

Audio Phraser

Owner's Manual

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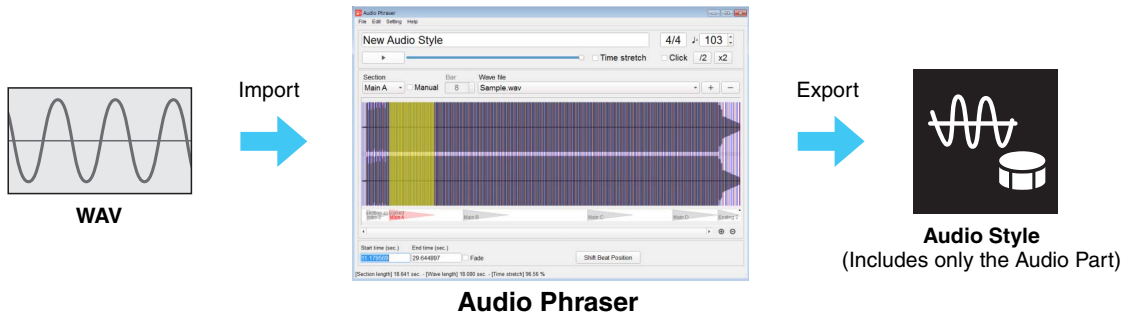
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This owner's manual assumes that you are already familiar with basic Windows/Mac operations. If you are not, please refer to the owner's manual which came with your Windows/Mac software before using this application.

What is “Audio Phraser”?

Audio Phraser is a software that enables you to create your own Audio Styles (includes the Audio Part only) from the desired audio (wav) files. When you create an Audio Style with this software, you can assign the desired audio data to each section of the Styles (Intro 1-3, Main A-D, Fill In A-D, Break, Ending 1-3) as an Audio Part.



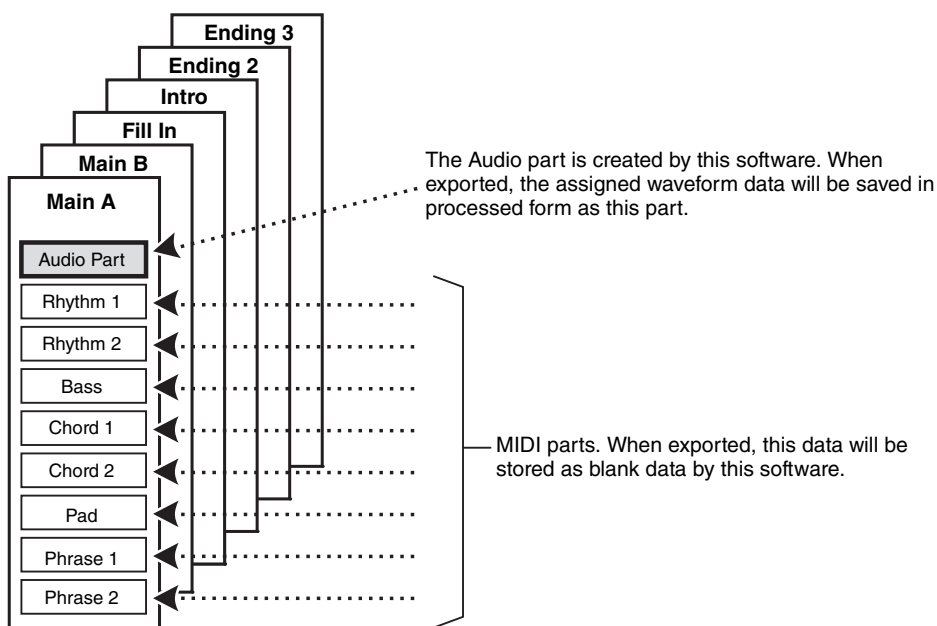
NOTE

- The exported Style file can be used only via an instrument that supports Audio Styles as well as the SFF GE format.
- The exported Style file can be edited on the Style Creator function of the instrument that supports Audio Styles, as regarding parts other than the Audio Part.

About the Audio Part

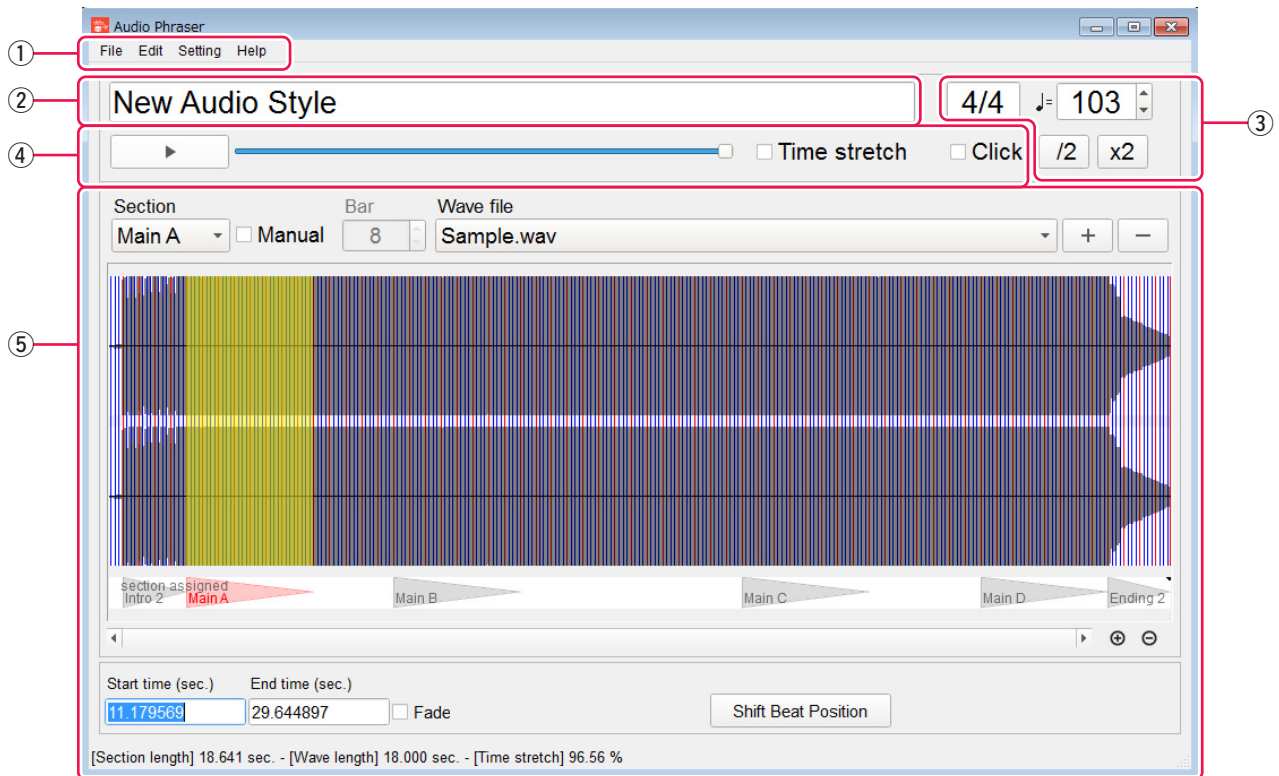
An Audio Part is a part of the Audio Style, which is itself a type of the Style. It consists of waveform data and data for time stretch playback in real time. When it is played back on the instrument, time stretch technology allows the waveform to follow your tempo changes without changing pitch during playback, so the Audio Part will stay in sync with the tempo. The Audio Part does not respond to chord input when it is played back on the instrument (in other words, it will not change pitch).

Audio Style overview



Screen Items and Functions

Main window



① Menu

File: For creating a new Audio Style project, saving or loading the project, exporting the project to an Audio Style file.

Edit: For performing Undo/Redo on the immediately previous operation.

Setting: For setting an audio output device used for auditioning.

Help: For displaying an information of the software, such as the version etc.

② Project Name

Shows the project name being edited.

③ Style Tempo and Time Signature

Shows the tempo and the time signature for the entire Style of the project. These values can be changed by entering numbers directly.

NOTICE

Changing the time signature resets all settings of all sections.

[▲], [▼]: Incrementally changes the tempo.

[/2] (*): Reanalyzes the tempo of the audio file (**), interpreting it as half of the current value. Also, it changes the style tempo value to half of the original.

[x2] (*): Reanalyzes the tempo of the audio file (**), interpreting it as twice the current value. Also, it changes the style tempo value to twice the original.

* These buttons are available only when a single audio file is assigned to the whole project and the "Manual" checkbox is not checked in the section edit area.

** **Tempo of the audio file:** The analysis result tempo of the audio file. This is analyzed when the audio file is imported /2 or x2 operations are executed. This is a hidden parameter, so the value is not shown on the screen directly. For details, see the next page.

④ Audition operation area

This lets you perform audition operations. For details, see the following pages.

⑤ Section editing area

You can select the desired section for editing, and can assign the waveform to the section. For details, see the following pages.

Time Stretch—Effects on the waveform by the tempo differences in the audio file and Style when exporting

The audio file is automatically analyzed when imported, and the tempo is estimated. This tempo value of the audio is not displayed with a number, but it is reflected in the beat display on the screen and the initial value of the Style Tempo of the project. The tempo of the audio file and the Style Tempo are used for time stretching calculation when exporting a project to a style file.

When exporting a project to a Style file, the assigned audio data to each section will be time stretched so that it fits to the Style Tempo, and then the data is exported as the waveform data of the section.

For example, if the tempo of the audio file is 120 and the Style Tempo is 180, time stretch is executed so that it will be 150% of the original audio data's speed and the data will be saved and exported.

NOTE

- An analysis result file (.awi) is created in the same location as the imported audio file.
- The range of time stretching ratio is 50-200%. When the ratio by the settings results in exceeded this range, the project cannot be exported to the Style file.
- The playback time calculated from the Style tempo, the time signature, and the "Bar" (number of measures) value is displayed as the "Section length" on the Status bar.
- The original playback time of the selected range of the audio file is displayed as the "Wave length" on the Status bar.
- The time stretching ratio used in order to fit the selected audio data to the "Section length" is displayed as the "Time stretch" on the Status bar.

Audition operation area of the Main window



[▶]/[■]: Starts/stops the audition playback of the audio data that is assigned to the section being edited. Playback continues in a loop until stopped.

Volume slider: Adjusts the volume of audition playback.

Time stretch: When this is checked, you can audition the audio data which is processed by time stretching, as it will sound when exported to a Style at the current setting. When not checked, the audio data is played back as is.

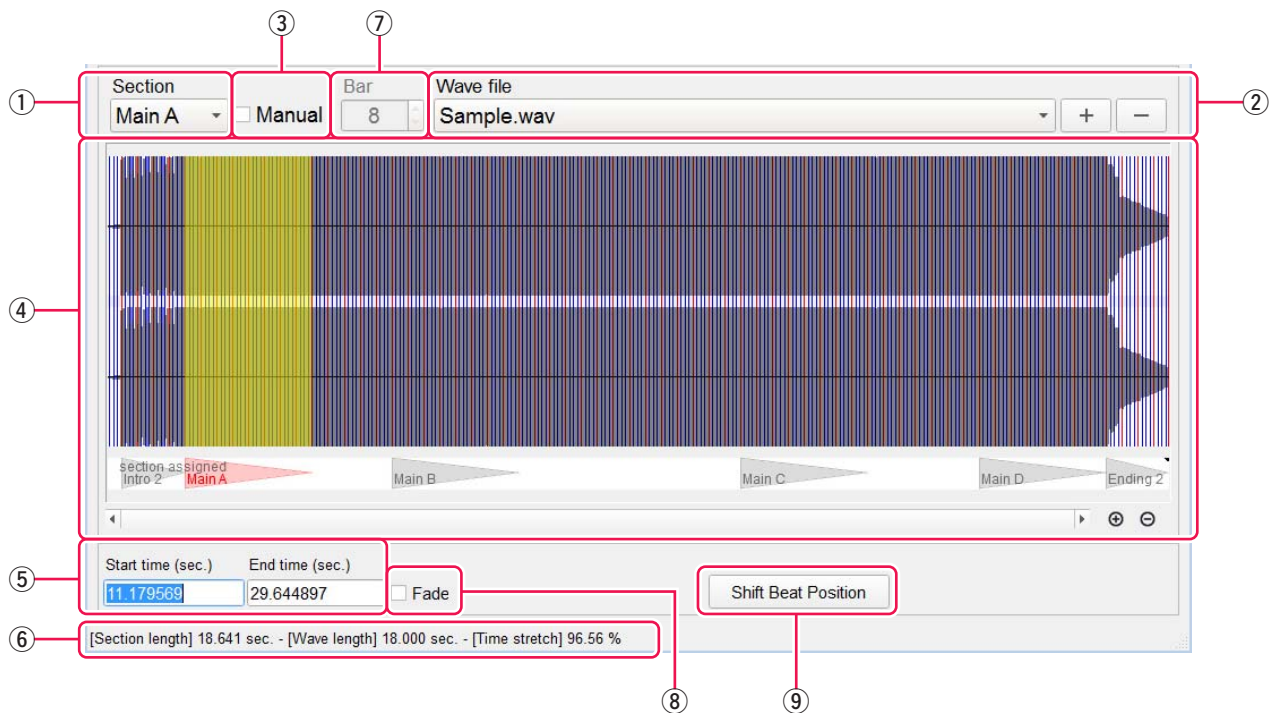
NOTE

- Time stretching is the process of changing the speed or duration of an audio signal without affecting its pitch.
- The audio data assigned to the section will be processed by time stretching so that fit the "Section length," when the project will be exported to an Audio Style file.
- During the audition playback of the time stretching results, a dedicated pop-up window is shown, and editing operations cannot be performed during audition.

Click (*): When this is checked, a metronome click sounds during audition playback. The volume of the click sound is fixed.

* This checkbox is available only when a single audio file is assigned to the entire project and the "Manual" checkbox is not checked in the section edit area.

Section Editing area of the Main window



- ① **Section:** Shows the section name being edited. You can also select the section to be edited by this.
- ② **Wave file:** Shows the audio file name which is assigned to the section being edited. You can also change the assigned audio file.
 [+] : Assign a new audio file to the section (import).
 [-] : Remove the current audio file assignment.
- ③ **Manual:** When this is checked, you can manually enter all settings for waveform assignment of the section.
- NOTE**
- When this is checked, there are also changes to the display, which the grid of beats (analysis result) on the waveform area will not be displayed, and some operation items will be disabled, etc.
 - When two or more audio files are used in one project, the “Manual” checkboxes of all sections are checked automatically.
- ④ **Waveform area:** Shows the waveform of the assigned audio file and the range assigned to the section being edited. You can select the range of assignment by mouse operations.
 The range assigned to the section is shown in yellow. When the “Manual” checkbox is not checked, the grid of beats based on the analysis is shown on the waveform. If the same audio file is assigned to other sections, ranges of other sections are shown at the bottom of this area.
- NOTE**
- If you hold down the Shift key when the mouse cursor is on the waveform area, you can perform other operations to the yellow range by using the mouse. When the cursor is in the range, you can move the range. When the cursor is left or right of the range, you can change the border of the range.
- ⑤ **Start time / End time:** Shows the start and end times of the waveform assigned range in the audio file. You can change it by direct input.

NOTE

If the “Manual” checkbox is not checked, the “Start time” and “End time” will be automatically adjusted to the beat grid closest to the input value.

⑥ Status bar

Shows the following information on the section being edited. If there is some setting which will result in failure to export, an additional message is shown in red.

Section length: Indicates the playback time of the section, when the exported Style will be played back on the instrument with the tempo not changed. This is calculated from the tempo, time signature, and “Bar” (number of measures).

Wave length: Indicates the original playback time of the selected range of the audio file.

Time Stretch: Indicates the time stretching ratio applied so that the selected audio data fits to the “Section length” when the project will be exported to the Audio Style file. When this is 50%, the audio is converted to half-speed for playback. When this is 200%, the audio is converted to double-speed for playback.

If the audio cannot be exported due to an invalid ratio, it is shown in red.

⑦ **Bar:** Shows how many bars (measures) the selected range is estimated to be. This parameter corresponds to the “Pattern Length” of section in the Style Creator function of the instrument. If the “Manual” checkbox is checked, you can enter it manually. There is an upper limit for each type of section in the “Bar” value, and the project will not be exported if the value exceeds the limit. For details on limitations, refer to “The upper limit of the Bar value for each section” on the next page.

⑧ **Fade:** When this is checked, fade-in/fade-out processing will be performed when exporting the selected range. Try enabling this when there is noticeable noise around the start/end time of an exported section when playing it back in the instrument.

⑨ **Shift/Unshift Beat Position:** Adjusts the beat detection result by swapping between downbeat and upbeat recognition. This is available only when the “Manual” checkbox is not checked.

Selection of assignment range—difference between Manual disabled or enabled

When the Manual checkbox is NOT checked (semi-automatic):

Analysis result of the audio file is used.

- The range of the waveform is selected according to the beat position of the analysis result.
- The “Bar” value is calculated automatically from the tempo of the audio file (analysis result), and the selected range.
- The ratio of time stretch is almost constant, unless you change the tempo of the Style with numeric input.

When the Manual checkbox is checked (manually):

Analysis result of the audio file is NOT used.

- The desired range of the waveform can be selected manually.
- The “Bar” value is manually entered, and the value specifies how many bars (measures) the selected range is estimated to be, depending the current time signature. The number of beats in the selected range is calculated based on the “Bar” value and time signature, and then finally the Section length is calculated using the tempo of the Style in addition.
- The ratio of time stretch varies depends on the settings.

What happens when the waveform assigned to one section is too long

In an Audio Style, audio information is added to the waveform in order to perform time stretch processing that maintains optimum sound quality when played on the instrument. If the playback time of the waveform assigned to one section is too long, there may not be enough audio information to be added, and a warning message appears when the project is exported to the Audio Style file. In this case, sound quality degradation may occur when playing an exported Style on the instrument. For this reason, you should keep the assigned waveform to the minimum length required when making each section.

The upper limit of the Bar value for each section

The Bar value has an upper limit for each section type. If the value of one or more sections exceeds the limit, the project cannot be exported to an Audio Style.

While editing sections, the operation is not restricted by the upper limit, but a message is displayed in the Status bar when the upper limit is exceeded.

The upper limit of each section is as follows:

Sections	Upper limit of the Bar
Main A-D, Intro 1-4, Ending 1-4	32
Fill In A-D, Break	1

Creating a New Project, and Importing an Audio File

1. Click “File → New Audio Style Project.”

2. Click the Wave file: [+] button.

3. Select the desired audio file (.wav).

Compatible file format: WAV format; 44.1 kHz sample rate, 16-bit resolution, stereo

NOTE

An analysis result file (.awi) is created in the same location as the imported audio file.

4. Click “File → Save Project File” to save the project.

Loading the Project, and Editing the Sections

1. Click “File → Open Audio Style Project.”

2. Select the desired project file.

3. Edit the sections as desired.

For instructions on how to edit the sections, refer to the “Screen Items and Functions.”

4. Click “File → Save Project File” to save the project.

If you want to save the edited project by another name, click “File → Save Project File as ...” to save the project with the desired name.

Exporting the Project to an Audio Style File

- 1. Click “File → Open Audio Style Project.”**
- 2. Select the desired project file.**
- 3. Click “File → Export as the Style File” to Export the project.**
- 4. Enter the desired Style file name, then click the [Save] button.**

The export process is executed, and then a message will be shown when finished.

How to install an exported Audio Style file (.aus) to the instrument

There are two ways to install and play the exported Audio Style on your instrument.

- (a) Import the data Yamaha Expansion Manager, and install it on the instrument as original Expansion Pack data.
- (b) Save the Audio Style file (.aus) directly to a USB flash drive and connect the USB flash drive to the instrument.

Method (a) is available for an instrument supported by Yamaha Expansion Manager and can be used with models compatible with Audio Style. To determine whether if your instrument is compatible or not with Audio Style, refer to the manuals of the instrument itself.

Method (b) is available only with Genos firmware version 1.20 or later, as of April 2018.