fake, Breath, Chopped, Female, Loop, Male, One Shot, Pitched, Rhythmic Phrase, and Robotic. Below the list is a button labeled 'Add New Type'. The right column is titled 'Color' and contains a list of audio tags: Ambient, Bright, Chaos, Clean, Cute, Dark, Distorted, Dreamy, Dry, and Falsetto. Below the list is a button labeled 'Add New Color'. At the bottom right of the dialog are two buttons: 'Cancel' and 'OK'.

- The WAV file added has a 44.1 kHz/16 bit format.

## VOCALOID Part

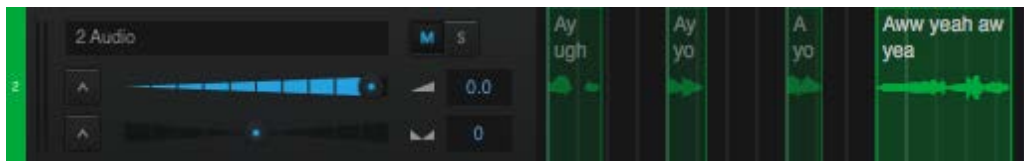
Part for keying in the MIDI data to compose the synthesized vocal.

Made it so that as parts are highlighted from left to right during the synthesis process, you can listen to the highlighted, synthesized parts. (Parts that are longer than ten minutes in length will be highlighted from bottom to top, and you can listen to those that are fully highlighted.)



## Audio Part

Displays the audio part. A thumbnail of the audio file appears inside the part.



A variety of audio files can be used. See below for the file format.

Number of bits	Fixed point: 8 bit, 16 bit, 24 bit Floating point: 32 bit
Sampling rate	44.1 kHz, 48 kHz, 96 kHz, 192 kHz
File format	WAV only

A file can be pasted by dragging and dropping it from Finder (macOS) or Explorer (Windows).

The pasted audio file is converted to the 44.1 kHz/16 bit format in accordance with the internal operating specifications of VOCALOID.

## Volume/Panpot Automation

Automation of the the volume and panpot position can be written. Click the arrow to the left of the corresponding slider to open an automation track.



# Musical Editor

## Musical Editor Tools



**Arrow [Command]+[1] (Mac) / [Ctrl]+[1] (Win)**

This is used when selecting or moving an event such as a note or the breakpoint of a control parameter etc.



**Pencil [Command]+[2] (Mac) / [Ctrl]+[2] (Win)**

This is used when entering a note or a control parameter.



**Scissors [Command]+[3] (Mac) / [Ctrl]+[3] (Win)**

A note can be divided.

If the pronunciation symbol protect was applied on the note before the division, the note after division will no longer be protected.

If Quantize is ON, the division position will follow Quantize.



**Quantize**

Quantizes the input note position or control parameter relative to the position, and sets Quantize for the note length.

- Quantize can be turned OFF temporarily by operating the mouse while pressing the [Command] key (Mac) or [Ctrl] key (Win).

## Musical Editor Controls



### Emotion Tool [Command]+[E] (Mac) / [Ctrl]+[E] (Win)

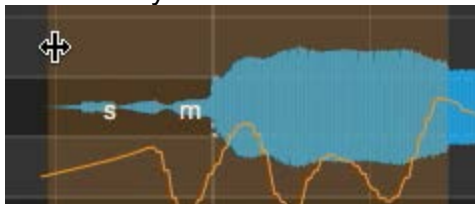
Button to display the emotion tool screen.

Adjusts the "Accent" on how each note is sung.

- If Singing Skill is applied and the Attack Release Effect is not applied to the note, the screen below can be displayed to adjust the "Accent" by clicking the orange belt section.

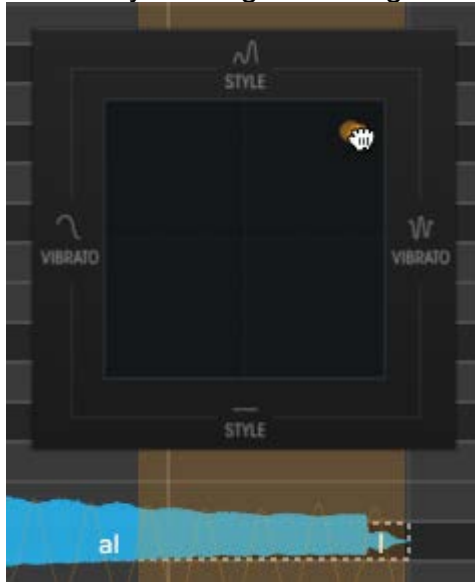


In addition, if the lyrics start from a consonant, the velocity control parameter\*1 can be adjusted by dragging the left end in the horizontally as shown in the screen below.

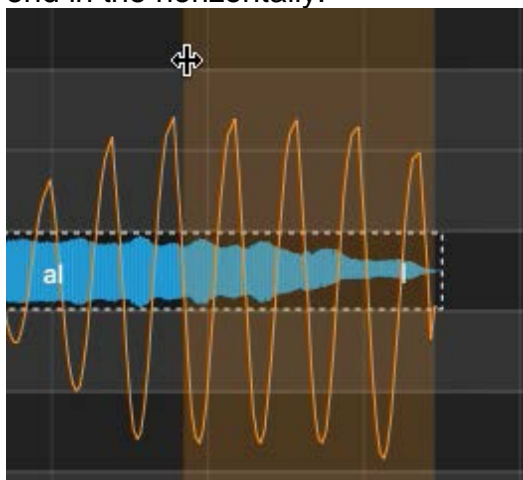


\*1 Adjusts the length of the consonant. Adjustment is not possible if the lyrics start from a vowel.

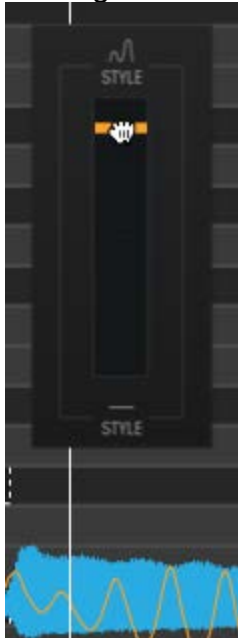
- If the Attack Release Effect Vibrato is applied to the note, the screen below can be displayed to adjust the period and amplitude of the vibrato by clicking the orange belt section.



The acting range of the vibrato can be adjusted by dragging the left end in the horizontally.



- If an effect other than the Attack Release Effect Vibrato is applied to the note, the screen below can be displayed to adjust the "Accent" by clicking the orange belt section.



## Temporary Switching of Emotion Tool

The emotion tool can be used temporarily by pressing the [Option] key (Mac) / [Alt] key (Win).



**Attack Release Effect [Command]+[D] (Mac) / [Ctrl]+[D] (Win)**

Toggle button to display the Attack Release Effect.

The Attack and Release Effect screen appears at the bottom of the screen.



**Breath [Command]+[B] (Mac) / [Ctrl]+[B] (Win)**

The breath to be inserted automatically in the style can be turned ON/OFF.



## Ruler

Displays the bar or beat.

## Set Start or End Marker to Song Position

The range to be played back repeatedly can be set by setting the start marker to the position you would like the repeated playback to commence and the end marker to the position that it will finish.

The respective marker displayed on the major ruler can be moved by dragging and sliding it along any time axis (the interval set in Quantize).

The start marker is always placed in front of the end marker.

When the position of the start marker or the end marker is changed, the repeat mode turns ON automatically and the belt color of the repeat range changes.

## Changing the Part Length

Click the thin belt section to turn the part into an active part.

The part length can be edited by extending or shortening the thin belt section.

## Piano Roll Header

### Confirmation Sound

An interval sounds when you press the keyboard on the left side of the piano roll screen.



## Piano Roll

### Zoom In/Out

You can zoom in or zoom out in the vertically or horizontally.

### Pitch Curve

The orange line displayed together on top of the note refers to the pitch curve of the synthesized sound.



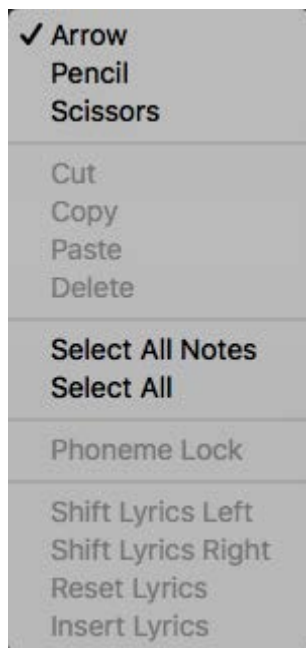
### Context Menu

A tool can be changed, copied or pasted etc.

The functions available with this differ for each screen.

If the context menu is opened due to an event such as a note or breakpoint, the event will be selected. However, note that the selected status of the previously selected event will be removed.

The following screen is for musical editor.



## Entering the Lyrics and Phonetic Symbols [Enter]\*1

Lyrics or phonetic symbols can be edited according to the 2 modes by double clicking the lyrics at the bottom of the note or pressing the [Enter] key with the note selected.

- Letter Mode: Mode to input the lyrics
  - Phonetic symbols are displayed in a light color.
- Phonetic Symbol Mode: Mode to input the phonetic symbols
  - Lyrics are displayed in a light color.

\*1 This function does not work if multiple notes are selected or if a note and control parameter are selected simultaneously.

## Display Phonetic Symbol Choices

If there are multiple phonetic symbol choices, the multiple choices are displayed in a pull-down menu under the text field.

If multiple terms demarcated by single-byte spaces are input, the phonetic symbol choices will not appear.

## Melisma Symbol

The vowel of the previous note can be extended to produce the sound by entering a hyphen [-].

## Extend Part by Entering Note in Position Where no Part Exists

The part nearest to the note on position of the created note or the pasted note can be extended.

### **Select the Next Note [Right]**

The next note can be selected by pressing the [Right] key.

### **Select the Previous Note [Left]**

The next note can be selected by pressing the [Left] key.

### **Expand the Note Selection Range by One to the Right [Shift]+[Right]**

The selection range of the note can be expanded by one to the right by pressing the [Shift] + [Right] keys.

### **Expand the Note Selection Range by One to the Left [Shift]+[Left]**

The selection range of the note can be expanded by one to the left by pressing the [Shift] + [Left] keys.

### **Raise Note by Half a Tone [Up]**

A note can be raised by half a tone by pressing the [Up] key.

### **Lower Note by Half a Tone [Down]**

A note can be lowered by half a tone by pressing the [Down] key.

### **Raise Note by One Octave [Shift]+[Up]**

A note can be raised by one octave by pressing the [Shift] + [Up] keys.

### **Lower Note by One Octave [Shift]+[Down]**

A note can be lowered by one octave by pressing the [Shift] + [Down] keys.

### **Input Lyrics of Next Note [Tab]**

When entering the lyrics, press the [Tab] key within the text field displayed to shift to the lyrics input state for the next note.

### **Input Lyrics of Previous Note [Shift]+[Tab]**

When entering the lyrics, press the [Shift] + [Tab] keys within the text field displayed to shift to the lyrics input state for the previous note.

## **Control Parameter**

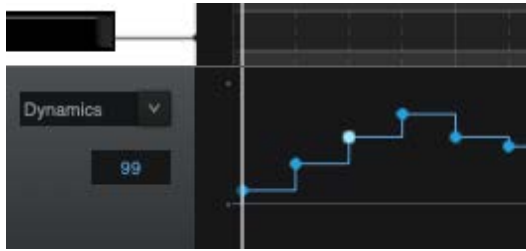
### **Show or Hide Control Parameters Area [Command]+[P] (Mac) / [Ctrl]+[P] (Win)**

When the musical editor screen is open, you can press the button at the bottom left of the screen to show/hide the control parameters area.

### **Entering the Control Parameter [Enter]\*1**

You can enter control parameters using the musical editor tool. The value of the selected control parameter will be displayed in a text box as shown

below. You can edit the selected control parameter by changing the value in the text box.



If multiple control parameters are selected, an asterisk "\*" will appear in the text box. The values of multiple selected control parameters can be changed all at once by entering the values.

\*1 You can enable the text box to be edited by pressing the [Enter] key with a control parameter selected but this does not work if a note has been selected simultaneously.

## Explanation of Each Control Parameter

### Velocity

Adjusts the length of the consonant.

When this value is increased, the consonant becomes shorted and when it is decreased, the consonant becomes longer.

### Dynamics

Adjusts the magnitude of the pronunciation.

### Pitch Bend

Adjusts the pitch of the pronunciation. Range of values is -8192 - +8191.

### Pitch Bend Sensitivity

Adjusts the sensitivity of the pitch bend.

If the value is set to 12 half-tones, and the pitch bend is set to a value from 0 to +8191, the pitch is raised by 12 half-tones = 1 octave.

### Exciter

Adjusts the tone of the voice.

### Growl

Adjusts the extent of the growl.

### Breathiness

Adjusts the amount of breath to mix in with the pronunciation, and the tone of the vowel.

### Air

Adjusts the amount of breath to mix in with the pronunciation.

### Mouth

Adjusts the distinctness (mouth opening) of the pronunciation.

### Character

Adjusts the formant of the pronunciation.

A feminine pronunciation is produced by raising this value.

A masculine pronunciation is produced by lowering this value.

### **Brightness**

Adjusts the brightness of the pronunciation.

### **Clearness**

Adjusts the clearness of the pronunciation.

### **Portamento Timing**

Adjusts the position where the pitch of the pronunciation changes.

## **Attack Release Effect**

### **Edit Lyrics**

Both lyrics and phonetic symbols can be edited.



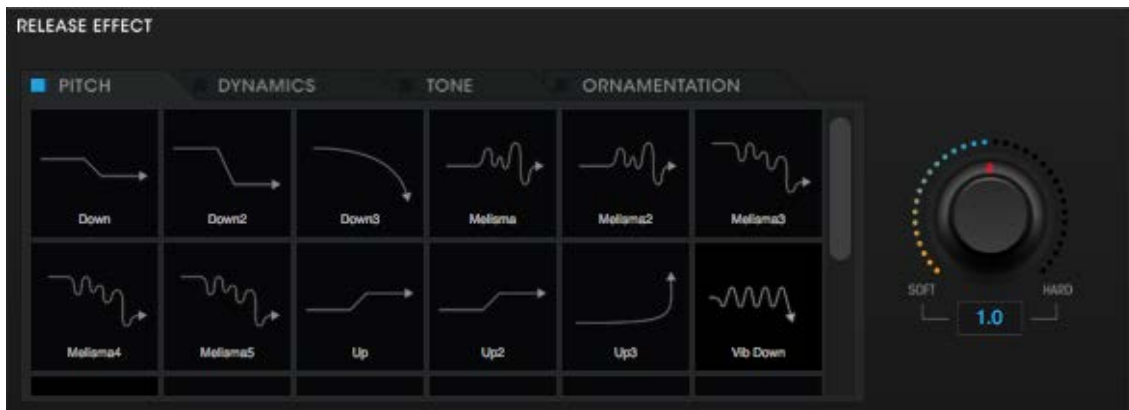
### **How to Apply/Cancel an Effect**

A note can be applied on an effect having an Attack Release attribute.

To apply an effect, click the icon.

To cancel an effect, click the icon again.





## Adjust Effect

The intensity of each effect can be adjusted by turning a knob.



## Category of Effect

There are several Attack Effects and Release Effects available which are grouped into 4 respective categories.

- PITCH
- DYNAMICS
- TONE
- ORNAMENTATION

## Attack Release Effects Designed for Specific Voice Banks

If there are special attack release effects designed for the selected Voice Bank, it will be displayed at the top of each tab.

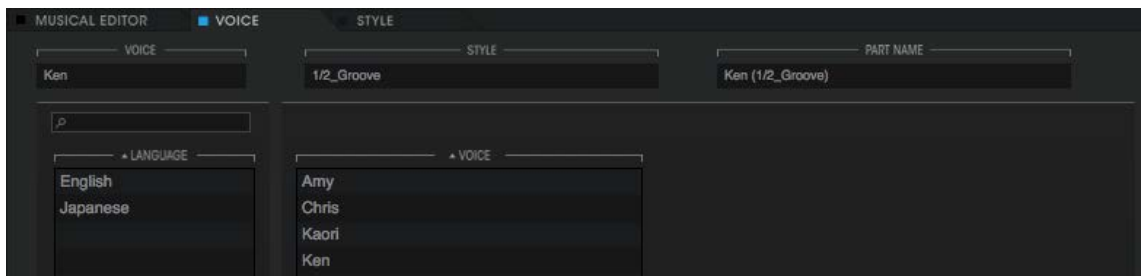
# Voice Selection

## Voice Setting Method

Voice can be selected for each VOCALOID part.

Press the [Voice] tab  with a VOCALOID part selected to open the voice selection screen.

The voice of multiple VOCALOID parts can be changed to the same voice simultaneously by opening the voice selection screen with multiple parts selected at the same time.



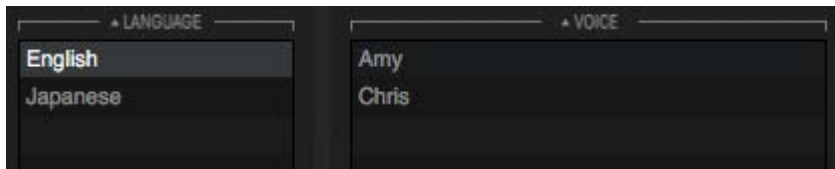
## Voice Word Search

Voices can be filtered and searched by entering a word directly in the search window.



## Voice Language Search


Voices can be filtered from a language list.



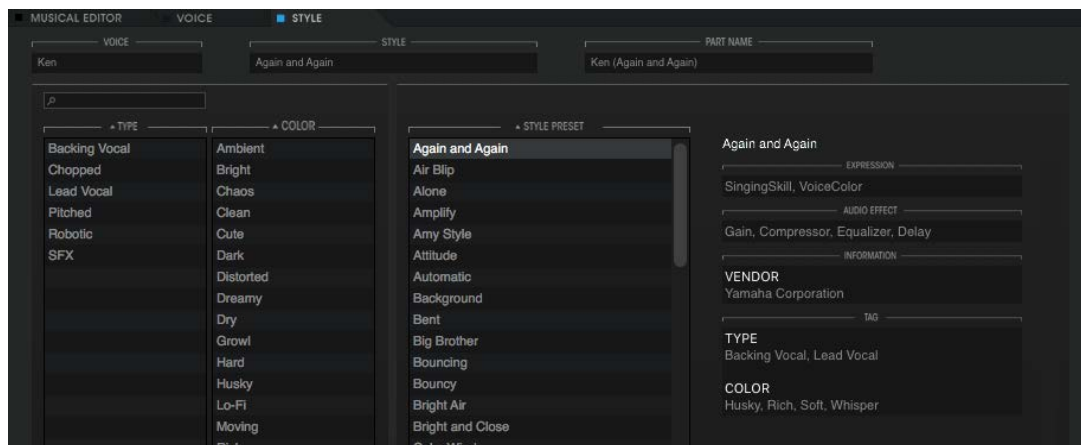
## Style Selection

A style can be assigned to a part unit.

### Style Preset Setting Method

Press the [Style] tab  with the VOCALOID part selected to open the style selection screen.

Even if the style is changed, control parameters such as Pitch Bend, Dynamics, etc., entered manually in the VOCALOID part will not be deleted.



### Style Word Search

A style preset can be searched directly by entering a word directly.

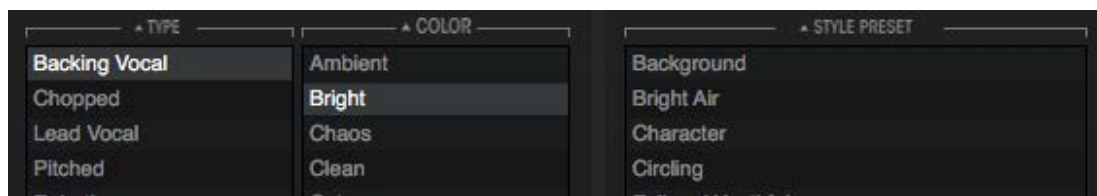
If multiple words separated by single-byte spaces are entered, the search becomes an "And" search.

Multiple words separated by half-byte spaces can also be entered to narrow down the search.



### Style Tag Search

A style preset can be searched by filtering it from a tag.



### Edit Style Preset Properties

The applied style can be edited by selecting "Edit Style Preset Properties" from the context menu.

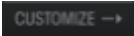
However, pre-installed style presets cannot be edited.

## Delete Style Preset

The applied style preset can be deleted by selecting "Delete" from the context menu.

However, pre-installed style presets cannot be deleted.

## Accessing the Style Customization Screen

Press the  button at the bottom right of the style selection screen to access to the style customization screen.

# Style Customization Setting



## Return to Style Selection Screen

Press the **← BACK TO LIST** button at the top left of the style customization screen to return to the style selection screen.

## Switch Style Preset (Pull-Down)

The style preset can be switched from the pull-down list on the right of the **← BACK TO LIST** button.

## Save Style Preset

The style can be saved by pressing the **SAVE** button on the right of the pull-down list.

Besides the name, a tag can also be attached.

The tag is selected from a list. New tags can also be added.

## SINGING SKILL

A MIDI effect that automatically applies a suitable pitch bend, dynamics, etc., according to the sequence.

### SKILL

Adjusts the "singing skill".

### AMOUNT

Adjusts the "singing accent".

## VOICE COLOR

Determines the voice color.

Provides an offset to a control parameter that can be edited with the musical editor.

## **EXCITER**

Adjusts the tone of the voice.

Range of values is Muffled(-64) - Bright(+63).

## **GROWL**

Adjusts the extent of the growl.

Range of values is Clear(0) - Hard(127).

## **BREATHINESS**

Adjusts the amount of breath to mix in the pronunciation, and the tone of the vowel.

Range of values is Clear(0) - Breathy(127).

## **AIR**

Adjusts the amount of breath to mix in the pronunciation.

Range of values is Clear(0) - Airy(127).

## **MOUTH**

Adjusts the distinctness (mouth opening) of the pronunciation.

Range of values is Close(-127) - Open(0).

## **CHARACTER**

Adjusts the formant of the pronunciation.

A feminine pronunciation is produced by raising this value.

A masculine pronunciation is produced by lowering this value.

Range of values is Cool(-64) - Cute(63).

## **ROBOT VOICE**

Changes the voice to a robot voice.

3 modes, HARD/NORMAL/SOFT, can be selected.

## **DEFAULT LYRIC**

The type of lyrics to use in a newly created note can be selected.

## **BREATH**

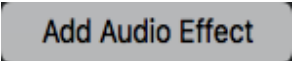
Function to analyze a sequence and automatically insert a breath at a suitable location.

The following parameters are available.

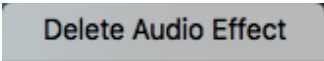
- **MODE:** Sets the frequency to insert a breath. OFTEN/SOMETIMES/RARELY can be selected.
- **EXHALATION:** Sets the volume of the breath to insert.
- **TYPE:** Sets the gender of the voice. Female/Male can be selected.

## AUDIO EFFECT



### How to Add an Audio Effect

Right click an area outside the effect screen in the audio effect screen to open the context menu  for adding audio effects. An effect list appears when this is clicked. Select the effect to add from the list and click the OK button.


### Audio Effect Deletion Method

Right click an area of the effect screen you want to delete in the audio effect screen to open the context menu  for deleting audio effects.

### Collapse or Expand Audio Effects Area [Command]+[U] (Mac) / [Ctrl]+[U] (Win)

Press the button   on the left of the screen to collapse/expand the audio effects area.

### Bypass Method

Press the  button at the top left of each effect screen to bypass the effect.

### Change Routing

The routing can be changed by dragging and dropping the effect screen.

### Preset of Each Audio Effect

A preset can be imported from the list at the top right of each effect screen.

### GAIN

This effect adjusts the level.



## DE-ESSER

This effect reduces excessive sibilance, primarily for vocal recordings. It is a special type of compressor that is tuned to be sensitive to the frequencies produced by the s-sound.

Filtered signals can be monitored by pressing the MONITOR button.



## COMPRESSOR

A compressor is an effect used to narrow the dynamic range (the difference in volume between loud and soft) by compressing the sound.



## EQUALIZER

A standard 4Band parametric equalizer equipped with a low-cut filter. Low and High are shelving type.



## DISTORTION

A standard distortion effect having four filter types. Distortion adds crunch to your tracks.



## CHORUS

A standard chorus effect in which 3 filters including the flanger type can be selected. It works by doubling the audio that is sent into it with a slightly detuned version.



## PHASER

Phaser is an effect to create the well-known swooshing phasing effect. A stereo enhancement function has been added.



## TREMOLO

Tremolo is an amplitude modulation effect.



## AUTO PAN

Auto Pan moves the sound to the left and right.



## DELAY

This is a stereo delay effect that alternates each delay repeat between the left and right channels. The effect can either be tempo-based or use freely specified delay time settings.

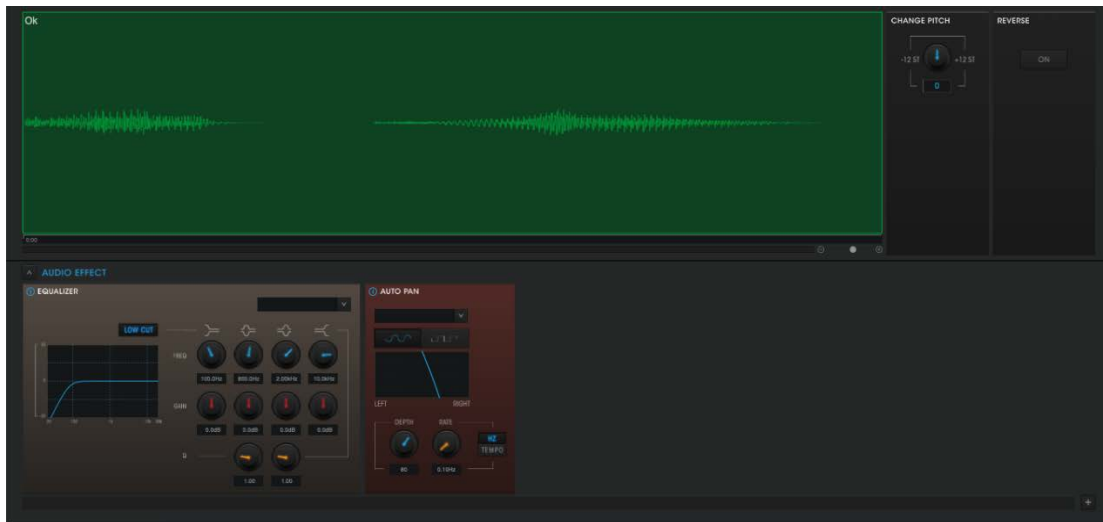


## REVERB

A standard reverberation effect having three types.



## Edit Audio Part



### Change Pitch

The range for pitch conversion is from -1200 cent (-12st) to +1200 cent (+12st).

The value can also be changed by entering the value in the text field.



### Reverse

Press this button to invert the waveform. Press it again to return to normal.



### Time Stretch [Option]+Drag (Mac) / [Alt]+Drag (Win)

In the track editor, the time can be stretched by the [Option] key+ dragging (Mac) or [Alt] key+ dragging (Win) the end of the audio part.

The time stretch range is from 0.5 times to 4 times.

### Add Audio Effect

The effect to be applied on an audio part can be adjusted.


Execute "Add audio effect" from the context menu.

The specifications are the same as the audio effect of the style customization settings screen.




In addition, right-side tags are also filtered and unnecessary tags are hidden, when a list is filtered with tags so that a faster search can be conducted.

## Media Preview Function

When the Preview button is ON, phrases and voice samples can be previewed by single clicking them. The preview can be stopped by clicking the Preview button  during the preview.

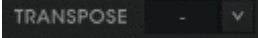
Continuous playback is also possible by selecting with the up/down cursor keys.

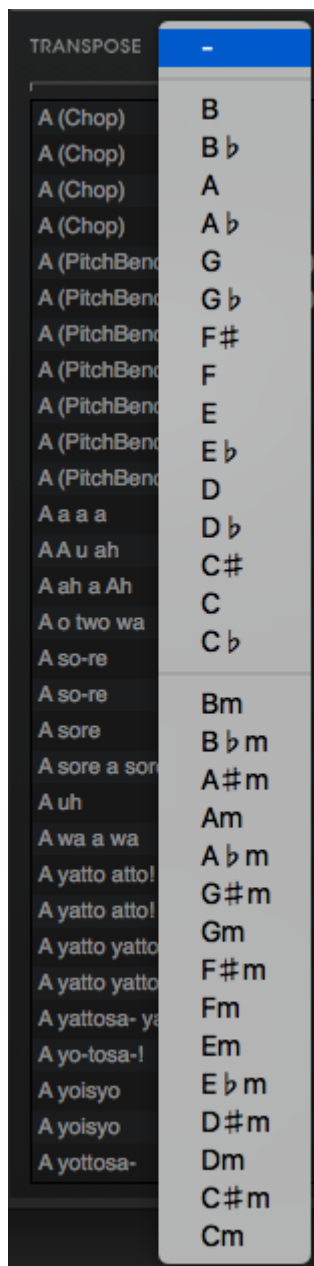
Adjust the volume for trial listening using the slider () on the top right.

## How to Paste Media

A voice phrase (VOCALOID) can be developed into a VOCALOID track by dragging and dropping it.

When pasting a voice phrase (VOCALOID) to a VOCALOID track, the key can be transposed.

Select the key you want to transpose  from the pull-down list next to the TRANSPOSE display.



- There are a total of 30 types of major and minor keys.
- If you do not wish to transpose, select "-" at the top of the pull-down list.

You can paste a voice phrase (VOCALOID) in the media screen at the current song position for the selected VOCALOID track, by double clicking that sample.

Similarly, a voice sample (WAV) can also be dragged and pasted onto an audio track. However, a voice sample cannot be pasted onto a VOCALOID track.

You can paste a voice sample (WAV) in the media screen at the current song position for the selected audio track, by double clicking that sample.

## **Edit Media Properties**

Only media properties that you have added on your own can be edited from the context menu.

Pre-installed media properties cannot be edited.

## **Delete Media**

Only phrases that you have added on your own can be deleted from the context menu.

## **Add VOCALOID Part to Media**

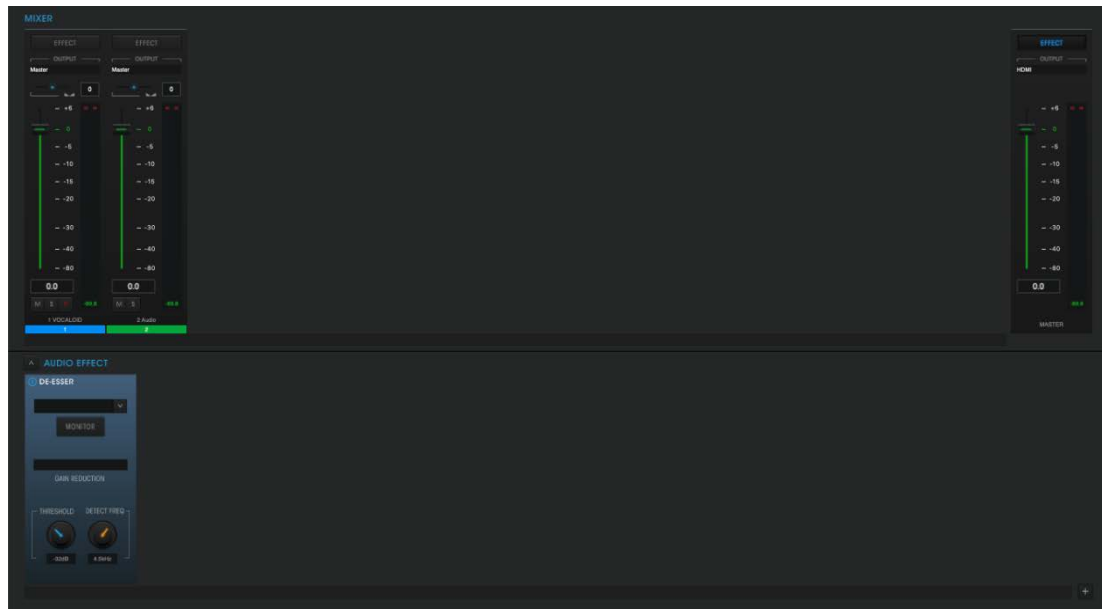
VOCALOID parts in the track editor can be added to your own media. Any tag can be attached when adding a VOCALOID part.

This menu can be selected from the job menu.



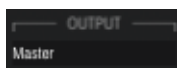
## Mixer

Press the mixer button at the top right of the editor screen to open the mixer screen.



## Track Audio Effect Button

Displays the audio effect of the track.



## Audio Output Routing Setting

Sets the output destination of the track.

- For the standalone edition: "Master" appears.
- For the VST/AU edition: The output destination path can be selected from the pull-down menu.



## Panpot Slider

Moves the pan position of the track.



## Volume Fader

Operates the output level of the track.



## Solo

Outputs only a random track.



## Mute

Mutes the output from any track.



## MIDI Recording

Records the track. This is for VOCALOID tracks only.



## Master Audio Effect

Displays the audio effect of the master track.



## Master Volume Fader

Operates the output level of the master track.



## About the VST/AU Edition

### Save Sequence in DAW Project File

When save is executed on the DAW side, sequence data of the VOCALOID5 VST/AU edition can be saved in a DAW project file.

The VOCALOID5 sequence (vpr) can be imported in the VOCALOID5 VST/AU edition.

### Performing Operations from the VOCALOID5 VST/AU Version

You can play, pause, set up a repeat loop, and change the song position.

\*In order to set up a repeat loop or change the song position, you may need to separately configure ReWire™.

### Tempo Synchronization Function

The tempo track in the VOCALOID5 VST/AU edition can be disabled and synchronized to the global tempo of DAW.

By enabling the tempo track, a local tempo in the VOCALOID5 VST/AU edition can be used without synchronizing it with DAW. Use this if the tempo changes in a song.

Synchronize with the global tempo of DAW by disabling the tempo track. Use this if the tempo does not change in a song.

## About Using ReWire™

This function is a beta version. Note that no support and warranty shall be provided regarding the use of this function.

### Connection with DAW

It is possible to synchronize a compatible sequencer or music software with the ReWire™ protocol. Be sure to follow the following startup procedure when using this function.

1. Starting the host application first.
2. Check that the host application is started before starting the VOCALOID5 Editor.
3. Select VOCALOID5 from the device menu of the host application or the ReWire™ menu.

\* Where necessary, checking the information regarding ReWire™ in the instruction manual of the host application.

# Appendix

## Phoneme

### VOCALOID5 Phonetic Symbol Table (English)

Symbol	Sample	Comments
V	Str <u>u</u> t	
e	Th <u>e</u> m	
I	K <u>i</u> t	
i:	Be <u>ee</u> f	
{	Tr <u>a</u> p	
O:	T <u>a</u> ught	
Q	Lo <u>t</u>	
U	Put <u>u</u>	
u:	Bo <u>oo</u> t	
@r	Ma <u>ke</u> r	
eI	Pa <u>y</u>	
aI	Bu <u>y</u>	
OI	Bo <u>y</u>	
@U	O <u>a</u> t	
aU	Lo <u>u</u> d	
I@	Be <u>er</u>	
e@	Be <u>a</u> r	
U@	P <u>oo</u> r	
O@	P <u>oo</u> r	
Q@	St <u>a</u> r	
w	W <u>a</u> y	
j	Y <u>e</u> llow	
b	Ca <u>b</u>	
d	Bad <u>u</u>	

Symbol	Sample	Comments
g	Bag <u>g</u>	
bh	Bi <u>g</u>	beginning of syllable, with aspiration
dh	Do <u>g</u>	beginning of syllable, with aspiration
gh	Go <u>d</u>	beginning of syllable, with aspiration
dʒ	Je <u>ans</u>	
v	Vo <u>t</u> e	
D	The <u>ir</u>	
z	Re <u>s</u> ort	
Z	Asi <u>a</u>	
m	Mi <u>nd</u>	
n	Ni <u>gh</u> t	
N	Lo <u>ng</u>	
r	Re <u>d</u>	
l	Fee <u>l</u>	
lʊ	Li <u>s</u> t	beginning of syllable
p	Di <u>p</u>	
t	Si <u>t</u>	
k	Ro <u>ck</u>	
ph	Pea <u>ce</u>	beginning of syllable, with aspiration
th	To <u>p</u>	beginning of syllable, with aspiration
kh	Ki <u>ss</u>	beginning of syllable, with aspiration
tʃ	Touch <u>ed</u>	
f	Fee <u>l</u>	
T	Thi <u>nk</u>	
s	Sea <u>l</u>	
S	Sha <u>re</u>	
h	Ha <u>t</u>	

Symbol	Sample	Comments
@	-	schwa (reduced vowel sound)

## VOCALOID5 Phonetic Symbol Table (Japanese)

Symbol	Sample (in roman letters)	Comments
a	<u>a</u> i	
i	i <u>ma</u>	
M	<u>u</u> ta	
e	<u>e</u> ga o	
o	<u>o</u> mo i	
k	<u>ko</u> ko ro	
k'	<u>ki</u> bo u	/i/が後ろに続く
g	<u>ge</u> n ki	
g'	<u>gi</u> ri	/i/が後ろに続く
N	o n <u>ga</u> ku	/g/を鼻音化 発音記号を直接入力する場合にのみ使用できます
N'	ka <u>gi</u>	/i/に続く、/g/を鼻音化 発音記号を直接入力する場合にのみ使用できます
s	<u>sa</u> da me	
S	<u>shi</u> a wa se	
z	ki <u>zu</u>	発音記号を直接入力する場合にのみ使用できます
Z	i <u>ji</u>	発音記号を直接入力する場合にのみ使用できます
dz	<u>zu</u> bo shi	単語の始め
dZ	<u>ji</u> bu n	単語の始め
t	<u>ta</u> i do	
t'	ba ra e <u>ti</u>	/i/が後ろに続く
ts	<u>tsu</u> ki	

Symbol	Sample (in roman letters)	Comments
tS	i no <u>chi</u>	
d	<u>da</u> i chi	
d'	me ro <u>di</u>	/i/が後ろに続く
n	<u>na</u> mi da	
J	<u>ni</u> o i	/i/が後ろに続く
h	<u>ha</u> na	
h¥	ma <u>ho</u> u	単語の途中 発音記号を直接入力する場合にのみ使用できます
C	<u>hi</u> na gi ku	/i/が後ろに続く
p¥	fu shi gi	
p¥'	<u>fi</u> a n se	
b	<u>bo</u> ku	
b'	<u>bi</u> ji n	/i/が後ろに続く
p	<u>po</u> su to	
p'	<u>pi</u> a no	/i/が後ろに続く
m	<u>ma</u> na ko	
m'	<u>mi</u> ra i	/i/が後ろに続く
j	<u>yu</u> me	
4	so <u>ra</u>	
4'	<u>ri</u> ku tsu	/i/が後ろに続く
w	<u>wa</u> ta shi	
N¥	ji ka <u>N¥</u>	

## VOCALOID5 Phonetic Symbol Table (Korean)

Symbol	Main Symbol	Complementary Symbol	Sound Classification	Comments
ㅏ	[a]		모음	
ㅑ	[ja]			
ㅓ	[ʌ]			
ㅕ	[jʌ]			
ㅗ	[o]			
ㅛ	[jo]			
ㅜ	[u]			
ㅠ	[ju]			
ㅡ	[ɐ]			
ㅣ	[i]			
ㅞ, ㅟ	[e]			[ㅞ]와 [ㅟ]를 구별하지 않고, [ㅞ]를 대표음으로 발음
ㅚ, ㅙ	[je]			[ㅞ]와 [ㅟ]를 구별하지 않고, [ㅞ]를 대표음으로 발음
ㅘ	[oa]			
ㅙ	[uʌ]			
ㅞ, ㅟ, ㅙ	[ue]			[ㅞ],[ㅟ],[ㅙ]는 구별하지 않고, [ㅞ]를 대표음으로 발음
ㅟ	[ui]			
ㅡ	[Mi]			

ㄱ	[g]	[gp]	유성파열음	[gp]는 받침소리
ㄴ	[n]	[np]	비음	[np]는 받침소리
ㄷ	[d]	[dp]	유성파열음	[dp]는 받침소리
ㄹ	[r]	[l],[rp]	유음	[rp]는 받침소리, [l]은 [rp] 뒤의 [r] 발음(영어의 [l] 발음에 해당)
ㅁ	[m]	[mp]	비음	[mp]는 받침소리
ㅂ	[b]	[bp]	유성파열음	[bp]는 받침소리
ㅅ	[s]	[sh]	무성마찰음	[sh]는 [s]가
				모음[ja],[jɐ],[jo],[ ju],[i],[je],[ui]와 결합할 때의 발음
ㅇ	[N]	[Np]	비음	[Np]는 받침소리
ㅈ	[c]		유성파찰음	
ㅊ	[ch]		무성파찰음	
ㅋ	[k]			
ㅌ	[t]			
ㅍ	[p]		무성파열음	
ㅎ	[h]		무성마찰음	
ㄱ'	[g']		유성파열음	
ㄴ'	[d']			
ㅂ'	[b']			
ㅅ'	[s']	[sh']	무성마찰음	[sh']는 [s']가 모음[ja],[jɐ],[jo],[ ju],[i],[je],[ui]와 결합할 때의 발음
ㅆ	[c']		유성파찰음	

## VOCALOID5 Phonetic Symbol Table (Spanish)

Symbol	Sample	Comments
a	Pa <u>dr</u> e	
e	En <u>er</u> o	
i	Fin <u>ca</u>	
o	Fo <u>co</u>	
u	un <u>ido</u> s	
I	A <u>ir</u> e re <u>y</u> ho <u>y</u> mu <u>y</u>	forms diphthong [a I] forms diphthong [e I] forms diphthong [o I] forms diphthong [u I]
U	Pa <u>u</u> sa ne <u>u</u> tro bo <u>u</u>	forms diphthong [a U] forms diphthong [e U] forms diphthong [o U]
j	Hacia <u>l</u> ti <u>er</u> ra pio <u>j</u> o vi <u>u</u> da	palatal approximant forms diphthong [j a] forms diphthong [j e] forms diphthong [j o] forms diphthong [j u]
w	cu <u>u</u> adro fue <u>u</u> go cu <u>u</u> ota fui <u>u</u> mos	forms diphthong [w a] forms diphthong [w e] forms diphthong [w o] forms diphthong [w i]
p	Pe <u>r</u> ro	
t	Tu <u>y</u> o	
k	Ca <u>r</u> ro	
b	V <u>u</u> no	occlusive
d	Do <u>n</u> de	occlusive
g	Ga <u>t</u> a	occlusive

Symbol	Sample	Comments
B	Cab <u>ra</u>	approximant
D	Nad <u>a</u>	approximant
G	Lueg <u>o</u>	approximant
tS	Ch <u>ico</u>	
f	F <u>á</u> cil	
T	Pe <u>z</u>	
s	Sa <u>la</u>	
x	J <u>a</u> món	
m	ma <u>dre</u>	
n	N <u>a</u> da	
J	Ca <u>ña</u>	
l	habl <u>a</u> r	
r	Pe <u>ro</u>	sometimes written as [4]
rr	Pe <u>rr</u> o	sometimes written as [r]
L	Mill <u>o</u> n	palatal lateral approximant, in some accents pronounced [jɣ] (see: yeísmo)
jɣ	Sa <u>y</u> o	voiced palatal fricative, sometimes pronounced [j]

## VOCALOID5 Phonetic Symbol Table (Chinese)

Symbol	Sample (pinyin)	Comments
a	B <u>a</u>	
o	P <u>o</u>	
7	K <u>e</u>	
i	j <u>i</u> , y <u>i</u>	
u	f <u>u</u> , w <u>u</u>	
y	j <u>u</u> , q <u>u</u> , x <u>u</u> , n <u>v</u> , l <u>v</u> , y <u>u</u>	following /j/ , /q/ , /x/ (pinyin : u) following /n/ , /l/ (pinyin : v)
@`	E <u>r</u>	
i¥	z <u>i</u> , c <u>i</u> , s <u>i</u>	following /z/ , /c/ , /s/ (pinyin : i)
i`	zh <u>i</u> , ch <u>i</u> , sh <u>i</u> , r <u>i</u>	following /zh/ , /ch/ , /sh/ , /r/ (pinyin : i)
aI	S <u>a</u> i	
ei	F <u>e</u> i	
AU	H <u>a</u> o	
@U	H <u>o</u>	
ia	x <u>i</u> a , y <u>a</u>	
iE_r	j <u>i</u> e , y <u>e</u>	
ua	k <u>u</u> a , w <u>a</u>	
uo	h <u>u</u> o , w <u>o</u>	
yE_r	j <u>u</u> e , q <u>u</u> e , x <u>u</u> e , n <u>v</u> e , l <u>v</u> e , y <u>u</u> e	following /j/ , /q/ , /x/ (pinyin : ue) following /n/ , /l/ (pinyin : ve)
iAU	x <u>i</u> a <u>o</u> , y <u>a</u> o	
i@U	j <u>i</u> u , y <u>o</u>	
uaI	k <u>u</u> a <u>i</u> , w <u>a</u> i	
uei	g <u>u</u> i , w <u>e</u> i	
a_n	F <u>a</u> n	
@_n	F <u>e</u> n	

Symbol	Sample (pinyin)	Comments
i_n	x <u>in</u> , y <u>in</u>	
iE_n	q <u>ian</u> , y <u>an</u>	
ua_n	du <u>an</u> , wa <u>n</u>	
u@_n	du <u>n</u> , we <u>n</u>	
y_n	xu <u>n</u> , yu <u>n</u>	
y{ _n	xu <u>an</u> , yu <u>an</u>	
AN	P <u>an</u>	
@N	B <u>en</u>	
iN	x <u>ing</u> , y <u>ing</u>	
iAN	xi <u>ang</u> , ya <u>ng</u>	
uAN	chu <u>ang</u> , wa <u>ng</u>	
u@N	W <u>en</u>	
UN	D <u>ong</u>	
iUN	xi <u>ong</u> , yo <u>ng</u>	
p	B <u>o</u>	
p_h	P <u>o</u>	
m	M <u>o</u>	
f	F <u>o</u>	
t	D <u>e</u>	
t_h	T <u>e</u>	
n	N <u>e</u>	
l	L <u>e</u>	
k	G <u>e</u>	
k_h	K <u>e</u>	
x	H <u>e</u>	
tsʅ	J <u>i</u>	
tsʅ_h	Q <u>i</u>	
sʅ	X <u>i</u>	

Symbol	Sample (pinyin)	Comments
ts`	<u>Z</u> hi	
ts`_h	<u>C</u> hi	
s`	<u>S</u> hi	
z`	<u>R</u> i	
ts	<u>Z</u> i	
ts_h	<u>C</u> i	
s	<u>S</u> i	

## VOCALOID5 Phonetic Symbol Table (Chinese) (Bopomofo)

Symbol	Sample (bopomofo)	Comments
a	ㄉㄚˊ	
o	ㄛㄛˊ	
ɤ	ㄛㄜˊ	
i	ㄧˊ, ㄩˊ	
u	ㄨˊ, ㄩˊ	
y	ㄧˊ, ㄨˊ, ㄩˊ, ㄜˊ, ㄛˊ, ㄝˊ, ㄞˊ	
@`	ㄦ er	
i¥	ㄆ, ㄑ, ㄓ	vowel part
i`	ㄗ, ㄘ, ㄙ, ㄨ	vowel part
aI	ㄨㄛˊ	
ei	ㄟˊ	
AU	ㄞˊ	
@U	ㄞˊ	
ia	ㄧㄚˊ, ㄩㄚˊ	
iE_r	ㄧㄝˊ, ㄩㄝˊ	
ua	ㄨㄚˊ, ㄩㄚˊ	
uo	ㄨㄛˊ, ㄩㄛˊ	
yE_r	ㄧㄝˊ, ㄨㄝˊ, ㄩㄝˊ, ㄜˊ, ㄛˊ, ㄝˊ, ㄞˊ	
iAU	ㄧㄞˊ, ㄩㄞˊ	
i@U	ㄧㄞˊ, ㄩㄞˊ	
uaI	ㄨㄚˊ, ㄩㄚˊ	
uei	ㄨㄝˊ, ㄩㄝˊ	
a_n	ㄉㄚˊ	

Symbol	Sample (bopomofo)	Comments
@_n	ㄘㄣˊ	
i_n	ㄊㄣˊ, ㄣˊ	
iE_n	ㄣˊ, ㄣˊ	
ua_n	ㄨㄣˊ, ㄣˊ	
u@_n	ㄨㄣˊ, ㄣˊ	
y_n	ㄊㄣˊ, ㄣˊ	
y{ _n	ㄊㄣˊ, ㄣˊ	
AN	ㄣˊ	
@N	ㄣˊ	
iN	ㄊㄣˊ, ㄣˊ	
iAN	ㄊㄣˊ, ㄣˊ	
uAN	ㄨㄣˊ, ㄣˊ	
u@N	ㄣˊ	
UN	ㄣˊ	
iUN	ㄊㄣˊ, ㄣˊ	
p	ㄘ	
p_h	ㄘˊ	
m	ㄇ	
f	ㄈ	
t	ㄊ	
t_h	ㄊˊ	
n	ㄋ	
l	ㄌ	
k	ㄎ	
k_h	ㄎˊ	
x	ㄒ	
tsʔ	ㄘˊ	
tsʔ_h	ㄘˊ	

Symbol	Sample (bopomofo)	Comments
sʔ	ㄊ ㄟ	
ts`	ㄘ	consonant part
ts`_h	ㄘˊ	consonant part
s`	ㄙ	consonant part
z`	ㄗ	consonant part
ts	ㄊ	consonant part
ts_h	ㄊˊ	consonant part
s	ㄙ	consonant part

## Shortcut Keys

The functions assigned to shortcut keys are shown below.

### File

Function	Mac	Windows
New	[Command]+[N]	[Ctrl]+[N]
Open	[Command]+[O]	[Ctrl]+[O]
Close	[Command]+[W]	
Save	[Command]+[S]	[Ctrl]+[S]
Save As	[Command]+[Shift]+[S]	[Ctrl]+[Shift]+[S]
Audio Mixdown	[Command]+[Option] +[Shift]+[S]	[Ctrl]+[Alt]+[Shift]+[S]
Quit	[Command]+[Q]	[Alt]+[F4]

### Edit

Function	Mac	Windows
Undo	[Command]+[Z]	[Ctrl]+[Z]
Redo	[Command]+[Y] [Command]+[Shift]+[Z]	[Ctrl]+[Y] [Ctrl]+[Shift]+[Z]
Cut	[Command]+[X]	[Ctrl]+[X]
Copy	[Command]+[C]	[Ctrl]+[C]
Paste	[Command]+[V]	[Ctrl]+[V]
Delete	[Delete]	[Delete]
Duplicate	[D]	[D]
Select All	[Command]+[A]	[Ctrl]+[A]
Join VOCALOID Parts	[Command]+[J]	[Ctrl]+[J]

## Job/View/Window/Setting/Help

Function	Mac	Windows
Insert Lyrics	[Command]+[I]	[Ctrl]+[I]
Lyric Input Mode	[Command]+[R]	[Ctrl]+[R]
Show or Hide Lower Zone	[F4], [Command]+[T]	[F4], [Ctrl]+[T]
Collapse or Expand Audio Effects Area	[Command]+[U]	[Ctrl]+[U]
Show or Hide Control Parameters Area	[Command]+[P]	[Ctrl]+[P]
Minimize	[Command]+[M]	
Preference	[Command]+[,]	
Reference Manual	[F1]	[F1]

## Track Editor Tools

Function	Mac	Windows
Arrow	[Command]+[1]	[Ctrl]+[1]
Pencil	[Command]+[2]	[Ctrl]+[2]
Temporary Switching of Pencil	[Shift]	[Shift]
Scissors	[Command]+[3]	[Ctrl]+[3]
Temporary Quantize OFF	[Command]	[Ctrl]

## Track Editor Controls

Function	Mac	Windows
Repeat	[C]	[C]
Auto Scroll	[F]	[F]
Play	[Space]	[Space]
Stop	[Space]	[Space]
Time Display	[/], [Num /]	[/], [Num /]

## Track View

Function	Mac	Windows
Horizontal zoom in	[H], [Command]+ Trackpad horizontal scrolling	[H]
Horizontal zoom out	[G], [Command]+ Trackpad horizontal scrolling	[G]
Horizontal zoom in/out wheel	[Command]+[Shift]+[Wheel]	[Ctrl]+[Shift]+ [Wheel]
Vertical zoom in	[Shift]+H, [Command]+Trackpad vertical scrolling	[Shift]+H
Vertical zoom out	[Shift]+G, [Command]+Trackpad vertical scrolling	[Shift]+G
Vertical zoom in/out wheel	[Command]+[Wheel]	[Ctrl]+[Wheel]
Audio part time stretch	[Option]+Drag	[Alt]+Drag

## Media, Mixer

Function	Mac	Windows
Media	[F5]	[F5]
Mixer	[F3]	[F3]

## Musical Editor Tools

Function	Mac	Windows
Arrow	[Command]+[1]	[Ctrl]+[1]
Pencil	[Command]+[2]	[Ctrl]+[2]
Temporary Switching of Pencil	[Shift]	[Shift]
Scissors	[Command]+[3]	[Ctrl]+[3]
Temporary Quantize OFF	[Command]	[Ctrl]

## Musical Editor Controls

Function	Mac	Windows
Emotion Tool	[Command]+[E]	[Ctrl]+[E]
Temporary Switching of Emotion Tool	[Option]	[Alt]
Attack Release Effect	[Command]+[D]	[Ctrl]+[D]
Breath	[Command]+[B]	[Ctrl]+[B]

## Piano Roll

Function	Mac	Windows
Entering the Lyrics and Phonetic Symbols	[Enter]	[Enter]
Select the Next Note	[Right]	[Right]
Select the Previous Note	[Left]	[Left]
Expand the Note Selection Range by One to the Right	[Shift]+[Right]	[Shift]+[Right]
Expand the Note Selection Range by One to the Left	[Shift]+[Left]	[Shift]+[Left]
Raise Note by Half a Tone	[Up]	[Up]
Lower Note by Half a Tone	[Down]	[Down]
Raise Note by 1 Octave	[Shift]+[Up]	[Shift]+[Up]
Lower Note by 1 Octave	[Shift]+[Down]	[Shift]+[Down]
Input Lyrics of Next Note	[Tab]	[Tab]
Input Lyrics of Previous Note	[Shift]+[Tab]	[Shift]+[Tab]

## Control Parameters

Function	Mac	Windows
Entering the Control Parameter	[Enter]	[Enter]

## Common

Function	Mac	Windows
Default Value Input of Parameter	[Command]+Click	[Ctrl]+Click
Select Multiple Events	[Command]+Click	[Ctrl]+Click

## Troubleshooting

For answers to the frequently asked questions, see the following website.

<https://www.vocaloid.com/en/support/faq>