Sample Manager for MZ-X500/X300

Version 1.1.0 User's Guide

Use this manual in combination with the
User's Guide that comes with the Instrument.

CASIO®

Contents

Introduction

What is Sample Manager?

Sample Manager is application software that lets you perform the following operations on your computer.

● Convert waveform files to a format supported by the Instrument*.

● Use your computer to manipulate the parameters of converted files.

● Open and edit data files created on the Instrument or on your computer.

* MZ-X500/X300 (Referred to as "the Instrument" in this manual.)

IMPORTANT!
• **Do not use any other applications, disconnect your computer's USB cable, remove your computer's USB flash drive, disconnect the MIDI cable, or turn any peripheral connected to your computer on or off while Sample Manager is running. Doing so not only will cause Sample Manager to operate abnormally, it also can corrupt data and cause malfunction of the Instrument and/or your computer.**

MIDI Data Communication Function Precautions

MIDI Data Communication Functions

Sample Manager includes MIDI data communication functions. Note the precautions below when using MIDI data communication functions.

● Your computer must be connected to the Instrument to use MIDI data communication functions. See the Instrument's User's Guide for details about how to connect the Instrument to a computer using USB. For information about connecting the Instrument to a computer using a MIDI interface, see the user documentation for the MIDI interface you are using.

● Sample Manager does not support simultaneous use of a USB connection and MIDI interface connection.

● As a general rule, use Sample Manager to connect a single computer to a single Instrument. Attempting to connect multiple Instruments or multiple computers may result in malfunction of Sample Manager and/or the Instrument (due to software and hardware settings, connections, etc.), and corruption of Instrument data.

■ Requirements

• MZ-X500 / MZ-X300 (Firmware Ver1.40* or higher)

• USB Flash Drive (32GB or less recommended)

• USB cable

• This software

* If your Instrument's firmware is lower than Ver1.40, go to the CASIO website and update to Ver1.40.

Minimum Computer Operating Environment

■ Supported Operating Systems

Windows® 7 *1

Windows® 8 *2

Windows® 8.1 *3

Windows® 10 *4

Mac OS® X (10.8.X, 10.9.X, 10.10.X, 10.11.X, 10.12.X) *5

*1: Windows 7 (32bit Versions, 64bit Versions)

*2: Windows 8 (32bit Versions, 64bit Versions)

*3: Windows 8.1 (32bit Versions, 64bit Versions)

*4: Windows 10 (32bit Versions, 64bit Versions)

*5: Intel Mac only

■ Display Settings

Resolution: At least 800 × 600 pixels

Color : Windows OS: At least 16bit

IMPORTANT!
- **The above minimum computer operating environment does not guarantee proper operation of this software.**

Use of This Software

- All rights to this Software revert to CASIO COMPUTER CO., LTD.

- Distribution of any version of this Software created by altering the structure, content, or any other aspect of the original Software is prohibited.

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- You are granted the right to use this Software free of charge. You are also granted the right to distribute this Software freely, as long as such distribution is not for profit.

- Note that CASIO will not provide any support for this Software or its functions.

- The contents of this Software are subject to change without notice.

- The screen shots shown in this manual may differ from the screen contents produced by your computer.

- Except as authorized under GNU LESSER GENERAL PUBLIC LICENSE Version 2.1 (LGPL), you are not allowed to modify this Software without permission from CASIO.

- This Software uses the LGPL version Qt Library 5.6.1, and performs operations by dynamically linking to the Qt library. You can obtain the Qt library from http://qt-project.org/.

- For the full text of the LGPL, see the LGPL.txt file that is included with the files distributed with this Software.

Getting Ready, Starting Up, Shutting Down

Getting Ready

Windows Users

1. Download the Sample Manager software file from the CASIO website to your computer.

2. Uncompress the file.

This will create a folder named "CASIO SampleManager for MZX" on your computer.

Mac Users

1. Download the Sample Manager software file from the CASIO website to your computer.

2. Open the file.

This will create an image named "CASIO SampleManager for MZX".

Copy the image to the application folder.

Starting Up Sample Manager

Windows Users

1. On the Instrument, display the MAIN selection screen. If there is an ongoing recording operation or if there is a paused recording operation, cancel it.

You may not be able to transfer or delete data if you start up Sample Manager while the Instrument is in any other configuration.

2. Quit all other applications running on your computer.

Sample Manager will not run correctly if any other application is running on your computer.

3. Double-click the "CASIO SampleManager for MZX" folder.

4. Inside the folder, double-click "SampleManagerforMZX.exe".

This will start up Sample Manager.

Mac Users

1. On the Instrument, display the MAIN selection screen. If there is an ongoing recording operation or if there is a paused recording operation, cancel it.

You may not be able to transfer or delete data if you start up Sample Manager while the Instrument is in any other configuration.

2. Quit all other applications running on your computer.

Sample Manager will not run correctly if any other application is running on your computer.

3. In the application folder, double-click "SampleManager for MZX".

This will start up Sample Manager.

Exiting Sample Manager

Click the close (×) button in the title bar of the Sample Manager window.

- A confirmation dialog box will appear if you try to exit Sample Manager while it is transferring data or performing some other process. Click the [Yes] button to terminate the process and exit Sample Manager.

Wave Convert

What you can do in this mode...

- Convert waveform files to a format supported by the Instrument.
- Use your computer to manipulate the parameters of converted files.
- Open and edit data files created on the Instrument or on your computer.

Screen Content
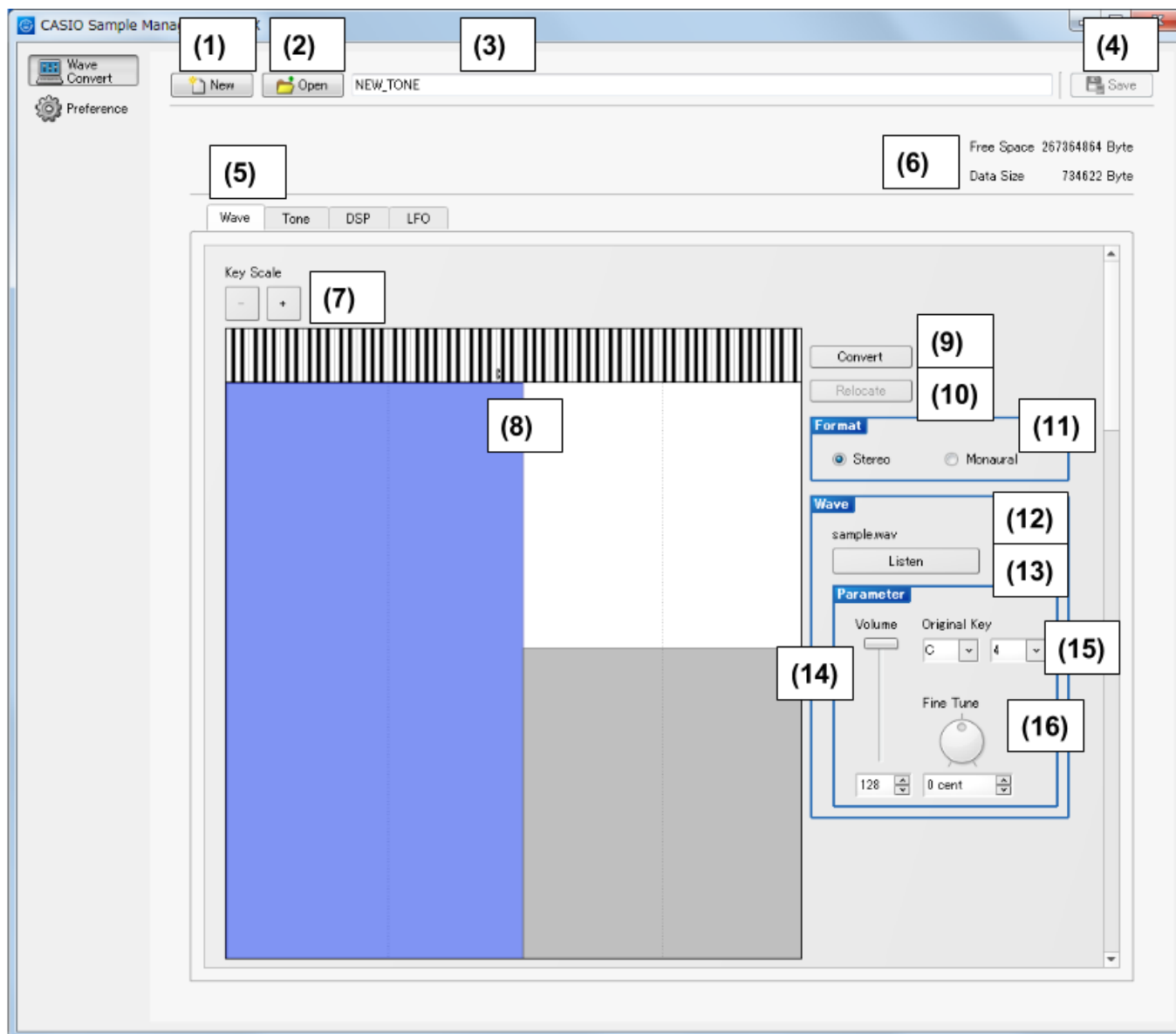
No.	Name	Overview	Settings
1	New	Creates a new data file.	–
2	Open	Opens a data file created with this software.	–
3	Name Box	Allows editing of the name of the data to be output as a user tone file.	–
4	Save	Outputs a user tone file. Click this button after you finish editing the tone data.	–
5	Editor Tabs	The Wave tab can be used to import waveforms and to edit waveform parameters. The Tone, DSP, and LFO tone parameter editing tabs become available after a tone file is loaded.	–
6	Capacity	Shows the size of the tone file currently being created. When the Instrument is connected, shows how much free space is available in Instrument memory.	–

No.	Name	Overview	Settings
7	Key Scale	Enlarges the key area of the Key/Velocity Palette.	3 levels
8	Key/Velocity Palette	Specifies the keyboard keys that sound the imported waveforms and their velocities. Drop the WAV or AIFF file to be imported into this area.	X-axis (note): C-1 (left) to G9 (right) Y-axis (velocity): 0 (bottom) to 127 (top)
9	Convert	Converts an input waveform file, copies it to the USB flash drive, and outputs a tone file required for editing. [Not Available] is shown in place of [Convert] if conversion is not possible for some reason.	–
10	Relocate	Click to relocate the waveform file located in the Key/Velocity Palette.	–
11	Format	Specifies creation of either a stereo tone or monaural tone. This setting is cannot be changed after the [Convert] button is pressed.	Stereo, Monaural
12	Wave File Name	Shows the name of the currently selected waveform file.	–
13	Listen	Click to check the sound source of the currently selected waveform file.	–
14	Volume	Adjusts the volume of each waveform.	0 to 128
15	Original Key	Specifies the note number played by the waveform sound source.	C-1 to G9
16	Fine tune	Adjusts the pitch of notes by cent units.	–99 to 99

Operational Procedures

■ Creating an Original User Tone from a Waveform File

1. Confirm that the Instrument is connected to the computer with a USB cable.

2. Click the **(Reload) button. In the Preference Mode, confirm that device names are displayed in the MIDI IN and MIDI OUT boxes.**

Computer

1. Select the type of tone file to be created and then click OK.

- Melody

  Creates a melody type tone.

  The tone is output as a ZTN file.

- Drum

  Creates a drum type tone.

  The tone is output as a ZDR file, which can be loaded to the Instrument's drum category.

- Hex Layer

  Creates a hex layer type tone. Hex layer is a tone type that can be used by the MZ-X500 only.

  The tone is output as a ZLT file, which can be loaded to the MZ-X500 hex layer category.

2. Import the waveform data file.

Drop a WAV or AIFF file into the Key/Velocity palette.

- This version supports WAV files of the format described below.

[Convert] button operation will be disabled if the size or other parameters are incompatible.

Data format: Linear PCM

Quantization bit rate: 16bit

Sampling Rate: 44.1kHz

Channel: Monaural, Stereo

Maximum Size of File: 768 KB (Monaural), 1536 KB (Stereo)

- The maximum number of waveforms that can be imported depends on the configuration of the tone being imported. For more information see "Waveform File Configuration" (page 16).
- Note that a large file size may take considerable time to load. A "Data Size" of no more than 2.5 MB is recommended for the tone being output.

3. To add a new wave file or to change the key velocity amplitude, you can adjust the width of the blue waveform file load area by dragging its edge.

- Use the Key Scale [+] and [−] buttons to enlarge the keyboard area of the horizontal axis.
- You can check the sound source of the selected wave by clicking [Listen].
- Operations that can be performed depend on what type of mouse cursor is displayed.
  When the mouse cursor is an arrow such as ↔, it means that the key velocity amplitude can be changed. When it is a hand such as 🖐, it means that the currently selected waveform can be changed.
- For Drum, you cannot set a range for each key velocity. Waveform files are arranged for each key.
- For Hex Layer, you cannot set a range for each key velocity. There are six Hex Layer layers.

4. Use the name box to edit the name of the file to be output, and then click the [Convert] button to output the file in accordance with the data folder path.

- You can use the Preference Mode to check or change the data folder path.
- The output file name will be the one you specify, with the extension .ztn (Melody)/.zlt (Hex Layer)/.zdr (Drum) appended.
- Before outputting a file, use the [Convert] button to embed all Key/Velocity areas.
- After pressing [Convert] button, the Instrument's display will show a screen of app information.
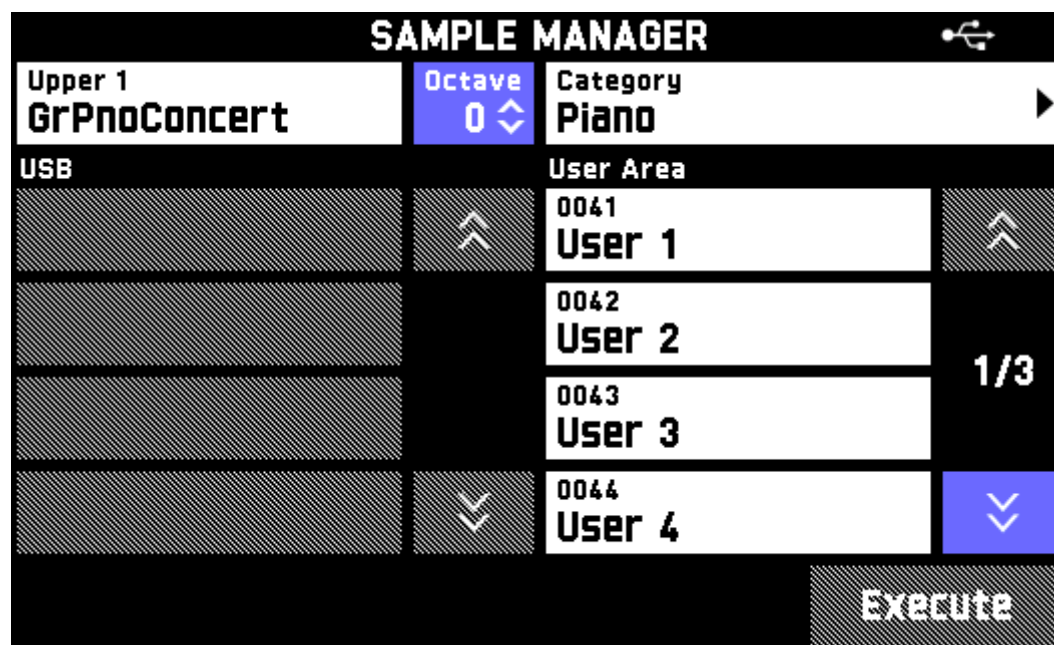
To force an editing operation to stop, press the Instrument's [Exit] button.

- In this mode, only the [Octave], [Exit], and [+]/[−] Instrument buttons are enabled. All other buttons are disabled.
- Entering this mode automatically discards any unsaved pending edits and changes Instrument settings to create an optimal environment for tone editing.

Keyboard

1. **Copy the output file to a USB flash drive.**

2. **Load the USB flash drive to which you saved the output file in step 1 into the Instrument.**

3. **On the app information screen, use the USB file list to select the tone file that you copied to the USB flash drive.**

4. **Use the [Category] button to select the load destination tone category and then select the destination User Area number.**

5. **Press the [Execute] button to execute the load operation.**

■ **Changing Tone Parameters**

Computer

1. **Use the Tone, DSP, and LFO tabs to edit parameters as required.**

2. **After you are finished editing, click the [Save] button to output a tone file.**
   - The edits are also saved on the Instrument.
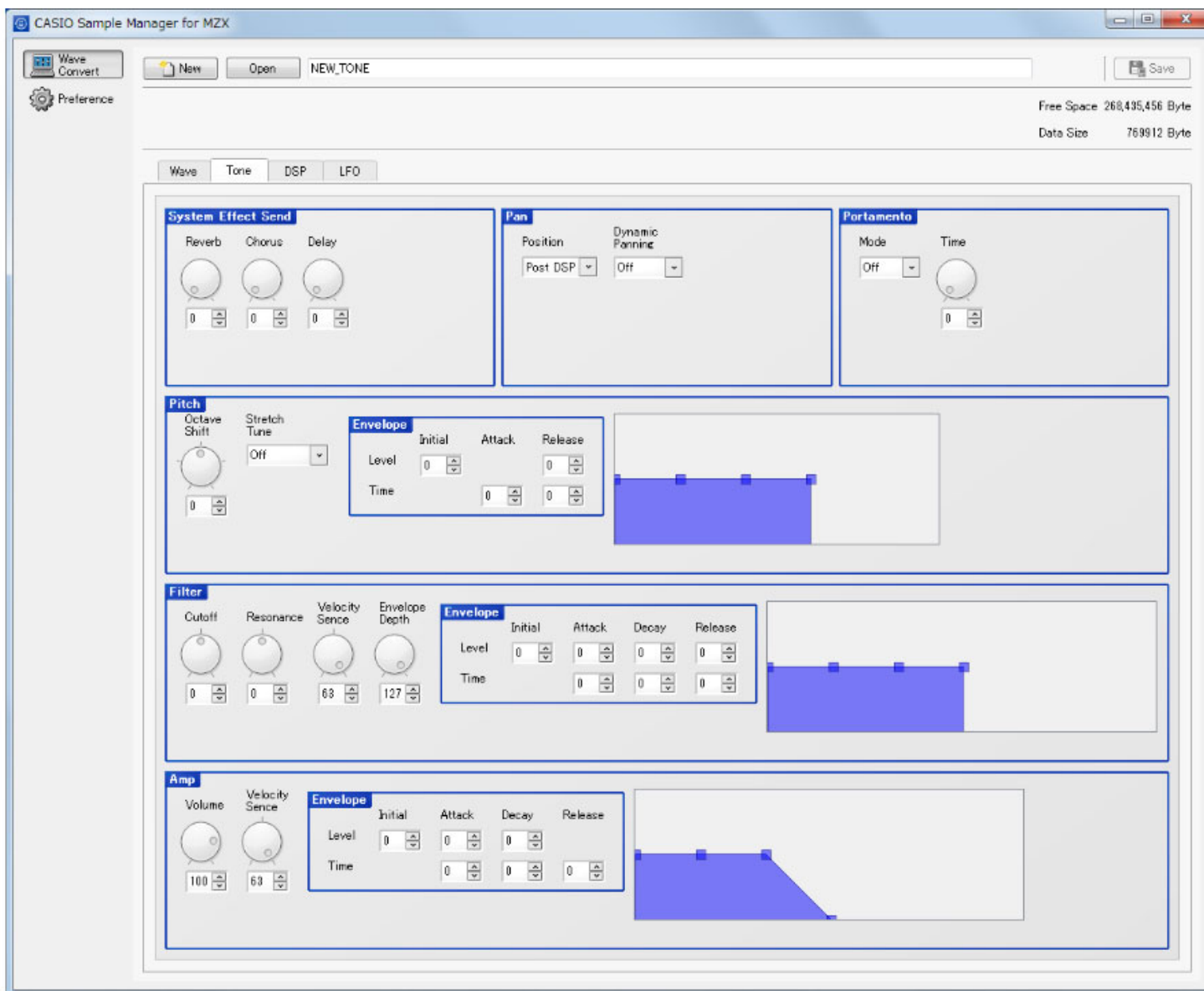
- For details about using the items on the Tone, DSP, and LFO tabs, refer to the Instrument's Tutorial Manual.
- To re-edit the key velocity area, click the [Relocate] button. Next return to step 2 (Computer) under "Creating an Original User Tone from a Waveform File".

■ Using the Controllers

Edit Box

- You can specify a value by directly inputting it into the text box.
- You can raise or lower the value by clicking the up or down arrow button.
- You can also change the value using your computer keyboard's up and down keys.

Dials

- Rotating a dial changes its setting. Drag the mouse pointer upwards or downwards across a dial to rotate it.
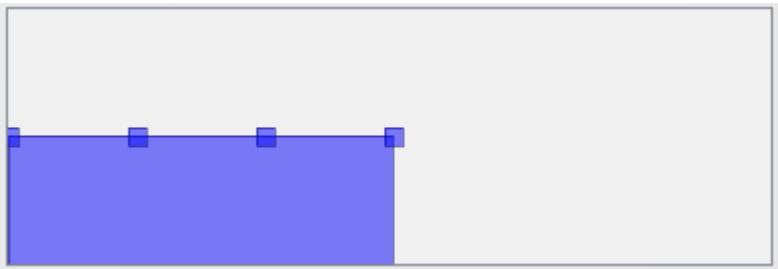
Sliders

- Dragging the slider with the mouse pointer changes its setting.

Item Selection Boxes

- Items that can be input are displayed in a menu. Click the down arrow button to the right of the box to display the menu.

Envelope Editing Box

- You can edit an envelope by dragging a point with the mouse.
- The direction that a point can be dragged depends on whether a "Level" or "Time" box is displayed.
- You can also change point positions using the "Level" and "Time" boxes.

Key/Velocity Palette
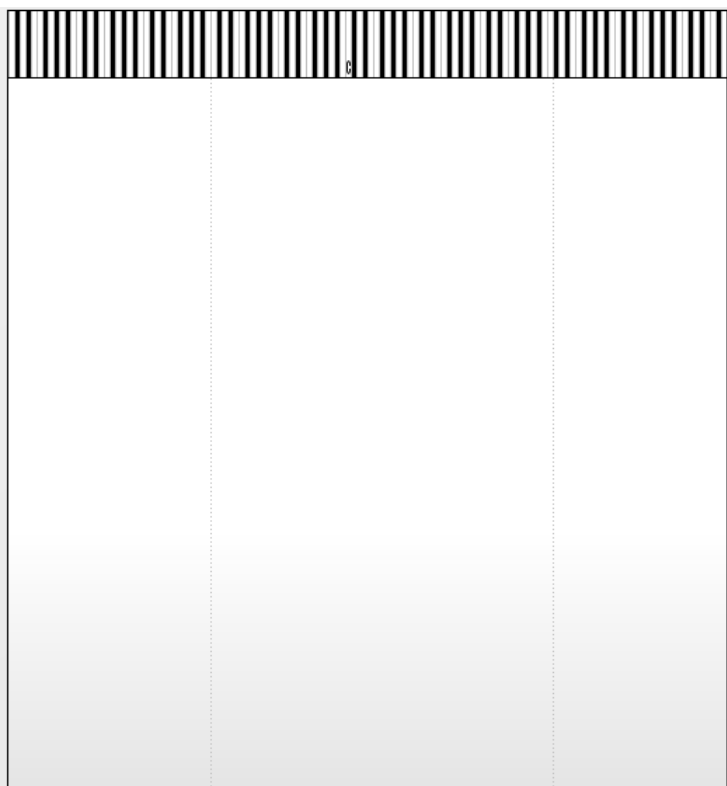
- Drop the wave or aiff file to be converted into this palette to import the file.
- Drag the edges to change the note number and velocity range.
- Pressing [Ctrl] and then one of the arrow keys of your computer keyboard will change Key High and Velocity Low value by one.
- You can shift the selection range by pressing a cursor control key on your computer's keyboard.
- To delete the dropped waveform, press the [Delete] key.
- In the case of Drum, only one waveform file can be assigned per key. When shifting a waveform, you can also shift the waveform parameter settings. You can copy the information for one key by selecting the waveform area and right-clicking.
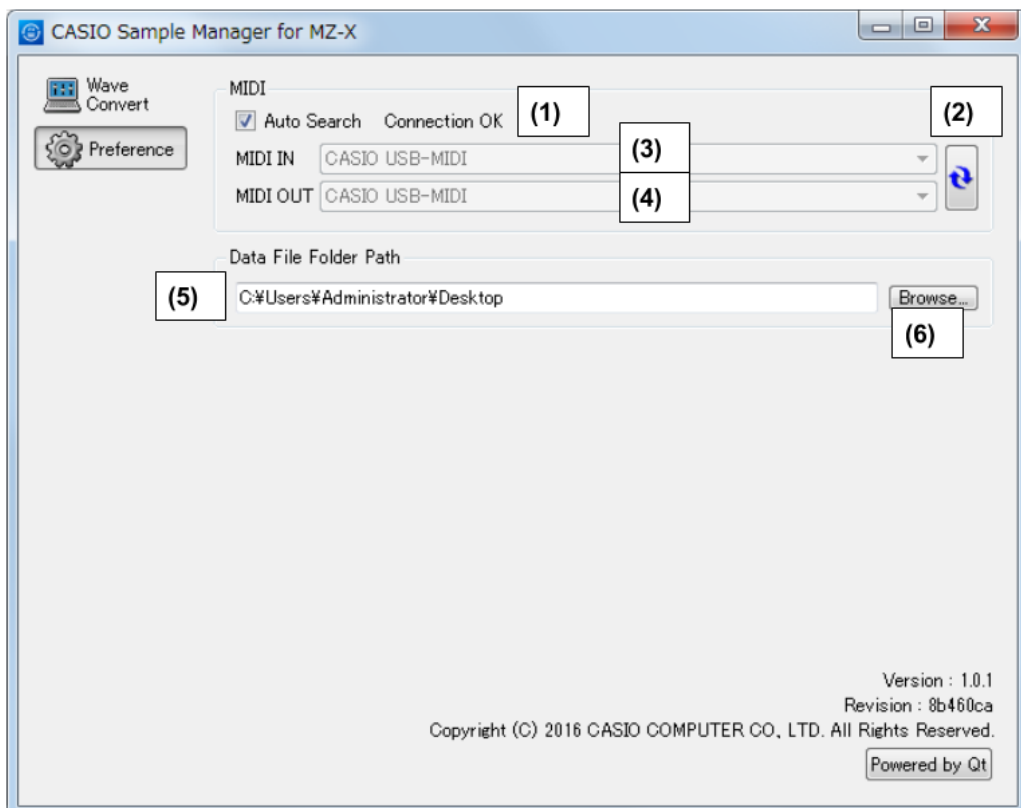
Preference Mode

What you can do in this mode...

- Configure MIDI device settings.
- Configure folder settings.

Screen Content

- The screen shot below is from a computer running Windows 7.

No.	Name	Overview
1	Auto Search	Selecting this check box enables auto Instrument search and connect.
2	MIDI device reload button	Reloads the MIDI device.
3	MIDI IN device	Specifies the MIDI IN device.
4	MIDI OUT device	Specifies the MIDI OUT device.
5	Data file folder	Shows the path to each file's storage folder. The files in this folder are displayed in the computer file list in each mode.
6	Data file folder path browse button	Displays a dialog box for specifying the path to the file storage folder.

Using a USB Flash Drive to Transfer Data between the Instrument and a Computer

User data files that have been saved to a USB flash drive on the Instrument can be copied to the data file folder (page 12). This will make the files available to Sample Manager. Also, user data files that have been saved from the Instrument to a computer using Sample Manager can be copied to a USB flash drive. Then the USB flash drive can be inserted into the Instrument's USB port. This will allow direct access to the files by the Instrument.

IMPORTANT!
- **Use a USB flash drive that has been formatted on the Instrument.**

User Data File Names

The Instrument can display only the file name characters shown in the table below.

0	1	2	3	4	5	6	7	8	9
A	B	C	D	E	F	G	H	I	J
K	L	M	N	O	P	Q	R	S	T
U	V	W	X	Y	Z	$	&	_	'
(	)	-	^	{	}	@	~	`	

If a user data file name on a USB flash drive is longer than eight characters (excluding the file name extension), the Instrument will display a different file name.

- Note that the above limitations do not apply to user data name display.

Configuring Settings

■ MIDI Settings

- Select the "(1) Auto Search" check box when using a USB connection between the Instrument and computer. This will cause the computer to search for and connect to the Instrument automatically.

- When using a MIDI connection between the Instrument and computer, clear the "(1) Auto Search" check box and configure "(3) MIDI IN device" and "(4) MIDI OUT device" settings manually.

■ Configuring Folder Settings

- Click the "(6) Data file folder path browse button" and then configure folder settings.

Error Messages

Operation errors, Instrument status problems, Sample Manager operating environment problems, and other factors can cause error messages to appear during operation. Look up the error message in the list below and perform the required action as noted.

| Message	Cause	Required Action
Already Running	A different instance of Sample Manager is already running.	Use the already running instance of Sample Manager.
Communication Error	An error occurred during communication with the Instrument.	• Check the connection between the computer and Instrument. • Make sure the Instrument MIDI settings and Sample Manager MIDI settings match. • If another application is running, exit it. • Make sure there is only one computer connected to the Instrument. Do not have multiple computers connected to the Instrument. • Do not perform any keyboard operations while data communication is in progress. • If you are connected via a USB hub or extension cable, change to a direct connection. • If the above actions do not resolve the problem, try turning the Instrument off and then back on again. Also try restarting Sample Manager.
File Read Error	An error occurred during a file or folder read operation.	• Check to make sure the file or folder you are trying to read actually exists. • Check to make sure the file or folder you are trying to read is readable. • Check if the file is being used by another application. • Check to make sure that the path to the data file folder does not contain any illegal characters. • If the path contains illegal characters, change the data file folder to a folder whose path is made up only of supported single-byte alphanumeric characters.
File Write Error	An error occurred during a file or folder write operation.	• Check to make sure the location where you are trying to create the file or folder actually exists. • Check to make sure the file or folder you are trying to write to actually exists. • Check to make sure the file or folder you are trying to write to is writable. • If you are trying to write to a USB flash drive, check to make sure that its protect switch is not in the write protect position. • Check if the file is being used by another application. • Check to make sure that available computer or USB flash drive memory space is sufficient. • Check to make sure that the path to the data file folder does not contain any illegal characters. • If the path contains illegal characters, change the data file folder to a folder whose path is made up only of supported single-byte alphanumeric characters.
File Format Error	The format of the file is not supported by Sample Manager.	The file is not supported by Sample Manager. Use a different file.
	The file is corrupted.	The file is unusable. If the same data is still available on the Instrument, re-save the data and use it.

Message	Cause	Required Action
File Too Large	Waveform data that exceeds the maximum size supported by the Instrument was imported in the Wave Convert Mode.	The Instrument does not support use of a file that exceeds the maximum size. Either cut the file down to the required size or use a different file.

Waveform File Configuration

One key split can be assigned to a single waveform file, which means that one key/velocity split can import 16 waveform files. If you attempt to convert a large number of files, the message "Not Available" may appear and you may not be able to convert them to tone files.

- The number of layers and the number of key/velocity splits depend on the tone type. Refer to the table below for the number of waveform files that can be imported into each layer.

- In the case of a Melody tone, key/velocity split can be combined either in a velocity direction or a key direction.

Tone	Number of Layers	Number of key/velocity splits	Number of Importable Waveform Files Per Layer
Melody (Mono)	1	8	128
Melody (Stereo)		4	64
Hex Layer	6	1	16
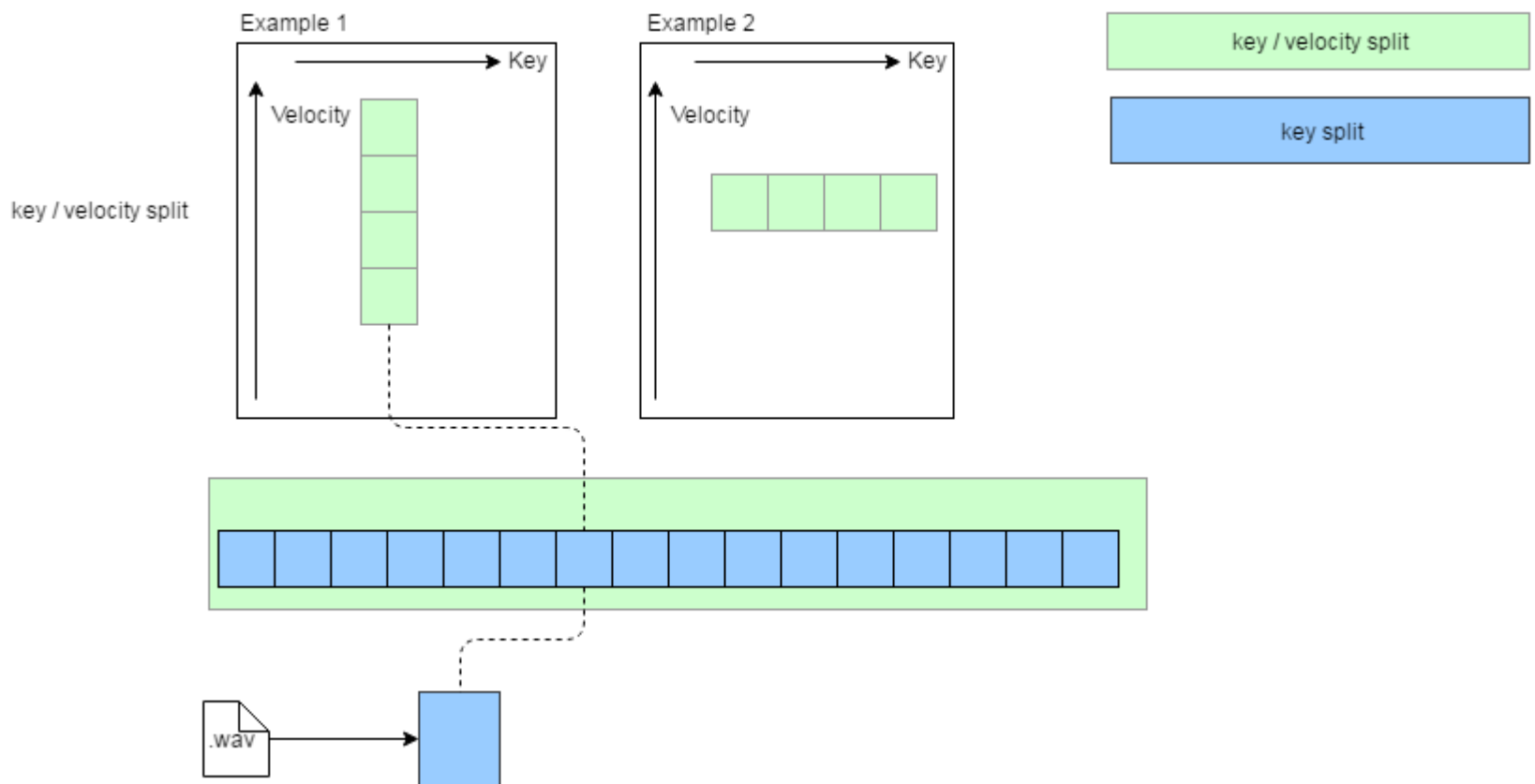
- For Drum, one key is assigned to each file, but unlike Melody there is no layer in the key velocity direction.

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