



Voice Editor for MOTIF ES6/7/8 Owner's Manual

Contents

What is the Voice Editor?	2
Starting the Voice Editor	3
Receiving the Preset voices	4
Menu Bar	5
Library Window	8
Library Window Toolbar	10
Edit Window	
An Example of Voice Editor in Use	31
OMS Settings (Macintosh)	
Troubleshooting	

- Copying of the commercially available music sequence data and/or digital audio files is strictly prohibited except for your personal use.
- The software and this owner's manual are exclusive copyrights of Yamaha Corporation.
- Copying of the software or reproduction of this manual in whole or in part by any means is expressly forbidden without the written consent of the manufacturer.
- Yamaha makes no representations or warranties with regard to the use of the software and documentation and cannot be held responsible for the results of the use of this manual and the software.
- The screen displays as illustrated in this Owner's Manual are for instructional purposes, and may appear somewhat different from the screens which appear on your computer.
- Click on the red-colored text to jump to the related item in this manual.
- The OMS[®] and oms[™] mark in this Owner's Manual are the trademarks or registered trademarks of Opcode Systems, Inc.
- The company names and product names in this Owner's Manual are the trademarks or registered trademarks of their respective companies.

This owner's manual assumes that you are already familiar with basic Windows/Macintosh operations.

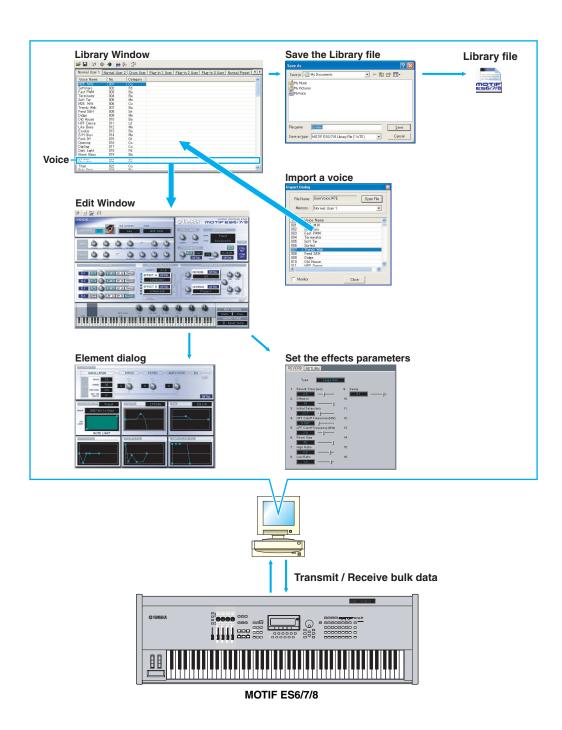
If you are not, please refer to the owner's manual which came with your Windows/Mac OS software before using Voice Editor.

For information about hardware requirements, the interconnection of devices and the installation of the Voice Editor software, refer to the separate "Installation Manual" as well as the Owner's Manual for the respective MIDI device.

The screen illustrations in this manual are mainly taken from Windows. Differences that exist in the Macintosh version are duly shown and explained.

What is the Voice Editor?

With the Voice Editor, you can edit your tone generator's voices and effects via your computer. Thanks to the easy-to-understand graphical interface, you can edit virtually all of the voice parameters of MOTIF ES6/7/8 right from your computer — using the mouse to adjust the virtual knobs, sliders, and buttons and entering values from the computer keyboard. Finally, all the changes you have made to your voices can be saved to your computer.



Starting the Voice Editor

After installing the Voice Editor and making the required connection, follow the instructions below to start the Voice Editor.

Windows

In order to use the Voice Editor with your tone generator, you'll need to install the USB MIDI driver (page 12).

Starting the Voice Editor as a stand-alone application

Windows 98/2000/Me

From the [Start] menu, select [Programs] → [YAMAHA OPT Tools] → [Voice Editor for MOTIF ES6] → [Voice Editor for MOTIF ES6].

Windows XP

From the [Start] menu, select [All Programs] \rightarrow [YAMAHA OPT Tools] \rightarrow [Voice Editor for MOTIF ES6] → [Voice Editor for MOTIF ES6].

Starting the Voice Editor in the host application as a plug-in software.

The Plug-in Board Editor can be used as a plug-in software in any host application compatible with Open Plug-in Technology (OPT). Refer to the owner's manual of the host application (sequencer, etc.) for details on using plug-in software.

- 1. Start the host application.
- 2. Select "Voice Editor for MOTIF ES6/7/8" in the host application's "Plug-in" menu.

■ About Open Plug-In Technology

Open Plug-in Technology (OPT) is a newly developed software format that allows control over MIDI devices from a music software program. For example, this allows you to start up and operate various parts of your music system, such as plug-in board editors, and mixing control editors - directly from an OPT-compatible sequencer, without having to use each separately. This also makes it unnecessary to set MIDI drivers for each application, streamlining your music production system and making all operations more convenient and seamless.

About the OPT Levels

The client application and its compatibility with OPT can be divided into three levels, as shown below.



OPT Panels provides basic support for opening and displaying OPT control panels that can transmit data via the clients' external MIDI ports. Typically this will allow basic hardware editor control panels to operate properly.



Level 2

OPT Processors provides support for real-time MIDI processors and panel automation. PROCESSORS Typically this will allow both real-time and offline MIDI effects to operate properly and supply automation to OPT panels.



Level 3

OPT Views provides support for edit views and MIDI processors/panels that require direct access to client program storage structures. Typically this will allow sophisticated MIDI edit views to be supported.

OPT Level Implementation for the Voice Editor

This chart shows the OPT-compatibility of the Voice Editor.

OPT levels of the client application	Voice Editor for operation		
	chem application	Operation support	Operation limits
VIEWS (Level	3)	Yes	None
PROCESSOF	RS (Level2)	Yes	None
PANELS (Lev	el1)	Yes	Bulk reception

Certain operations may not work as expected if there is no corresponding function in the client application (sequencer, etc.). The highest level of implementation for the client application is indicated in the OPT logo (which appears along with the version information in the application).

Macintosh

If you are using Voice Editor on a Macintosh computer, open "Chooser" from the Apple menu and turn off "AppleTalk."

Open the "YAMAHA Tools" folder and double-click "VoiceEditorForMOTIFES6" icon in the "Voice Editor for MOTIF ES6" folder.

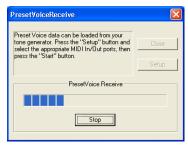
Receiving the Preset voices

The first time the Voice Editor is launched after installation, the Preset Voice Receive dialog window shown below appears. In order to edit Preset Voices for creating User Voices, the Preset Voice data must first be loaded from the MOTIF ES6/7/8.

DNOTE If you don't intend to edit Preset Voices, this operation is not needed.



- 1. Click "Setup" and set the ports as required in the dialog window that appears (page 12).
- Click "Start" to begin loading the preset voice data.



3. A dialog window appears when the load operation has finished. Click "OK" to continue.

The Preset Voice Receive dialog will not appear when the application is launched again after the preset voices have been loaded for the first time. If you press "Stop" during the load process, the data received up until that point will be considered invalid and the Preset Voice Receive dialog will appear the next time the application is launched. Similarly, if you click "Close" before loading, the preset voice data the Preset Voice Receive dialog will appear the next time the application is launched.

If you want to reload the preset voice data, delete the program's "Preset.ini" file and then re-launch the Voice Editor. The default location for the "Preset.ini" file is:

(Windows 2000/XP)

\Documents and Settings\[user profile]\Local Settings\Application data\YAMAHA\OPT Tools\Voice Editor for MOTIF ES6\Module\MVEditor\MOTIFES6\Preset.ini

(Windows 98/Me)

\Windows\Application data\YAMAHA\OPT Tools\Voice Editor for MOTIF ES6\Module\MVEditor\MOTIFES6\Preset.ini

or

\Windows\Profiles\[user profile]\Local Settings\Application data\YAMAHA\OPT Tools\Voice Editor for MOTIF ES6\Module\MVEditor\MOTIFES6\Preset.ini

(Macintosh)

YAMAHA Tools\VOICE Editor for MOTIF ES6\VEditor\MOTIF ES6

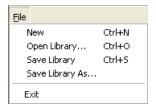
Menu Bar

The Menu Bar contains various editing and setup functions/commands. Click the desired menu name to open the appropriate pull-down menu, and choose the function/command you wish to apply. Those functions/commands which are unavailable are grayed out.

INDIES The most commonly-used menus in the Menu Bar are available as buttons in Voice Editor's toolbar.

File

Windows



Macintosh



New

Creates and opens a new Library file.

Open Library... (Open...)

This is the same as the "Open" button in the toolbar (page 10).

Save Library (Save)

This is the same as the "Save" button in the toolbar (page 11).

Save Library As... (Save As...)

Lets you save the Library file under a new or different name.

Close (Macintosh only)

Close the window. This is the same as the "Close" box in the Title bar.

Exit (Quit)

Exits from the Voice Editor. This menu is not available when the Voice Editor is used as a plug-in of the host application.

Edit





Copy

Copies the selected voice to the clipboard. If nothing is selected, this item is grayed out.

Paste

Copies the voice from the clipboard to the Voice Editor.

Initialize

Resets the selected voice parameters to the default values. If nothing is selected, this item is grayed out.

Edit

This is the same as the "Edit Window" button in the toolbar (page 15).

Library

This is the same as the "Library Window" button in the toolbar (page 30).

Store...

This is the same as the "Store" button in the toolbar (page 30).

Import...

This is the same as the "Import" button in the toolbar (page 15).

Compare

This is the same as the "Compare" button in the toolbar (page 31).

Setup (Windows) / MIDI (Macintosh)





Setup... (Editor Setup...)

This is the same as the "Editor Setup" button in the toolbar (page 12).

Transmit Bulk... (Transmit...)

This is the same as the "Transmit Bulk" button in the toolbar (page 13).

Receive Bulk... (Receive...)

This is the same as the "Receive Bulk" button in the toolbar (page 14).

Monitor

This is the same as the "Monitor" button in the toolbar (page 15).

OMS Port Setup... (Macintosh only)

Opens the OMS Port Setup window for the Voice Editor. Refer to the section "OMS Port Setup" (page 34) for further details.

OMS MIDI Setup... (Macintosh only)

Opens the OMS MIDI Setup window. Refer to the documentation that came with OMS for further details.

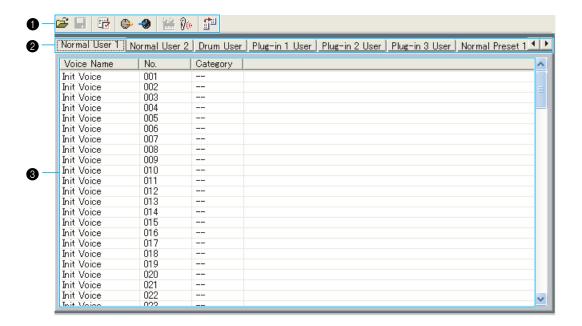
OMS Studio Setup... (Macintosh only)

Opens the OMS Studio Setup window. Refer to the documentation that came with OMS for further details.

Library Window

When you start Voice Editor, you will first see the Library window, which consists of tabs, each representing a Memory in the tone generation block. Each tab lists all the names, numbers and categories of voices in the selected Memory. Double-clicking on a voice name in the Library window opens the Edit window for a voice, letting you edit the voice.

You can save your settings as a Library file (*.W7E).



Toolbar

This area contains the buttons controlling the Voice Editor (page 10).

Tabs

Click any of these to view the voice list for the corresponding Memory Bank.

O Voice list

This area shows all the voices in the selected Memory as a scrollable list. The name, number and Category of each voice are shown. You can rearrange the voices by dragging-and-dropping their voice numbers to a new location. You can rename a voice in Windows by selecting the voice name, then clicking on it again to enter a new name. On the Macintosh, you click on the voice name while holding down [control], choose "Edit Voice Name" from the pull-down menu, and enter the new name in the dialog.

To select a continuous block of voices, click the number of the first voice, hold down the [Shift] key, then click the last number.

ENOTE Voice names can consist of up to 10 characters.

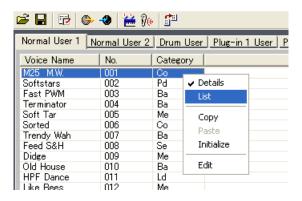
Split Bar (Windows only)

If you place the mouse pointer over the line (Split Bar) that divides the Track Parameter Section from the Block Section, the pointer will change shape into the split tool. With this tool, you can drag the Split Bar back and forth and change the widths of the two sections.

You can change the size of any of the windows by placing the mouse pointer on the top, bottom, left, or right border lines of the window, then dragging the line until the window is as big or small as you like.

Viewing Just the Voice Names (Windows only)

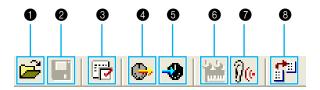
You can view just the names of all voices in the Memory without their "Number" and "Category" information. To do this, right-click on any part of the voice list and choose "List." This may be useful when choosing voices quickly, since you will have less scrolling to do.





NOTE To switch back to the full Voice Name/Number/Category list, right-click on any part of the voice list and choose "Details."

Library Window Toolbar

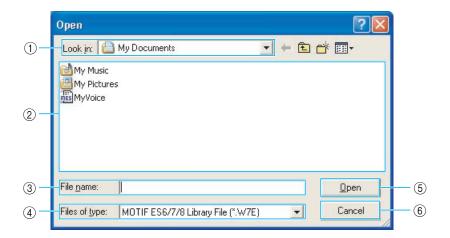


1 "Open" button

Click this to open the "Open" dialog and select a Library file to open.

"Open" Dialog

Select the desired Library file (extension: .W7E) and click [Open]. The contents of the selected file is indicated on the Library Window.



FINOTE If you are using a Macintosh, the typical Macintosh "Open" dialog will appear.

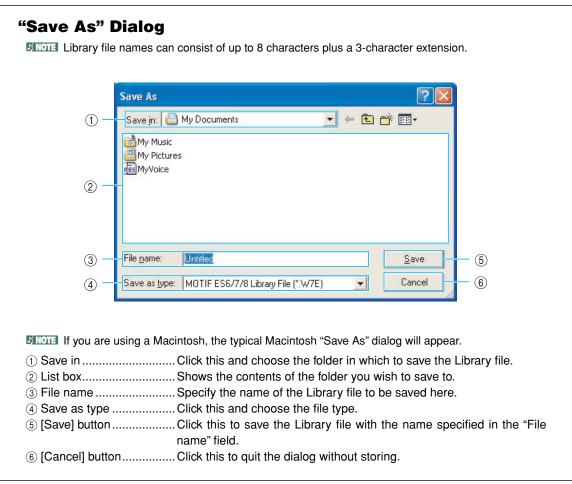
- ② List box.....Shows the contents of the current folder.
- ③ File name Shows the name of the files selected from the List.

When using Voice Editor for MOTIF ES6/7/8, it is possible to open Voice Editor for MOTIF6/MOTIF7/
MOTIF8 or MOTIF-RACK library files, but the voices will not necessarily sound exactly the same as
they sound on the instrument for which they were created.

- ⑤ [Open] button Click this to open the file selected from the List.
- ⑥ [Cancel] button......Click this to cancel the operation.

2 "Save" button

Click this to save the existing Library file with your new settings. If you are working on a new file, this button will open the "Save As" dialog, where you can name and save your settings as a new Library file (*.W6E).



When saving .W7E files, the file extension .W8E is attached automatically. These files need to loaded directly into MOTIF ES6/7/8 via SmartMedia.

The file extension .W7E is not added when using Macintosh. To load the library file directly via SmartMedia, attach .W7E to the file name.

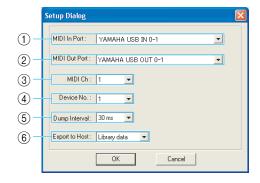
"Editor Setup" button

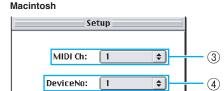
Click this to open the "Setup" dialog and specify the MIDI Out port settings.

"Setup" Dialog

This is where you set up the Voice Editor to allow the transmission/reception of voice data to/from your tone generator. Click the [OK] button to apply the settings and quit the dialog. Click the [Cancel] button to quit without applying the settings.

Windows





30ms

0K

\$

Cancel

(5)

Dump Interval:

- ① MIDI In Port......Click this and choose the MIDI In port. You can use the Voice Editor to receive data sent from the device connected to this port.
- If you are using a Macintosh, the MIDI Out Port setting is assigned in the OMS Port Setup. For further details, see the section "OMS Settings" (page 33).
- ③ MIDI Ch......Click this and choose the MIDI Out channel. This is used when monitoring sounds using the on-screen keyboard in the Edit Windows.

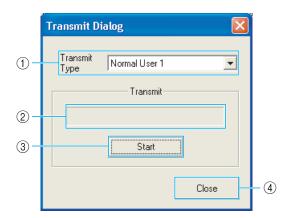
- Setting this to too short of an interval may result in errors when transmitting MIDI data.
- When the song that contains the Library File data is opened in SQ01, the exported voice data is also opened with the Voice Editor.
- This operation may not be available depending on the client application you use.

"Transmit" button

Click this to open the "Transmit" dialog to transmit all settings to your tone generator.

"Transmit" Dialog

Voice data can be transmitted in bulk to your tone generator. Click the [Start] button to begin transmitting the data. The progress bar shows how much of the data has been transmitted. Finally, click the [Close] button to quit the dialog.



① Transmit Type Indicates the voice data to be transmitted.

Normal User 1+2 + Drum All Normal User Voices and Drum User Voices

Plug-in 1 User Voices
Plug-in 2 User Voices
Plug-in 3 User All Plug-in 2 User Voices
Plug-in 3 User All Plug-in 3 User Voices
Plug-in 1+2+3 User All Plug-in User Voices

All All User Voices (Normal, Drum, and Plug-in)

② Progress barIndicates how much of the data has been transmitted.

③ [Start] button Click this to transmit the data.

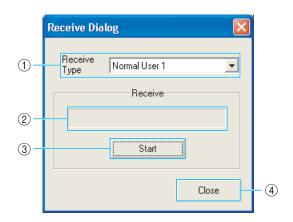
The MIDI Device Number has to be set correctly in order to transmit bulk data. For further details, see page 12.

6 "Receive" button

Click this to open the "Receive" dialog to receive all settings from your tone generator.

"Receive" Dialog

Voice data can be received in bulk from your tone generator. Select the bulk voice data you wish to receive, then click the [Start] button. The progress bar shows how much of the data has been received. Finally, click the [Close] button to quit the dialog.



Normal User 1+2 + Drum All Normal User Voices and Drum User Voices

Plug-in 1 User Voices
Plug-in 2 User Voices
Plug-in 3 User All Plug-in 2 User Voices
Plug-in 3 User All Plug-in 3 User Voices
Plug-in 1+2+3 User Plug-in User Voices

All All User Voices (Normal, Drum, and Plug-in)

- 2) Progress bar Indicates how much of the data has been received.
- ③ [Start] button Click this to receive the data.

The MIDI Device Number has to be set correctly in order to receive bulk data. For further details, see page 12.

"Edit Window" button

Click this to open the Edit Window (Common) for the selected voice in the list. For further details, see page 17.

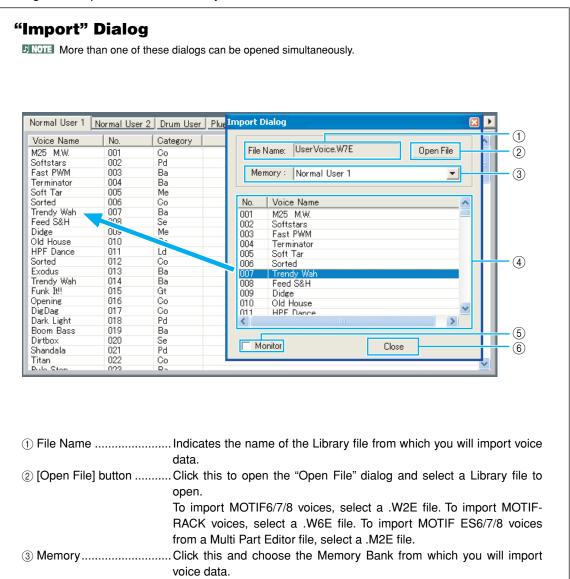
"Monitor" button

If you click this, bulk voice data will be sent for monitoring on your tone generator each time you select a voice. Click it again to disable monitoring.

INDIE! To monitor the voice, you need to play the keyboard connected to your tone generator.

"Import" button

Click this to open the "Import" dialog and import voices from an existing Library file. You can drag-and-drop voices to the Library Window.



(4) Voice listThis area shows all the voices in the selected Memory as a scrollable list, in order of voice number. You can select a voice here and import it directly to the voice list in the Library Window by drag-and-drop. (Multiple voices can also be imported this way.) In Windows, you can alternatively copy the voice by selecting it and pressing [Ctrl]+[C] on the computer keyboard, and then switch to the Library Window and press [Ctrl]+[V] at the new location to paste (import) it. The selected voice cannot be imported to the list in the Preset Voice tab. DINOTE To select a block of voices, click the number of the first voice, hold down the [Shift] key, then click the last voice. **ENOTE** A normal voice cannot be imported to a Drum voice or a Plug-in voice. Similarly, a Drum voice cannot be imported to a Normal voice or a Plug-in voice. **ENOTE** Plug-in Board preset voices can be imported from the "Data" folder. By default, the "Data" folder is located in the following folder. (Windows) C:\Program Files\YAMAHA\OPT Tools\Voice Editor\Voice Editor for MOTIF ES6\Library (Macintosh) YAMAHA Tools\Voice Editor for MOTIF ES6\Library list will be transferred to your tone generator for monitoring. To monitor the voice, use the keyboard connected to your tone generator. Monitoring will not be possible if the MIDI Out port and other parameters in the Editor Setup are not

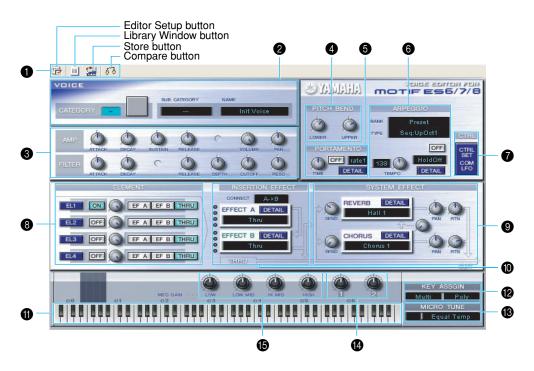
Edit Window

There are three types of voices you can edit using Voice Editor: Normal voices, Drum voices, and Plug-in voices. In the Library window, click the tab containing the Normal voice/Drum voice/Plug-in voice that you wish to edit. Then double-click the voice (or select it and click the "Edit Window" button) to open the Edit window.

- Settings in the Edit window are transmitted via MIDI from your computer to your tone generator in realtime.
- · Settings in the Edit window can be stored to a Library file.
- For details about each parameter, refer to the MOTIF ES6/7/8 Owner's Manual and Data List.

Voice Edit Window

When editing a voice, you will see the following screen:



Toolbar

This contains buttons for executing various basic functions in the program. The following four buttons are available:

- Editor Setup button......See page 12.
- Library Window button Click this to bring the Library Window back into view.

VOICE panel

The name, category, category icon, and sub-category are displayed when editing a voice. Using your computer keyboard, you can assign a different name to the voice.

ENOTE Voice names can consist of up to 10 characters.

3 COMMON EDIT panel (Quick Edit)

This lets you quickly change the volume and tonal characteristics of the Voice by editing the amplitude and filter parameters.

The parameters available for editing differ depending on the selected Voice (Normal, Drum or Plug-in). Available parameters appear as virtual knobs in the window.

Parameter Knob Operation

You can change the operation of the parameter knobs. Right click on any knob, and select "Rotate" or "Up/down or left/right."

When "Rotate" is selected, the parameter values (of the panel "knobs") are changed by clicking and dragging the mouse in a circular direction.

When "Up/down or left/right" is selected, the parameter values (of the panel "knobs") are changed by clicking and dragging the mouse vertically or horizontally.

The setting made here affects all knobs.

PITCH BEND settings

Use the "LOWER" knob to set the lowest point in the pitch bend wheel's range and the "UPPER" knob to set the highest point.

6 PORTAMENTO block

Use the switch to enable/disable portamento and the "TIME" knob to specify the portamento time. Click on the text box and select the portamento mode.

The "PORTAMENTO" block is not available for Drum Voices.

(a) ARPEGGIO block

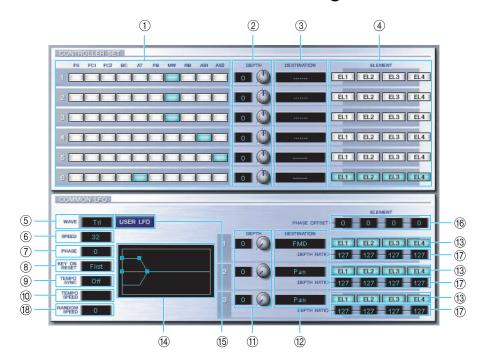
Use the switch to enable/disable the arpeggiator and the "TEMPO" knob to specify the arpeggiator speed. Click on the text box below the switch to select the arpeggiator mode. Click on the text box to the left of the switch to select the arpeggio type. The specific parameters for the arpeggiator can be found in the "ARPEGGIO" dialog, opened by clicking the [DETAIL] button.

[CTRL SET/COM LFO] button

Click this to open the "CONTROLLER SET /COMMON LFO" dialog. In the top panel, you can specify the parameters for all controllers such as the pitch bend and modulation wheels. The bottom panel lets you specify the parameters for the Common LFO.

The "COMMON LFO" panel is available only for Normal Voices.

"CONTROLLER SET/COMMON LFO" Dialog



CONTROLLER SET Panel

You can assign your synthesizer's controllers such as the modulation wheel or keyboard aftertouch to various parameters to allow them to be modified in real-time. For instance, you could assign the modulation wheel to the filter's Resonance parameter when the Normal Voice is selected. In all, up to six controllers can be assigned.

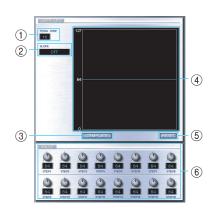
to one controller can be accegned.	
① SOURCE	. Select the controller from "FS" (footswitch), "FC1" (foot control-
	ler 1), "FC2" (foot controller 2), "BC" (breath controller), "AT"
	(aftertouch), "PB" (pitch bend wheel),
	"MW" (modulation wheel), "RB", "AS1/2" (assignable 1/2).
② DEPTH settings	. Sets the degree to which the selected controller will affect the
	parameter assigned to it.
③ DESTINATION settings	. Click on the text box and choose the parameter you wish to
	control.
4 ELEMENT switches	. Click these to enable/disable the Elements which will be
	effected by the controller assignments.

<u>C</u>

COMMON LFO Panel (Normal Voice only)			
•	lick on the text box and select the LFO waveform.		
6 LFO SPEED setting CI	lick on the text box and set the LFO speed.		
7 LFO PHASE setting CI	lick on the text box and select the LFO phase.		
8 LFO KEY ON RESET setting Cl	lick on the text box and select the method of restarting the		
LF	FO when a note is played.		
TEMPO SYNC settingCI	lick on the text box and set TEMPO SYNC to on or off.		
•	lick on the text box and select determine how the LFO pulses		
	sync with the Arpeggio or sequencer.		
•	et the degree to which the selected controller will affect the arameter assigned to it.		

② DESTINATION settings
① Editor graph
(5) USER LFO button
General Conditions of Special Conditions of the value set for the phase parameter. General Conditions of Special Conditions of the value set for the phase parameter.
① DEPTH RATIO Sets the depth of the LFO modulation.
® RANDOM SPEED Sets the LFO speed to vary at random. The greater the value set, the greater the variance of the LFO speed, with 0 is the original speed.

User LFO Panel (Normal Voice only)



① TOTAL STEP Determines the number of steps for the currently edited LFO wave, up to a maximum of sixteen.
② SLOPE Determines the slope or ramp characteristics of the LFO wave.
OFFNo slope; the LFO instantly jumps to the level of each step.
UPThe LFO ramps up to the next step, when that step is
higher in value. No slope for lower steps.
DOWNThe LFO ramps down to the next step, when that step is
lower in value. No slope for higher steps.
• UP & DOWNThe LFO ramps both up and down to the level of each step.
③ TEMPLATE You can select a pre-programmed template for the LFO wave.
The selected template's wave graph appears in the dialog.
randomRandomly generates step values, creating each time a
different random LFO wave.
 all0Values of all the steps are set to 0.
all64Values of all the steps are set to 64.
 all127Values of all the steps are set to 127.
 saw upCreates a saw shaped upward wave.
 saw downCreates a saw shaped downward wave.

even step	Values of all even steps are set to 127, and values of all
	odd steps are set to 0.
 odd step 	Values of all odd steps are set to 127, and values of all
	even steps are set to 0.
④ Wave graph	. Click on the text box and select the method of restarting the
	LFO when a note is played.
⑤ RESET	. Values of all the steps are reset to 0.
⑥ VALUE	. Edit the value for each step by using the corresponding knob.

CONTROLLER (Plug-in Voice only)

This determines the depth of pitch, cutoff, pitch modulation, cutoff modulation, and amplitude modulation.

8 ELEMENT unit

This section is explained in more detail in "Element Unit" (page 23).

9 INSERTION EFFECT units

This section is explained in more detail in "Insertion Effect" (page 28).

SYSTEM EFFECT settings

This section is explained in more detail in "System Effects" (page 28).

(i) Keyboard

Click any key on the keyboard to monitor your edited voice in that key.

KEY ASSIGN settings

Click on the left text box to select a Key Assign setting. Click on the right text box to select Monophonic or Polyphonic. The "KEY ASSIGN" settings are not available for Drum Voices.

MICRO TUNE settings

Click on the text box to select a Micro Tuning preset. The "MICRO TUNE" settings are not available for Drum Voices.

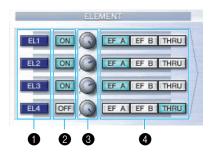
ASSIGNABLE 1/2 settings

Use the knobs to set the value of the parameter assigned to each of the assignable 1/2 controllers.

(b) MEQ GAIN CONTROL settings

Use the knobs to set the gain for each frequency band of the five-band EQ.

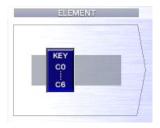
ELEMENT Unit



1 EL (Element) 1 to 4 buttons

Click these to open the corresponding "ELEMENT" dialogs.

For Drum voices, you will see the following panel. Click [KEY C0...C6] to open the "Drum Key" dialog (page 26).



For Plug-in voices, you will see the following panel. Click [DETAIL] to open the "Plug-in Voice Detail" dialog.



- ① VOICE BANKDetermines the Plug-in voice bank.
- ② VOICE NUMBER.....Determines the Plug-in voice number.
- ③ LFODetermines the Speed of LFO, Pitch Modulation, and Delay.
- 4 NOTE SHIFTDetermines the amount of Note Shift (key transpose).

Click [NATIVE PARAM] to open the "NATIVE Parameter" dialog. Select the Plug-in board to be edited at the top left of the keyboard illustration on the window.



ON/OFF switches

Click these to switch each Element on or off.

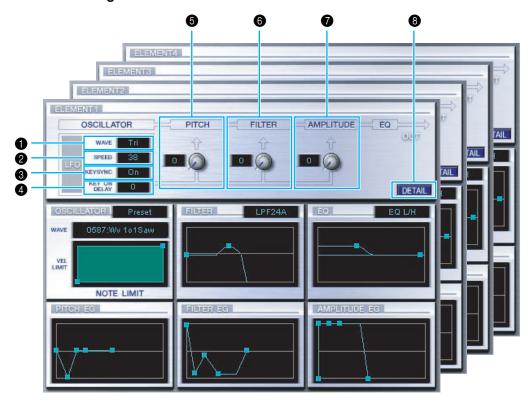
8 Element Level knobs

Use these to set the level of each Element.

EF (Effect)A / EF (Effect) B / THRU switches

Click these to assign each Element to Insertion Effect A or Insertion Effect B, or to bypass the Insertion Effect units.

ELEMENT Dialog



LFO WAVE

Click on the "WAVE" text box and select the LFO's waveform.

2 LFO SPEED

Click on the "SPEED" text box and specify its speed.

KEY SYNC

Click on the "KEY SYNC" text box to switch LFO key sync on or off. (If switched on, the LFO waveform is restarted each time you play a note.)

KEY ON DELAY

Determines the time (delay) between the moment a Note On message is received and the point at which the LFO comes into effect.

6 LFO PITCH knob

Use this to set the pitch modulation depth of the LFO. You can also enter a value directly in the text box to the left of the knob.

6 LFO FILTER knob

Use this to set the filter modulation depth of the LFO. You can also enter a value directly in the text box to the left of the knob.

LFO AMPLITUDE knob

Use this to set the amplitude modulation depth of the LFO. You can also enter a value directly in the text box to the left of the knob.

[DETAIL] button

Click this to open the "EL DETAIL" dialog and enter the parameters for each Element. You have wider and more accurate control over the parameters than with the editor graphs.

Editor graphs

Within these graphs, click and drag the "handles" (square marks) to visually adjust the parameters for each Element.

Sometimes, not all the handles are visible as they may be layered on top of each other at the same position. If this is the case, click the visible handle and drag it away temporarily to reveal the next handle.



OSCILLATOR Settings

Click on the "WAVE" text box and choose the source waveform. One of the square marks is used to set "VEL LIMIT LOW" and "NOTE LIMIT LOW." Set the lowest note velocity response by dragging this the handle horizontally. Set the lowest note in the key range by dragging it vertically. Similarly, set the highest note velocity ("VEL LIMIT HIGH") and key range note ("NOTE LIMIT HIGH") using the other handle.

When dragging the handles, values are given as (X,Y) coordinates, where X is the NOTE LIMIT (given as a MIDI note number) and Y is the VEL LIMIT. To view the note name instead of the note number, select the "OSCILLATOR" tab of the "EL DETAIL" dialog.

FILTER Settings

Click on the text box and choose the filter type. The graph shows pre-defined settings initially, but you can edit these. Using the LPF type as an example, drag the left handle vertically to set the Filter Gain. Drag the right handle horizontally to set the Filter Cutoff frequency.

Parameter values are shown when dragging the handles. To set these values directly, select the "FILTER EG" tab of the "EL DETAIL" dialog.

EQ Settings

Click on the text box and choose the equalizer type. Using the EQ/LH type as an example, the left handle controls the bass frequencies and the right handle controls the treble frequencies. Drag the handles vertically to adjust gain, and horizontally to adjust the frequency.

DNOTE To set these values directly, select the "OSCILLATOR" tab of the "EL DETAIL" dialog.

PITCH EG Settings

The PITCH EG (Envelope Generator) determines the transition in pitch while the key is being held down. There are five handles, each controlling a different stage in the envelope.

The first square mark (furthest to the left) controls the "Hold Time/Level." The second controls the "Attack Time/Level." The third controls the "Decay 1 Time/Level." The fourth controls the "Decay 2 Time/Sustain Level." The last handle (furthest to the right) controls the "Release Time/Level." Drag the handles vertically to adjust levels, and horizontally to adjust the transition times.

To set these values directly, select the "PITCH" tab of the "EL DETAIL" dialog.

FILTER EG Settings

The FILTER EG (Envelope Generator) determines the transition in timbre while the key is being held down. There are five handles, each controlling a different stage in the envelope. The first handle (furthest to the left) controls the "Hold Time/Level." The second controls the "Attack Time/Level." The third controls the "Decay 1 Time/Level." The fourth controls the "Decay 2 Time/Sustain Level." The last square mark (furthest to the right) controls the "Release Time/Level." Drag the handles vertically to adjust levels, and horizontally to adjust the transition times.

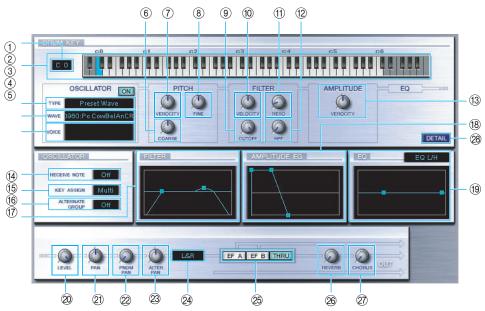
To set these values directly, select the "FILTER EG" tab of the "EL DETAIL" dialog.

AMPLITUDE EG Settings

Controls the transition in volume from the moment a Note On message is received (attack) to the point at which the sound stops (release). Drag the leftmost ■ up or down to set the velocity of the attack time. Drag the second ■ left or right to set the envelope attack time, and drag it up or down to set the attack level. Dragging the third and fourth ■ left or right controls the way the sound is sustained (Decay Time 1 & 2) while the keys on the keyboard are held down, and dragging them up or down control the Decay 1 Level and Sustain Level. Dragging the last ■ left or right controls the how long the sound is heard after receiving a Note Off message (Release Time).

DNOTE To set these values directly, select the "AMP EG" tab of the "EL DETAIL" dialog.

"DRUM KEY" Dialog



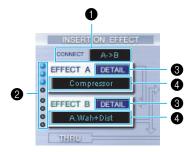
- (1) Key......Indicates the note name to be edited.
- ③ TYPE Determines the bank of the sound source: Preset wave or Voice.
- ④ WAVE......To select a waveform as the source, click this and then the text box next to it to select the waveform.
- ⑤ VOICE......To select a voice as the source, click this and then the text box next to it to open the "Voice List" dialog.
- VELOCITY Use the "VELOCITY" knob to define how the Element's pitch varies with note velocity.

- ⁽²⁾ HPF......Use the "HPF" knob to set the HPF Frequency.
- (3) AMPLITUDE VELOCITY. Use the "VELOCITY" knob to define how the Element's output level varies with note velocity.
- (5) KEY ASSIGN......Click on the text box and select Single key assignment or Multi key assignment.
- (for example, an open and closed hi-hat).
- © FILTER......Drag one of the handles horizontally to adjust the Element's "HPF Cutoff Frequency." Drag the other handle vertically to adjust its "LPF Resonance," and horizontally to adjust its "LPF Cutoff Frequency."

DINOTE To set these values directly, select the "OSCILLATOR" tab of the DRUM KEY DETAIL Dialog.

® AMPLITUDE EG	
FINOTE To set these values directly, select the "PARAMETER" tab of the DRUM KEY DETAIL Dialog.	
© EQ	
To set these values directly, select the "OSCILLATOR" tab of the DRUM KEY DETAIL Dialog.	
② LEVELUse this knob to set the level of the Element.	
② PANUse this knob to set the stereo position of the Element.	
22 RNDM PAN	
② ALTER PANUse this knob to set the "Alternate Pan" depth.	
@ Output Assignment	
selectorClick on the text box and select the output(s) to which the Element will	
be sent.	
EFA/EFB/THRUClick the [EF A] switch to pass the signal through Insertion Effect A. Click [EF B] to pass it through Insertion Effect B. Click [THRU] to bypass the Insertion Effects.	
® REVERB	
Effect A/B (or the by-passed signal) sent to the Reverb unit.	
② CHORUS	
Effect A/B (or by-passed signal) sent to the CHORUS unit.	
® DETAILClick this to open the "DRUM KEY DETAIL" dialog and input all Ele-	
ment values directly (except the Keyboard note assignment).	
The signal output from EQ is sent to LEVEL at the left bottom of the Drum Key Dialog.	
If the OSCILLATOR TYPE is set to "Voice," parameters 7, 9 -14, 16 -19, 22, and 23 described above are not available.	

Insertion Effect A Unit



CONNECT selector

Click on the text box and choose the order in which signals are passed from one insertion effect unit to the other.

Indicator lamps

These show which of the Elements are assigned to the respective Insertion Effect unit. The Indicator lamps are not available for Drum Voices.

[DETAIL] button

Click this to open the Insertion Effect dialog and set the detailed parameters.

Effect Type selector

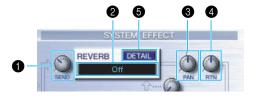
Click on the text box and choose the type of Insertion Effect.

Insertion Effect B Unit

Same as Insertion Effect A Unit. See above.

System Effects

Reverb Unit



Reverb Send

Use this knob to set the level of the signal of Insertion Effect A/B (or the by-passed signal) sent to the Reverb Effect.

2 Reverb Effect Type selector

Click on the text box and choose the type of Reverb Effect.

Reverb Pan controls

Use these knobs to set the stereo positioning of the Reverb Effect.

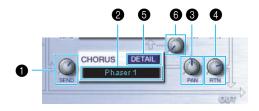
A Reverb Return controls

Use these knobs to set the amount of Reverb Effect that is used in the output signal.

6 [DETAIL] button

Click this to open the Reverb dialog and set the detailed parameters.

Chorus Unit



Chorus Send

Use this knob to set the level of the signal of Insertion Effect A/B (or the by-passed signal) sent to the Chorus effect.

2 Chorus Effect Type selector

Click on the text box and choose the type of Chorus Effect.

Chorus Pan control

Use this knob to set the stereo positioning of the Chorus Effect.

Chorus Return control

Use this knob to set the amount of Chorus Effect that is used in the output signal.

6 [DETAIL] button

Click this to open the Chorus dialog and set the detailed parameters.

6 CHORUS REVERB control

Use this knob to set the level of the signal of sent from the Chorus unit to the Reverb unit.

The Toolbar



1 "Editor Setup" button

Click this to open the "Setup" dialog. See page 12 for details.

2 "Library Window" button

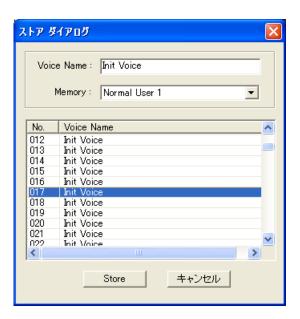
Click this to bring the Library Window back into view. See page 8 for details.

"Store" button

Click this to open the "Store" dialog. See below for details.

"Store" Dialog

You can store the edited voice to any of the Library file.



- 1 Click the Voice Name box at the top of the dialog. The cursor is highlighted and you can enter characters for the name.
- 2 Enter the Voice name via the keyboard of your computer.

 NOTE Voice names can consist of up to 10 characters.
- 3 Click the Memory box and choose the Memory in which to store your edited voice.

4 In the Voice Name list, click the voice in which your edited voice will be stored.

/ CAUTION

After storing to a Library file, the data for the original voice will be overwritten when you save the Library file. It is recommended that you back up important data.

5 Click the [Store] button to store your edited voice in the location specified in step #4.



The "Store" dialog is used to temporarily store your Library file. After storing, save your Library file. If you do not save your Library file after storing, your edits will not be saved.

"Compare" button

If you click this, bulk data for the original voice (prior to editing) will be sent to your tone generator. Click it again to send the bulk data for your edited voice. This button is useful for making A/B comparisons between the original and edited voices.

An Example of Voice Editor in Use

There is no single way to use the many components in the Voice Editor. Your editing needs and preferences may differ; however, the following example gives you a simple step-by-step guide in how to use the Voice Editor.

The Library window is the first window to open, so that's where the explanation begins.

- In the Library window, you can open existing Library files containing the Voices you wish to edit, and specific voices can be imported to the Library window.
- 1 Click the "Editor Setup" button in the toolbar of the Library window to open the "Setup" dialog. Then select the appropriate MIDI In/Out Port and Device No. settings for your tone generator (See the section "Setup" Dialog).
 - If you are using Macintosh, you will also need to make settings in OMS (page 33).
 - If you are using Windows, you will also need to make settings in the MIDI Setup Toolbar or the host application's MIDI port.
- 2 Receive the User voice data from your tone generator.
 - ① Select [Receive Bulk...(Receive...)] (page 7) from the [Setup (MIDI)] menu.
 - ② Select "All" from "Receive Type," then click the [Start] button (page 14). Close the dialog box after reception. The received voice is shown.
- 3 In the Voice List of the Library window, double-click the voice you wish to edit. The Edit Window will open for the voice.
- 4 Various blocks are arranged in the Edit window. First, let's set the parameters for Elements 1 to 4 on the Element block which make up the voice. Open the dialogs for Elements 1 to 4, select the waveforms, and adjust the tonal characteristics of the voice using the filters and equalizers. You can use the graph editors in each dialog to visually edit the parameters.

- You can edit the Element parameters in much finer detail within the "EL DETAIL" dialogs. The Element dialogs are linked to the "EL DETAIL" dialogs, so changes in one dialog are immediately reflected in the other. You can simultaneously view the graphs and the "EL DETAIL" dialogs side-by-side while editing.
- Also within the Element Unit, you can set the output level for each Element and the route their outputs through Insertion Effects A/B.
- 5 Select the Insertion Effect Type in the Insertion A/B Unit and set the remaining parameters.
- $oldsymbol{6}$ Select the System Effect Type in the Reverb/Chorus Unit and set the remaining parameters.
- 7 Set the Arpeggio and Portamento parameters if necessary.
- **8** Click the "Store" button in the toolbar of the Edit Window to open the "Store" dialog. This will store the edits for the current voice in the Library file.
 - The edits for the voice are only stored in the Library file temporarily. Beware that if you proceed further without saving the Library file itself, you will lose all your edits.
- 9 Switch back to the Library Window and click the "Save" button in the toolbar to save (overwrite) the Library file. The edits for your voice will be saved with the voice itself in the designated voice list location.
 - The Library file you have saved can be opened in the Library Window at any time. Voices in the Library Window can be transmitted to your synthesizer.
 - You can create a variety of different Library files, each tailored for separate applications, such as live performances, recording, etc. Thus, you can conveniently modify voices to suit different situations and needs.
- 10 Click the "Transmit" button in the toolbar of the Library window to transmit the edited voice from the computer to the MOTIF ES6/7/8. After the operation is completed, you can select the edited voice on the MOTIF ES6/7/8's panel.

OMS Settings (Macintosh)

The Voice Editor software uses OMS (Open Music System) for MIDI input/output. To use the Voice Editor software, OMS must be installed beforehand.

For information about installing OMS, refer to the separate Installation Manual.

About OMS

Voice Editor uses the OMS (Open Music System) to transfer MIDI data to an external MIDI device. OMS is a system extension that goes in the Mac OS System folder, designed to manage the MIDI data stream (input & output) in a computer, to enable MIDI data transfer between MIDI software and hardware attached to the computer. OMS is a de facto standard of the MIDI environment under the Mac OS, and various music software manufacturers have released OMS-compatible sequencer and other software.

OMS has the following merits:

- As OMS-compatible MIDI applications communicate with various MIDI devices via OMS, it is
 no longer necessary for you to set up multiple MIDI drivers for those applications. Thus, you
 can avoid conflicts between different drivers with the same purpose (MIDI control).
- Once a Studio Setup is read in OMS, any OMS-compatible application will be aware of it, even
 if you need to reconfigure the routing of the MIDI data stream or change the current Studio
 Setup. OMS-compatible applications will commonly recognize the new configuration.
- You can have different Studio Setups to choose from, letting you instantly switch to a different MIDI routing (patches between MIDI devices and software).
- Every time the OMS Setup application is opened, any MIDI device connected to the computer
 is automatically detected, and its icon appears with a current MIDI status (channel number,
 port number, patches, etc.). Once devices are properly configured with OMS Setup, you don't
 need to worry about the status.
- OMS can drive various MIDI interfaces, including the standard type (16 channels) and the
 multi-port type (16 channels per port). If you use a multi-port type, you can control over 16
 channels simultaneously via OMS.

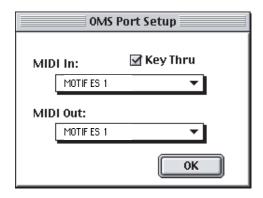
For more information about OMS features, see the READ ME file included with OMS.

OMS Port Setup

Having set up OMS, you now need to start up Voice Editor and set the OMS ports.

- 1 Start up Voice Editor by double-clicking its icon.

 FIGURE If AppleTalk is enabled, you will get an alert message. Click "OFF".
- 2 Choose "OMS Port Setup" from Voice Editor's "MIDI" menu, then select the port settings. In the following example, the tone generator is an MOTIF ES6/7/8 and its settings are applied to OMS.



Key ThruCheck this if you are monitoring a sound generator module using an external keyboard.

MIDI In:Select "MOTIF ES 1."

MIDI Out:Select "MOTIF ES 1."

3 Click [OK] to close OMS Port Setup.

Troubleshooting

If you encounter problems such as no sound output or abnormal behavior, verify the connections before checking the following.

<Windows / Macintosh>

Sound does not change when using knobs or sliders.

Are the MIDI Out port and Device Number set correctly in the Editor Setup? (pages 12, 34)

Bulk data is not transmitted.

- Are the MIDI Out port and Device Number set correctly in the Editor Setup? (pages 12, 34)
- Is the Dump Interval in the Editor Setup too short? Make sure the Dump Interval is at least 20 ms.

No sound heard when clicking on-screen keyboard in Edit Window.

Is the MIDI channel set correctly in the Editor Setup? (page 12)

Sound does not change when Monitor button is pressed.

 Are the MIDI Out port and Device Number set correctly in the Editor Setup (OMS Port Setup)? (pages 12, 34)

<Windows>

Bulk data is not received.

- Open the Setup Dialog and check that the Device Number has been properly assigned (page 12).
- Is the MIDI Thru port set to off in the client application?
- When running the Multi Part Editor as an SQ01 plug-in, reduce the buffer size in SQ01 under [Setup] menu → [MIDI] → [System Exclusive] → Receive Buffer Size.

MIDI In/Out port is not available in Editor Setup.

• The MIDI In/Out port in Editor Setup is selected from the MIDI In/Out ports in the MIDI Setup. Check the MIDI In/Out settings in the MIDI Setup Toolbar or in the host application.

<Macintosh>

The USB port is not recognized.

Check whether the USB driver has been installed to your computer correctly. See the installation manual for details.

The modem/printer port is not recognized.

- Check the connection and settings of the MIDI interface.
- On some Macintosh models such as the Performa series, the modem port cannot be used and only the printer port is available.
- The modem/printer port will not be recognized if AppleTalk is ON. Note that with some Macintosh models, AppleTalk is automatically enabled when starting up.
- Verify that the "Modem" or "Printer" checkbox has been checked in the OMS MIDI Setup window.

No MIDI In/Out data

- Check whether the MIDI IN/OUT setting in the Utility mode corresponds to the actually used cable (USB or MIDI).
- In the OMS Port Setup, is MIDI In/Out set to "unknown"? If you change the OMS ports or setup, the OMS output ports have to be set accordingly in Voice Editor's OMS Port Setup window. Choose the appropriate receiving device.
- If the port and setup assignments are frequently altered, OMS may be unable to easily recognize the port. Reboot the Macintosh, set up OMS correctly, then start up the Voice Editor.

Bulk data is not received.

- Open the OMS Port Setup window and check that the MIDI In has been properly assigned (page 34).
- Open the Setup Dialog and check that the Device Number has been properly assigned (page 12).

Voice Editor does not start up when Library File (extension .W6E) is double-clicked.

 Change the Type/Creator settings for Library Files as follows, then try double-clicking the file again.

Type: W7E_ Creator: YMTE