YAMAHA

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

Contents

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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.
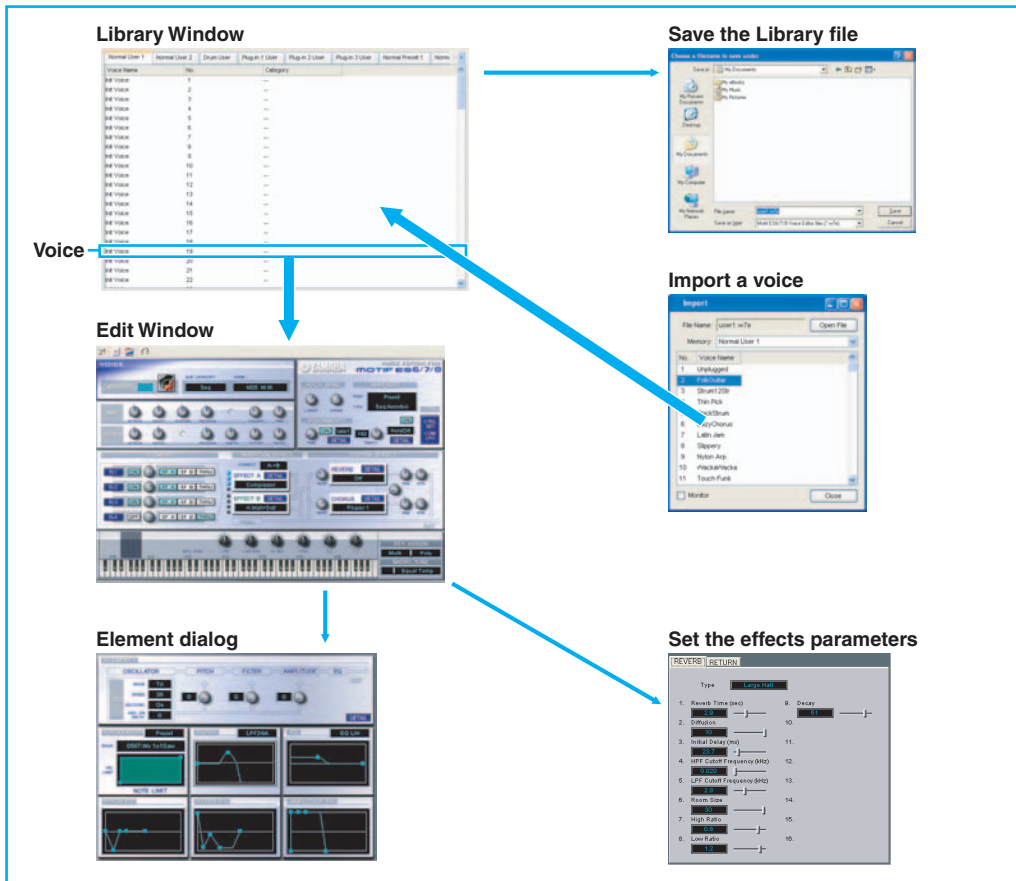
About Menu/Button Name
When the name of the menu or button differs in Windows and Macintosh, the names are indicated as "Windows name (Macintosh name)" in the manual.
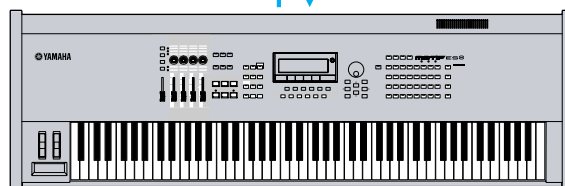
What is the Voice Editor?

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.

You can use this Voice Editor as a plug-in for the software below.
- Studio Manager
- Sequencer compatible with Open Plug-in Technology (OPT).

Library Window

Save the Library file

Voice

Edit Window

Import a voice

Element dialog

Set the effects parameters

Transmit / Receive bulk data

MOTIF ES6/7/8

About Studio Manager

Studio Manager is a cross-platform application that enables you to start multiple Editors for controlling YAMAHA hardware products remotely, and to save multiple Editor settings.
For more information, refer to the separate Installation Guide or the Studio Manager PDF manual.

What is Total Recall

You can save and recall each Editor's settings in Studio Manager. This enables you to recall all the settings of multiple devices from Studio Manager and control the entire system using simple operations. This capability is called the "Total Recall" function.
Also, if you are saving the setup files or trying to synchronize multiple devices, you can recall all the settings for multiple devices using Studio Manager. Alternatively, you can recall the settings only for a certain device using the Editor of the corresponding device.
For more information, refer to the Studio Manager PDF manual.

Right-click the Voice Editor icon in the Studio Manager window. Select "Configure Total Recall," then select the data to be recalled. The data that can be selected differs depending on the Editor.

The following data types can be selected in the MOTIF ES Voice Editor.

- All.. Current, Normal User 1/2, Drum User, and Plug-in 1-3 Voice data
- Current...................................... Voice data currently being edited
- Normal User 1 Voice .... Normal User 1 Voice data
- Normal User 2 Voice .... Normal User 2 Voice data
- Drum User Voice........................ Drum User Voice data
- Plug-in 1 User Voice .... Plug-in 1 User Voice data
- Plug-in 2 User Voice .... Plug-in 2 User Voice data
- Plug-in 3 User Voice .... Plug-in 3 User Voice data
  (You can select multiple data simultaneously from the Current, Normal User 1/2, and Drum User, Plug-in 1-3 Voices.)

- When starting the Voice Editor from the Studio Manager, you can save the Voice Editor data into the Session file of Studio Manager.
- When using DAW (digital audio workstation) software compatible with Total Recall and the Studio Manager together, the Voice Editor data will be saved into the Project file (Song file) of the DAW.

About Open Plug-in Technology

Open Plug-in Technology (OPT) is a new software format that enables you to control MIDI devices from a music DAW application software. 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. OPT also makes it unnecessary to set MIDI drivers for each application, streamlining your music production system and making all operations more convenient and seamless.

In addition to the original OPT, there is also Open Plug-in Technology Version 2 (OPT 2), designed for use with the Total Recall software. Studio Manager is a host application that supports OPT 2.

About the OPT Levels and Overview

The host application and its compatibility with OPT is divided into three levels, as shown below.

Level 1
OPT Panels provides basic support for opening and displaying OPT control panels that can transmit data via the client's external MIDI ports. Typically this will allow basic hardware editor control panels to operate properly.
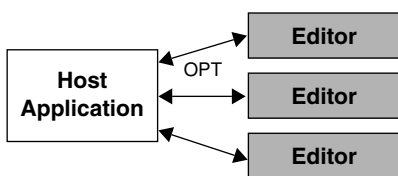
Level 2
OPT Processors provides support for real-time MIDI processors and panel automation.
Typically this will allow both real-time and offline MIDI effects to operate properly and supply automation to OPT panels.

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-compatible plug-in software is connected directly to an OPT-compatible host application.

OPT Level Implementation for the MOTIF ES6/7/8 Voice Editor

This chart shows the OPT-compatibility of the MOTIF ES6/7/8 Voice Editor.

OPT levels of the client application		MOTIF ES6/7/8 Voice Editor for operation	
		Operation support	Operation limits
VIEWS (Level3)		Yes	None
PROCESSORS (Level2)		Yes	None
PANELS (Level1)		Yes	Bulk reception

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

About the OPT 2 Overview

OPT 2 is a plug-in format that enhances OPT Level 1 (Panels) and adds some convenient functions for use with Total Recall. In addition to doing Total Recall functions using the Studio Manager as a host application, you can use Total Recall in a DAW application (provided it is compatible with Total Recall), via the Studio Manager.
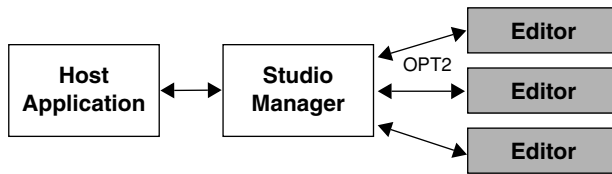
Plug-in software compatible with OPT 2 is indirectly connected to the DAW application compatible with Total Recall, via the Studio Manager.

Starting the Voice Editor

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

Windows

NOTE In order to use the Voice Editor with your tone generator, you'll need to set the MIDI in/out ports. (page 14)

● **Starting Voice Editor from Studio Manager**

1. Start Studio Manager as a plug-in within DAW software compatible with Total Recall, or as a stand-alone application.
2. Start Voice Editor from Studio Manager.

For more information, refer to the installation guide and Studio Manager PDF manual.

● **Starting the Voice Editor in the sequencer software compatible with OPT as a plug-in software.**

The Voice 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.

NOTE For OPT-compatible software, the Voice Editor settings will be saved along with the song file.

1. Start the host application.
2. Select "MOTIF ES Voice Editor" in the host application's "Plug-in" menu.

Macintosh

1. Start the Studio Manager as a plug-in for the DAW compatible with the Total Recall or a stand-alone application.
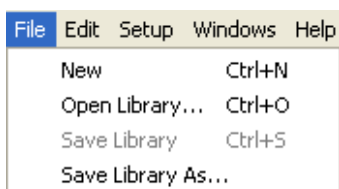2. Start the Voice Editor from the Studio Manager.

For more information, refer to the installation guide and Studio Manager PDF manual.

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.

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

File

```
File  Edit  Setup  Windows  Help
  New              Ctrl+N
  Open Library...  Ctrl+O
  Save Library     Ctrl+S
  Save Library As...
```

New

Creates and opens a new Library file.

Open Library...

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

Save Library

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

Save Library As...

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

Edit

Edit | Setup | Windows | Help
Copy | Ctrl+C
Paste | Ctrl+V
Initialize | Del
Edit... | Ctrl+E
Store
Import... | Ctrl+I
Compare | Ctrl+Z

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 18).

Store...
This is the same as the "Store" button in the toolbar (page 18).
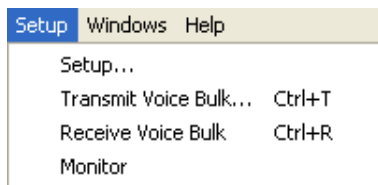
Import...
This is the same as the "Import" button in the toolbar (page 17).

Compare
This is the same as the "Compare" button in the toolbar (page 19).

Setup

Setup...
This is the same as the "Editor Setup" button in the toolbar (page 14).

Transmit Voice Bulk...
This is the same as the "Transmit Bulk" button in the toolbar (page 15).

Receive Voice Bulk...
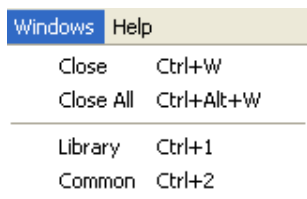This is the same as the "Receive Bulk" button in the toolbar (page 16).

Monitor
This is the same as the "Monitor" button in the toolbar (page 18).

Window

Close
Closes the selected window.

Close All
Closes all open windows.

Library
This is the same as the "Library Window" button in the toolbar (page 16).

Common
Displays the Common Edit window for the Voice being edited.

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.

♪NOTE You can save your settings as a Library file (*.W7E).
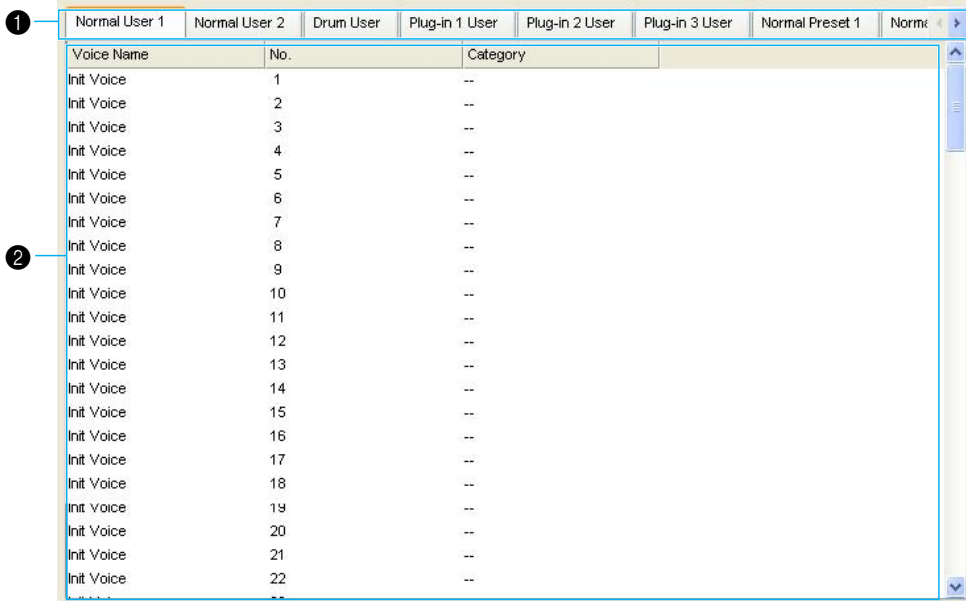
❶ Tabs

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

❷ 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 by selecting the voice name, then clicking on it again to enter a new name.

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

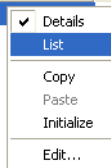♪NOTE Voice names can consist of up to 10 characters.

Split Bar

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.

🎵 NOTE 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 Only the Voice Names

You can view only 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 **Windows**

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

Macintosh

To switch back to the full Voice Name/Number/Category list, click the mouse while holding the [control] key on any part of the voice list and choose "Details."

Library Window Toolbar

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾ ❿ ⓫
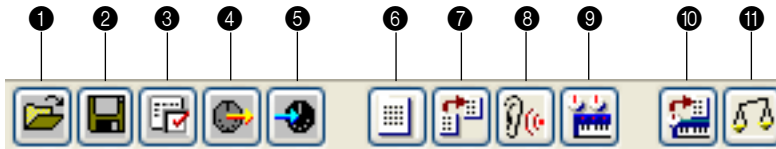
❶ **"Open" button**

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.

①	Choose a File to Open
②	
③④	File name: Files of type:
⑤⑥	Open / Cancel
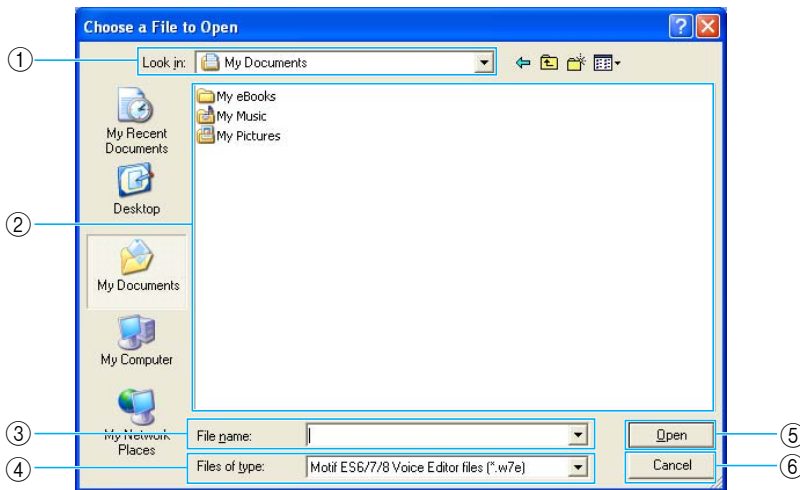
> **NOTE** If you are using a Macintosh, the typical Macintosh "Open" dialog will appear.

① Look in ....Click this and choose the folder containing the Voice Editor files.

② List box............................Shows the contents of the current folder.

③ File name ....Shows the name of the files selected from the List.

④ Files of type ....Select a file format from the pull-down menu.

> **NOTE** When using the MOTIF ES Voice Editor, it is possible to open MOTIF ES Voice Editor 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.

> **NOTE** When opening the MOTIF ES Multi Part Editor file (*.M2E/*.M4E), all User Voice data in the file will be read.

⑤ [Open] button ....Click this to open the file selected from the List.

⑥ [Cancel] button................Click this to cancel the operation.

❷ **"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 (*.W7E).

"Save As" Dialog
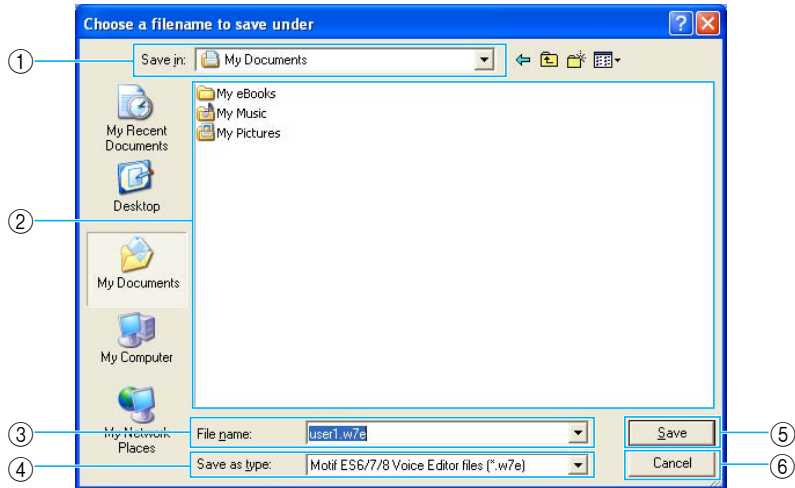
NOTE If you are using a Macintosh, the typical Macintosh "Save As" dialog will appear.

① Save in .... Click this and choose the folder in which to save the Library file.
② List box .... Shows the contents of the folder you wish to save to.
③ File name .... Specify the name of the Library file to be saved here.
④ Save as type .... Click this and choose the file type.
⑤ [Save] button .... Click this to save the Library file with the name specified in the "File name" field.
⑥ [Cancel] button .... Click this to quit the dialog without storing.

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

❸ "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.
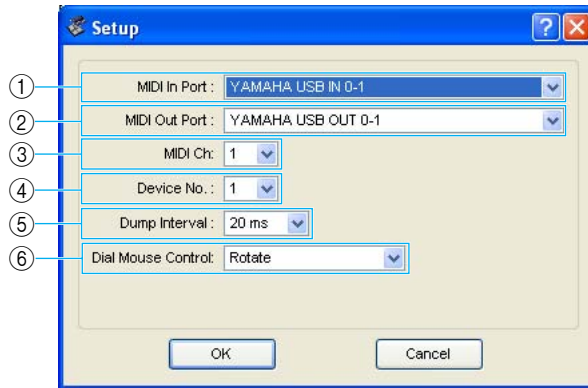
① MIDI In Port .... Click this and choose the MIDI In port. You can use the Voice Editor to receive data sent from the device connected to this port.

② MIDI Out Port .... Click this and choose the MIDI Out port. You can use the Voice Editor to control and edit the device connected to this port.

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.

④ Device No. .... Click this and choose the MIDI device number of your tone generator.

⑤ Dump Interval .... Click this and choose the interval between successive MIDI dumps.

♪ NOTE Setting this to too short of an interval may result in errors when transmitting MIDI data.

⑥ Dial Mouse Control .... Changes the operation of the parameter knobs.

When "Rotate" is selected, the parameter values (of the panel "knobs") are changed by clicking and dragging the mouse in a circular direction - in the same way as turning an actual knob.

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 - in the same way as operating a slider.

❹ **"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.
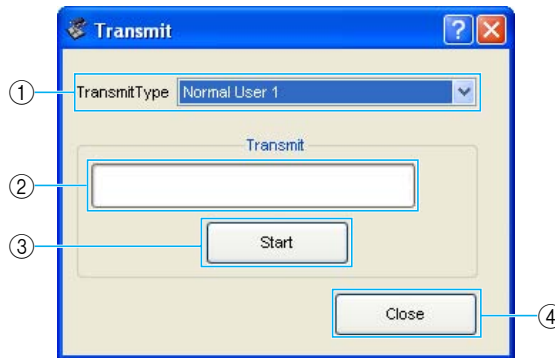
① Transmit Type .... Indicates the voice data to be transmitted.

     Normal User 1 .... All Normal User 1 Voices
     Normal User 2 .... All Normal User 2 Voices
     Normal User 1+2 .... All Normal User 1, 2 Voices
     Drum User .... All Drum User Voices
     Normal User 1+2+Drum .... All Normal User Voices 1, 2 and Drum User Voices
     Plug-in 1 User....................... All Plug-in 1 User Voices
     Plug-in 2 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 1-3 User Voices
     All .... All User Voices (Normal 1, 2, Drum, and Plug-in 1-3)

② Progress bar .... Indicates how much of the data has been transmitted.

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

④ [Close] button................. Click this to close this dialog.

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

❺ **"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.
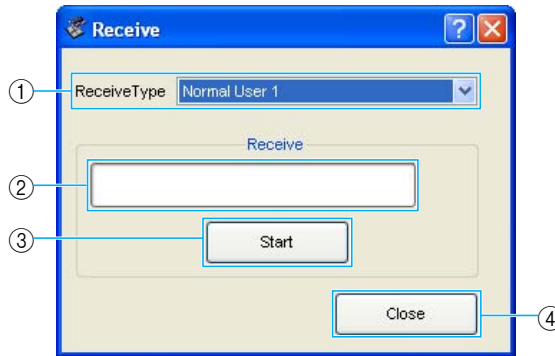
① Receive Type.................. Click this and choose the Voice data (internal/external/all) to receive.

Normal User 1 .... All Normal User 1 Voices
Normal User 2 .... All Normal User 2 Voices
Normal User 1+2 .... All Normal User 1, 2 Voices
Drum User .... All Drum User Voices
Normal User 1+2+Drum .... All Normal User Voices 1, 2 and Drum User Voices
Plug-in 1 User........................ All Plug-in 1 User Voices
Plug-in 2 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 1-3 User Voices
All .... All User Voices (Normal 1, 2, Drum, and Plug-in 1-3)
Preset .... All Preset Voices

② Progress bar .... Indicates how much of the data has been received.
③ [Start] button .... Click this to receive the data.
④ [Close] button................. Click this to close this dialog.

🎵 NOTE The MIDI Device Number has to be set correctly in order to receive bulk data. For further details, see page 14.
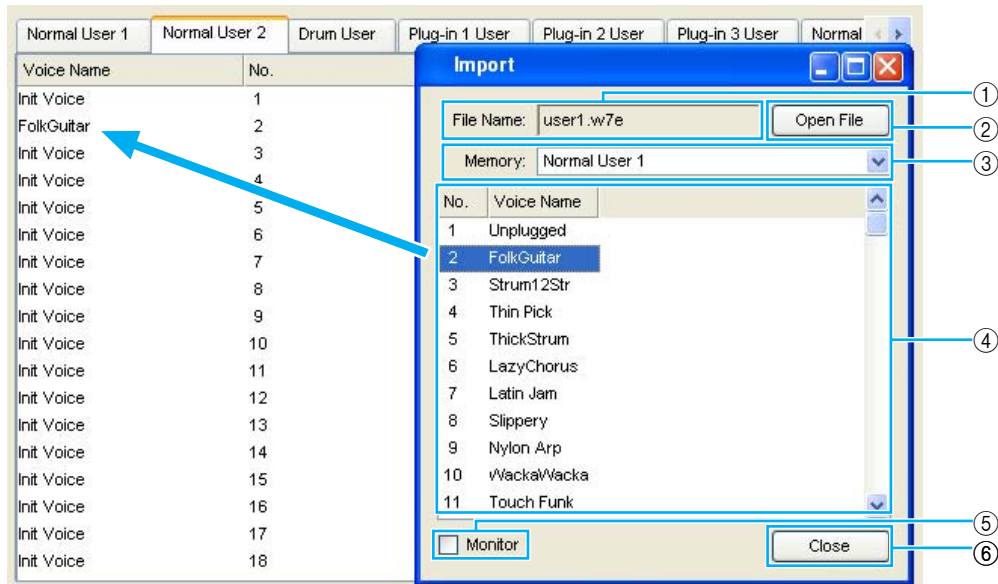
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❻ **"Library Window" button**

Click this to bring the Library Window back into view. See page 10 for details.

❼ **"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.

"Import" Dialog

🎵 NOTE More than one of these dialogs can be opened simultaneously.

① File Name .... Indicates the name of the Library file from which you will import voice data.

② [Open File] button .... Click this to open the "Open File" dialog and select a Library file to open (page 12).

③ Memory .... Click this and choose the Memory Bank from which you will import voice data.

④ Voice list .... This 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.) You can alternatively copy the voice by selecting it and pressing [Ctrl] ([Command])+[C] on the computer keyboard, and then switch to the Library Window and press [Ctrl] ([Command])+[V] at the new location to paste (import) it.

🎵 NOTE The selected voice cannot be imported to the list in the Preset Voice tab.

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

🎵 NOTE 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.

🎵 NOTE 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:\Pogram Files\YAMAHA\Studio Manager\MOTIF ES6 Voice Editor\Library
Macintosh
Applications\YAMAHA\Studio Manager\MOTIF ES6 Voice Editor\Library

❽ "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.

🎵 NOTE To monitor the voice, use the keyboard.

❾ "Edit Window" button

Click this to open the Edit Window (Common) for the selected voice in the list. For further details, see page 20.

❿ "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.

⚠ CAUTION

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.

⓫ **"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 comparisons between the original and edited voices.

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.

NOTE When using the MIDI echo (or "MIDI thru") setting of the sequencer, the actual MIDI channel used for MIDI messages (transmitted from the keyboard to this synthesizer through the computer) will differ depending on the track selected in the sequencer. In other words, selecting a different track will automatically select a different MIDI channel.

Voice Edit Window

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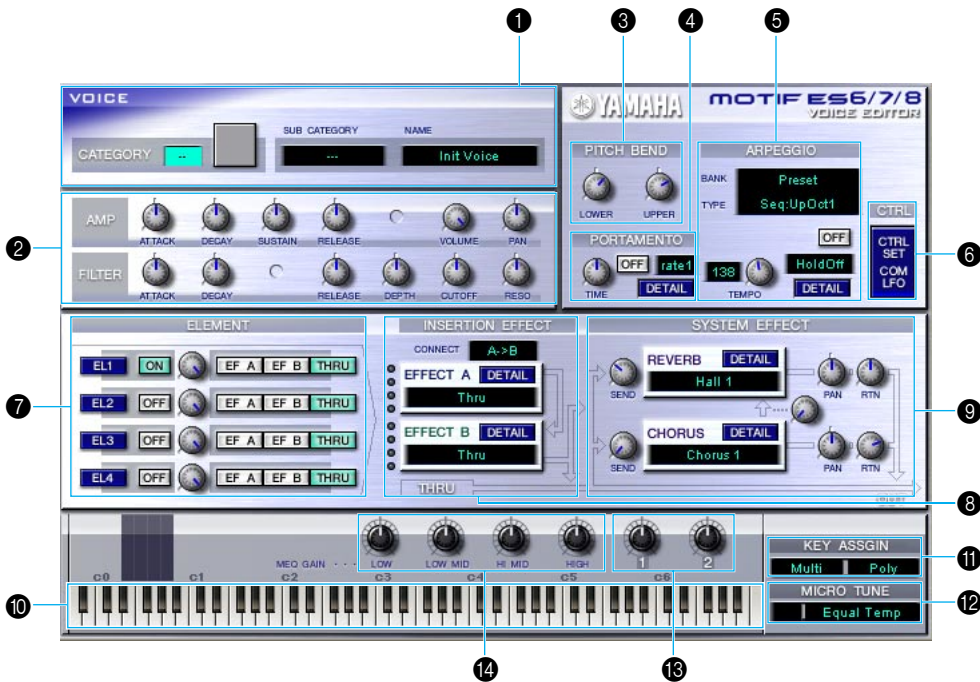
❶ VOICE panel

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.

NOTE Voice names can consist of up to 10 characters.

❷ 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.

NOTE 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.

❸ 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.

❹ 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.

❺ 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.

❻ [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
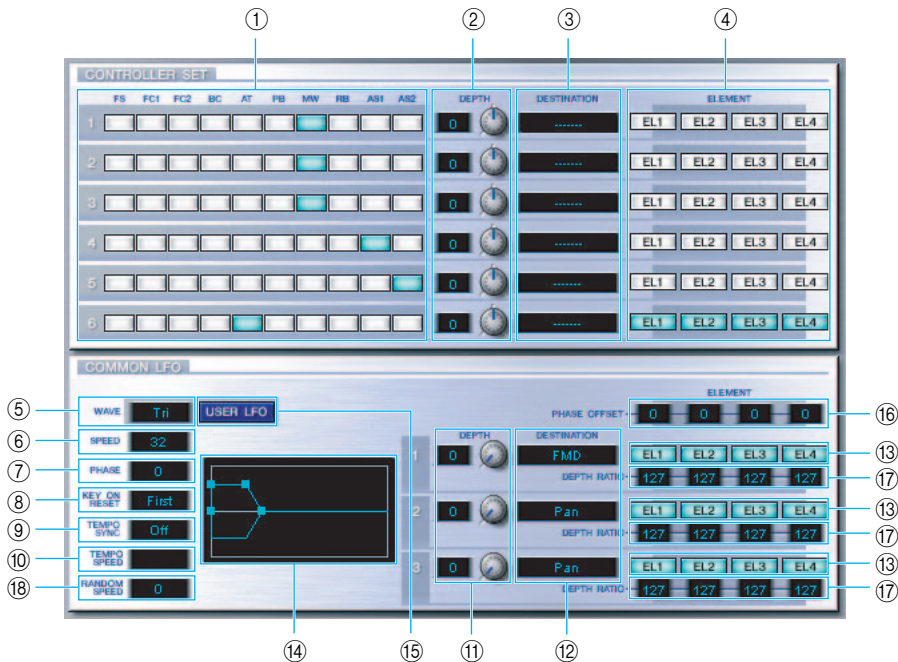
CONTROLLER SET Panel

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.

① SOURCE .... Select the controller from "FS" (footswitch), "FC1" (foot controller 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.

COMMON LFO Panel (Normal Voice only)

⑤ LFO WAVE setting .... Click on the text box and select the LFO waveform.

⑥ LFO SPEED setting .... Click on the text box and set the LFO speed.

⑦ LFO PHASE setting .... Click on the text box and select the LFO phase.

⑧ LFO KEY ON RESET setting..... Click on the text box and select the method of restarting the LFO when a note is played.

⑨ TEMPO SYNC setting .... Click on the text box and set TEMPO SYNC to on or off.

⑩ TEMPO SPEED setting .... Click on the text box and select determine how the LFO pulses in sync with the Arpeggio or sequencer.

⑪ DEPTH setting .... Set the degree to which the selected controller will affect the parameter assigned to it.

⑫ DESTINATION settings.............. Click on the text box and choose the parameter you wish to control.

⑬ ELEMENT switches .... Click these to enable/disable the Elements which will be effected by the controller assignments.

⑭ Editor graph .... Click and drag the "handles" (square marks) to set the time-dependent behavior of the Common LFO. The first handle (furthest to the left) controls the "LFO Delay Time." The second controls the "LFO Fade In Time." The third controls the "LFO Control Time." The last square mark (furthest to the right) controls the "LFO Fade Out Time." Drag the handles horizontally to adjust the transition times.

⑮ USER LFO button .... Click this to open the USER LFO dialog.

⑯ PHASE OFFSET .... Sets, for each element, the offset value of the value set for the phase parameter.

⑰ DEPTH RATIO .... Sets the depth of the LFO modulation.

⑱ 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)
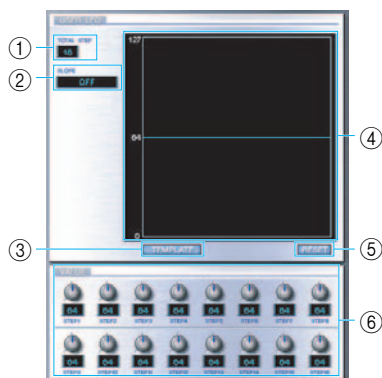
① TOTAL STEP .... Determines the number of steps for the currently edited LFO wave, up to a maximum of sixteen.

② SLOPE .... Determines the slope or ramp characteristics of the LFO wave.
 • OFF ....No slope; the LFO instantly jumps to the level of each step.
 • UP ....The LFO ramps up to the next step, when that step is higher in value. No slope for lower steps.
 • DOWN ....The LFO ramps down to the next step, when that step is lower in value. No slope for higher steps.
 • UP & DOWN ....The 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.
 • random ....Randomly generates step values, creating each time a different random LFO wave.
 • all0 ....Values of all the steps are set to 0.
 • all64 ....Values of all the steps are set to 64.
 • all127 ....Values of all the steps are set to 127.
 • saw up....................................Creates a saw shaped upward wave.
 • saw down ....Creates 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.

❼ **ELEMENT unit**

This section is explained in more detail in "Element Unit" (page 26).

❽ **INSERTION EFFECT units**

This section is explained in more detail in "Insertion Effect" (page 30).

⑨ SYSTEM EFFECT settings

This section is explained in more detail in "System Effects" (page 30).

⑩ Keyboard

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

⑪ 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.

⑫ MICRO TUNE settings

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

⑬ ASSIGNABLE 1/2 settings

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

⑭ MEQ GAIN CONTROL settings

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

<u>**ELEMENT Unit**</u>
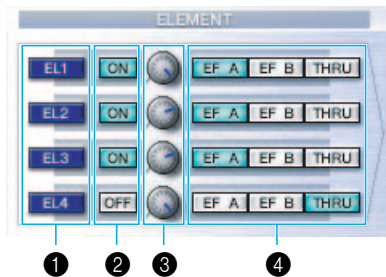
❶ EL (Element) 1 to 4 buttons

Click these to open the corresponding "ELEMENT" dialogs.

> **NOTE** For Drum voices, you will see the following panel. Click [KEY C0...C6] to open the "Drum Key" dialog (page 28).

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

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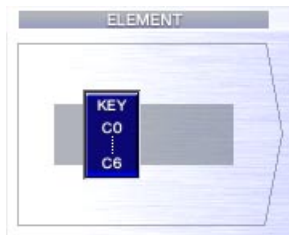② VOICE NUMBER.............Determines the Plug-in voice number.
③ LFO ....Determines the Speed of LFO, Pitch Modulation, and Delay.
④ NOTE SHIFT ....Determines the amount of Note Shift (key transpose).

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.
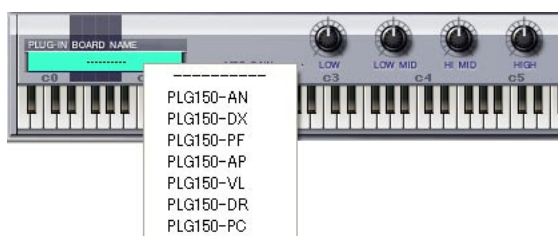
❷ ON/OFF switches

Click these to switch each Element on or off.

❸ Element Level knobs

Use these to set the level of each Element.

❹ 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.

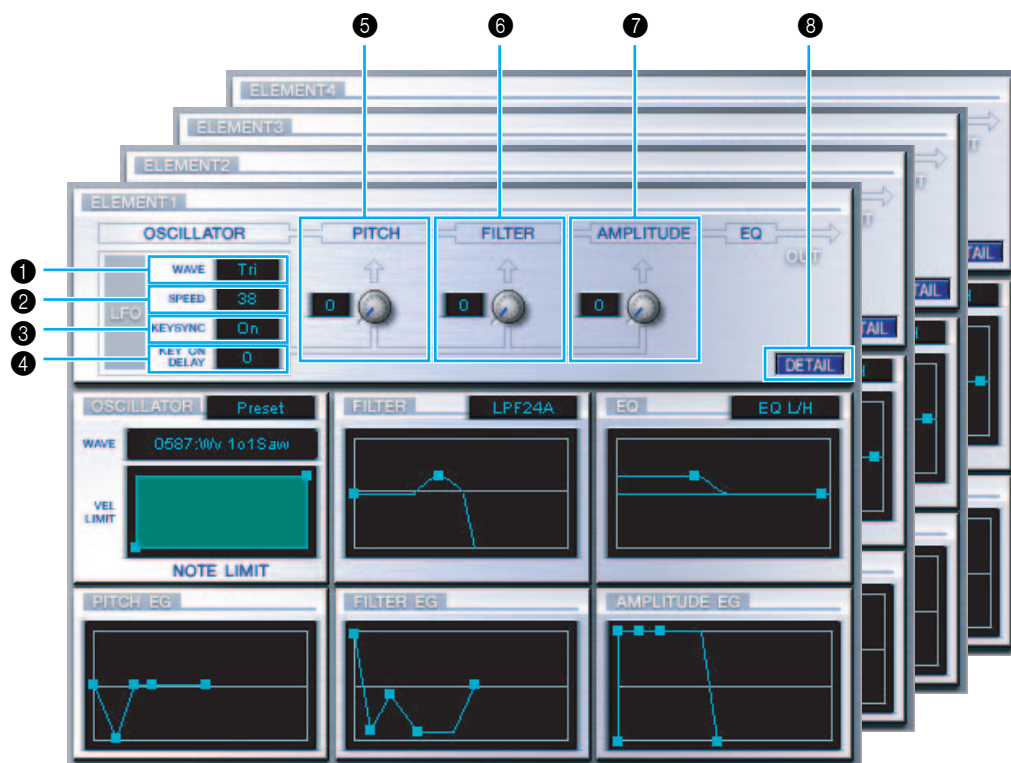● **ELEMENT Dialog**

❶ **LFO WAVE**

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

❷ **LFO SPEED**

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

❸ **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.)

❹ **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.

❺ **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.

❻ **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.

❼ **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.

❽ **[DETAIL] button**

Click this to open the "EL DETAIL" dialog and set 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.

🎵 **NOTE** 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.

🎵 **NOTE** 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.

🎵 **NOTE** 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.

🎵 **NOTE** 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.

🎵 **NOTE** 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.

♪ NOTE 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).

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

"DRUM KEY" Dialog
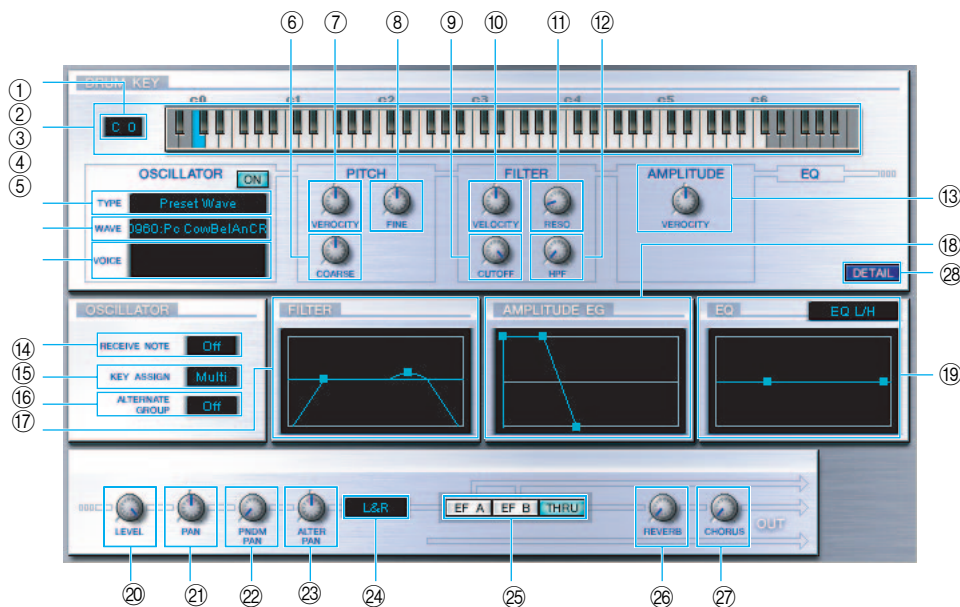
① Key .... Indicates the note name to be edited.
② Keyboard......................... Click on the keyboard to specify note assigned to the Element or Voice you are editing. The text box to the left shows the note name.
③ TYPE .... Determines the bank of the sound source: Preset/User wave or Voice.
④ 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.
⑥ COARSE......................... Use the "COARSE" knob to tune the Element's pitch in coarse increments (semitones).
⑦ VELOCITY .... Use the "VELOCITY" knob to define how the Element's pitch varies with note velocity.

⑧ FINE .... Use the "FINE" knob to further fine-tune it.

⑨ CUTOFF .... Use the "CUTOFF" knob to set its LPF Cutoff Frequency.

⑩ VELOCITY .... Use the "VELOCITY" knob to define how the Element's filter opens/
closes in response to note velocity.

⑪ RESO............................. Use the "RESO" knob to set the LPF Resonance level.

⑫ HPF................................ Use the "HPF" knob to set the HPF Frequency.

⑬ AMPLITUDE VELOCITY. Use the "VELOCITY" knob to define how the Element's output level
varies with note velocity.

⑭ RECEIVE NOTE .... Click on the text box and select whether or not to receive notes.

⑮ KEY ASSIGN .... Click on the text box and select Single key assignment or Multi key
assignment.

⑯ ALTERNATE GROUP ..... Click on the text box and select an alternate group number. This is
used to prevent a pair of drum sounds from sounding simultaneously
(for example, an open and closed hi-hat).

⑰ FILTER .... Drag one of the handles horizontally to adjust the Element's "HPF Cut-
off Frequency." Drag the other handle vertically to adjust its "LPF Res-
onance," and horizontally to adjust its "LPF Cutoff Frequency."

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

⑱ AMPLITUDE EG .... Drag the first handle (furthest to the left) horizontally to adjust the Ele-
ment's "Attack Time." Drag the second horizontally to adjust its "Decay
1 Time," and vertically to adjust its "Decay 1 Level." Drag the last han-
dle (furthest to the right) horizontally to adjust its "Decay 2 Time."

♪ NOTE To set these values directly, select the "PARAMETER" tab of the DRUM KEY DETAIL Dialog.

⑲ EQ.................................. Click on the text box and select the EQ type. With the "EQ L/H" and
"P.EQ" types, you can adjust some EQ parameters using the handles
in the graphs. Drag one of the handles horizontally to adjust the Ele-
ment's "EQ Low Frequency," and vertically to adjust its "EQ Low Gain."
Drag the other handle horizontally to adjust the Element's "EQ High
Frequency" (or "EQ Resonance" if the P.EQ type has been chosen)
and vertically to adjust its "EQ High Gain."

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

⑳ LEVEL............................. Use this knob to set the level of the Element.

㉑ PAN .... Use this knob to set the stereo position of the Element.

㉒ RNDM PAN .... Use this knob to set the Element's "Random Pan" depth.

㉓ ALTER PAN..................... Use this knob to set the "Alternate Pan" depth.

㉔ Output Assignment
selector .... Click on the text box and select the output(s) to which the Element will
be sent.

㉕ EFA/EFB/THRU .... Click 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.

㉖ REVERB .... Use the "REVERB" knob to set the level of the signal from Insertion
Effect A/B (or the by-passed signal) sent to the Reverb unit.

㉗ CHORUS .... Use the "CHORUS" knob to set the level of the signal from Insertion
Effect A/B (or by-passed signal) sent to the CHORUS unit.

㉘ DETAIL............................ Click this to open the "DRUM KEY DETAIL" dialog and input all Ele-
ment values directly (except the Keyboard note assignment).

♪ NOTE The signal output from EQ is sent to LEVEL at the left bottom of the Drum Key Dialog.

♪ NOTE If the OSCILLATOR TYPE is set to "Voice," parameters 7, 9 -14, 16 -19, 22, 23, 26, and 27 described
above are not available.

Insertion Effect A Unit
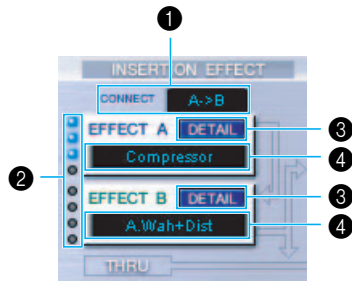
❶ CONNECT selector

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

❷ 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.

❸ [DETAIL] button

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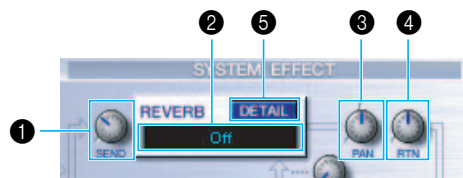
❹ Effect Type selector

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

❶ 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.

❷ Reverb Effect Type selector

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

❸ Reverb Pan controls

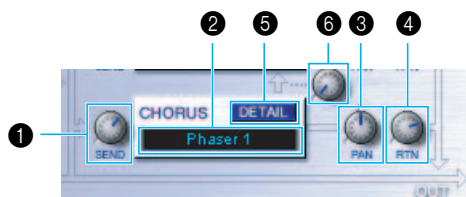Use these knobs to set the stereo positioning of the Reverb Effect.

❹ Reverb Return controls

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

⑤ [DETAIL] button

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

● **Chorus Unit**

❶ 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.

❷ Chorus Effect Type selector

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

❸ Chorus Pan control

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

❹ Chorus Return control

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

❺ [DETAIL] button

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

❻ CHORUS REVERB control

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

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.

Since the Library window is the first to open, the explanation below starts there.

♪NOTE 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).

2 Receive the User voice data from your tone generator.

① Select Receive Voice Bulk... (page 9) from the [Setup] menu.

② Select "All" from "Receive Type," then click the [Start] button (page 16). 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.

♪NOTE 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.

♪NOTE 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.

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.

♪NOTE 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.

♪NOTE 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.

♪NOTE 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.

Troubleshooting

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

Sound does not change when using knobs or sliders.
- Are the MIDI Out port and Device Number set correctly in the Editor Setup? (page 14)

No sound heard when clicking on-screen keyboard in Edit Window.
- Is the MIDI channel set correctly in the Editor Setup? (page 14)

Sound does not change when Monitor button is pressed.
- Are the MIDI Out port and Device Number set correctly in the Editor Setup? (page 14)

Bulk data is not transmitted.
- Are the MIDI Out port and Device Number set correctly in the Editor Setup? (page 14)
- Is the Dump Interval in the Editor Setup too short? Make sure to adjust the Dump Interval.

Bulk data is not received.
- Open the Setup Dialog and check that the Device Number has been properly assigned (page 14).
- Is the MIDI Thru port set to off in the client application?

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 host application. Check the MIDI In/Out settings in the host application.

The USB port is not recognized.
- Check whether the USB driver has been installed to your computer correctly. See the installation manual for details.