

Electone® **STAGEA**®

ELS-03G

ELS-03X

ELS-03XR

ELS-03XF

Owner's Manual – Detailed

This manual explains the detailed operations and functions of this Electone.
Before using the Electone, be sure to read “PRECAUTIONS” in the “Owner's Manual – Basic.”

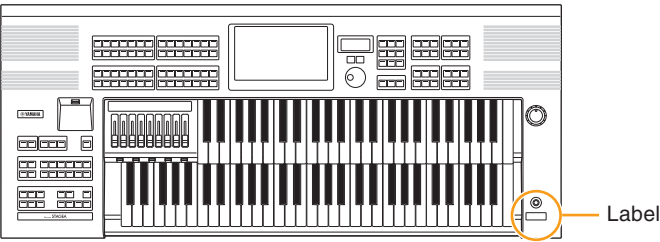
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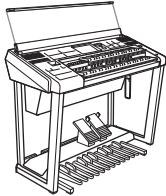
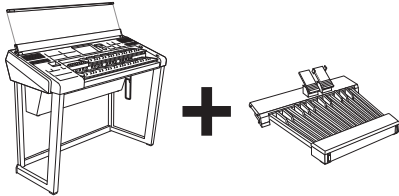
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About the Model Names

The model name of your Electone can be confirmed by its appearance and the label at the front right corner of the control panel.



Appearance	Label		Model name
	ELS-03G	➔	ELS-03G
	ELS-03X	➔	ELS-03X
	ELS-03X	➔	ELS-03XR
	ELS-03X	➔	ELS-03XF

About the Manuals

This product has the following documents and instructional materials.



Supplied with the product

- **Owner's Manual – Basic**

Explains the basic operations and functions of this Electone. You can experience the Electone's various functions by trying them out and playing the keyboard, using the supplied sheet music. Please read this manual first to use the Electone properly and safely.

- **Sheet music for “Londonderry Air,” and “Polovtsian Dances”**

Sheet music specifically for the Electone and this manual. Before playing with these pieces, make sure to set up the Electone by following the instructions in the “Owner's Manual – Basic.”

- **Bench Owner's Manual (ELS-03XR/ELS-03XF only)**

Explains how to assemble the supplied bench and how to handle it properly for your safety. This manual is included in the package of the bench.

* For handling of the bench for the ELS-03G/ELS-03X, see the “Owner's Manual – Basic.”



Available on the website

- **Owner's Manual – Detailed (this PDF)**

Explains all the detailed operations and functions of this Electone. Please read this or refer to the relevant sections when you want to make full use of the Electone.

The Data List referenced in this manual is available at the following location.

Data List <https://manual.yamaha.com/mi/rt/els03/>

- **MIDI Reference**

Contains MIDI-related information for this Electone.

To obtain these manuals, access the website below, and enter “ELS-03” to search for the desired files.

Yamaha Downloads <https://download.yamaha.com/>

* For a general overview of MIDI and how you can effectively use it, search for “MIDI Basics” (only in English, German, French and Spanish) on the website above.

Rules for the notes

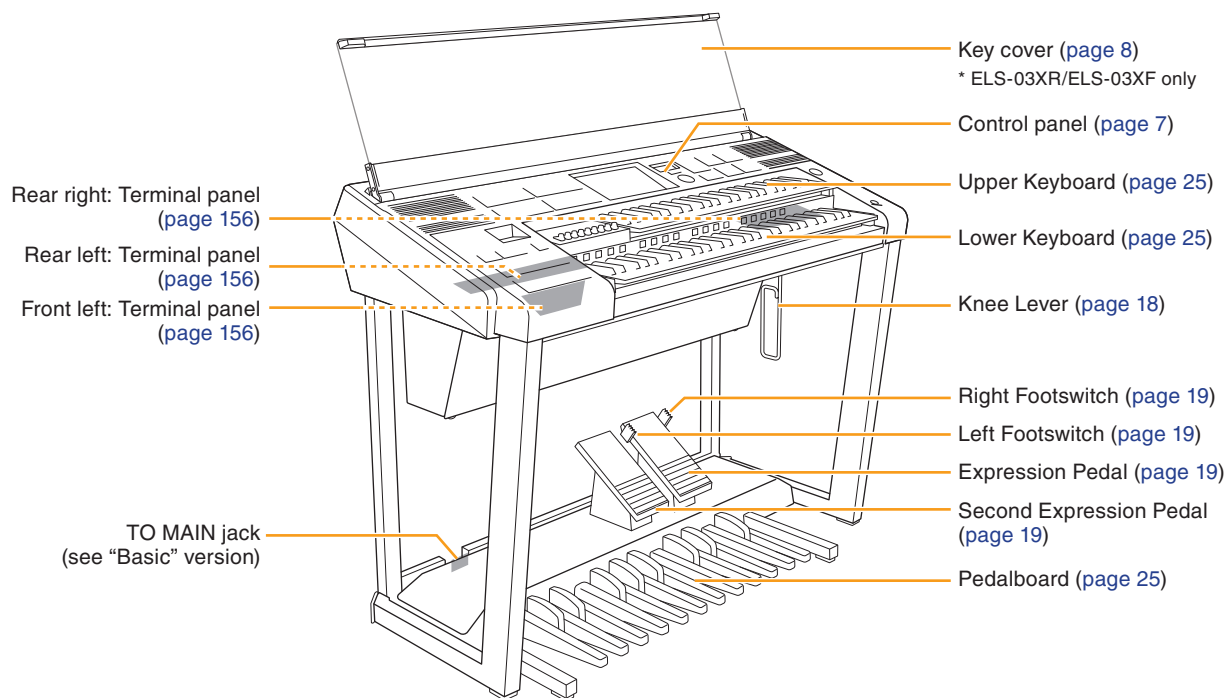
 WARNING	Indicates risk of serious injury or death.
 CAUTION	Indicates risk of injury.
NOTICE	Indicates points to prevent product failure, damage or malfunction and data loss.
NOTE	Helpful information and tips.

Information

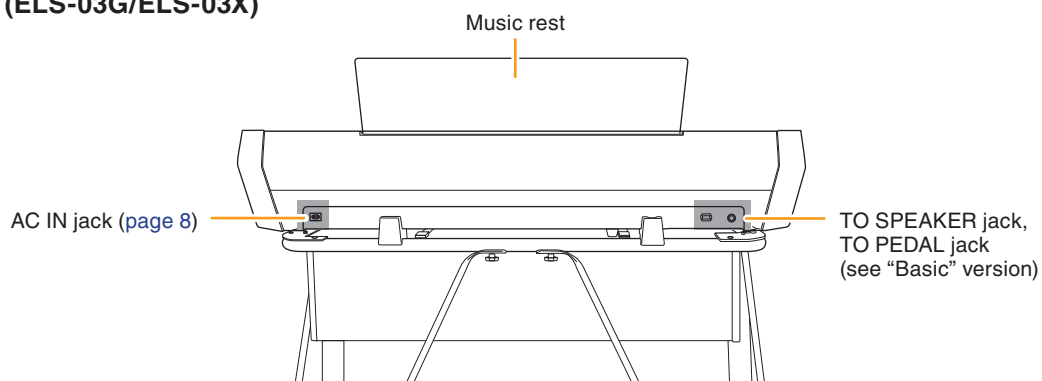
- The illustrations and LCD screens as shown in this manual are for instructional purposes only.
- Unless indicated otherwise, the illustrations and displays as shown in this manual are based on the ELS-03XR (in English).
- Windows is a registered trademark of Microsoft® Corporation in the United States and other countries.
- Apple, iPhone, iPad and Lightning are trademarks of Apple Inc., registered in the U.S. and other countries.
- Android is a trademark of Google LLC.
- Wi-Fi is a registered trademark of Wi-Fi Alliance®.
- USB Type-C™ and USB-C™ are registered trademarks of USB Implementers Forum.
- The company names and product names in this manual are the trademarks or registered trademarks of their respective companies.

Part Names

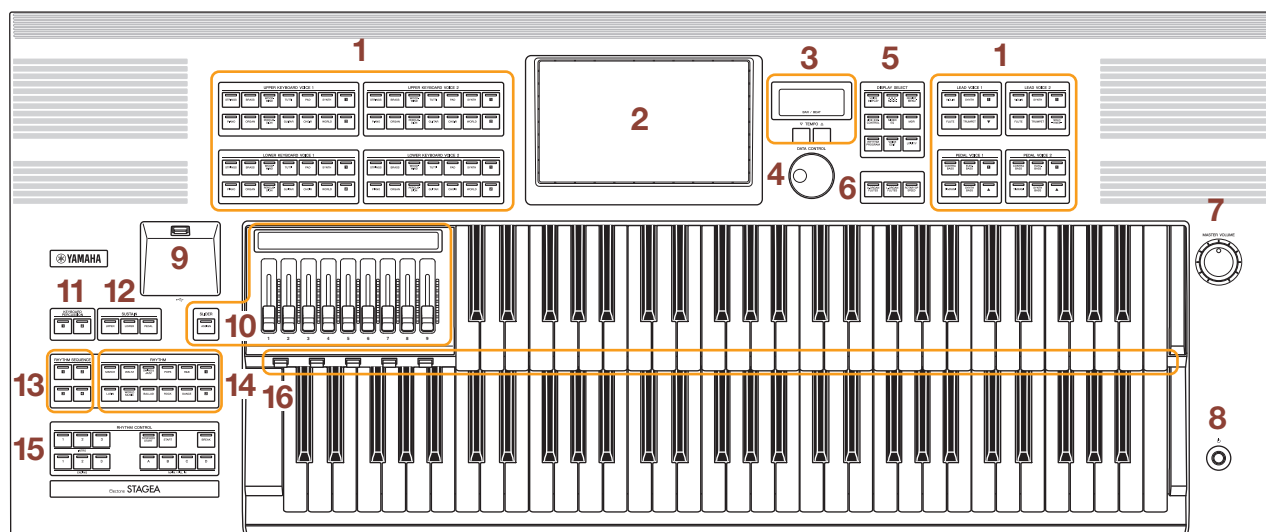
* This illustration shows the ELS-03XR.



Rear side (ELS-03G/ELS-03X)



Control Panel



- 1** Voice buttons: [page 25](#)
- 2** Main display: [page 11](#)
- 3** Tempo (BAR/BEAT) display, TEMPO [△]/[▽] buttons: [page 61](#)
- 4** [DATA CONTROL] dial: [page 12](#)
- 5** DISPLAY SELECT buttons
 - [VOICE DISPLAY] button: [page 26](#)
 - [A.B.C. M.O.C.] button: [pages 64, 66](#)
 - [REGIST. MENU] button: [page 17](#)
 - [LIVE EXP. CONTROL] button: [page 53](#)
 - [MIXER EQ] button: [pages 146, 151](#)
 - [MDR] button: [page 91](#)
 - [RHYTHM PROGRAM] button: [pages 124, 136](#)
 - [VOICE EDIT] button: [page 115](#)
 - [UTILITY] button: [pages 13, 20, 21, 158, 160, 163](#)
- 6** [U.ORGAN FLUTES] button, [L.ORGAN FLUTES] button, [ROTARY SP SPEED] button
- 7** [MASTER VOLUME] dial: [page 10](#)
- 8** [⏻] (Standby/On) switch: [page 9](#)
- 9** USB TO DEVICE terminal x 2: [page 168](#)
- 10** [ASSIGN] button, Sub display, Sliders: [page 48](#)
- 11** KEYBOARD PERCUSSION buttons: [page 67](#)
- 12** SUSTAIN buttons: [page 50](#)
- 13** RHYTHM SEQUENCE buttons: [page 144](#)
- 14** Rhythm buttons: [page 58](#)
- 15** RHYTHM CONTROL buttons: [page 60](#)
- 16** Registration Memory buttons: [page 77](#)

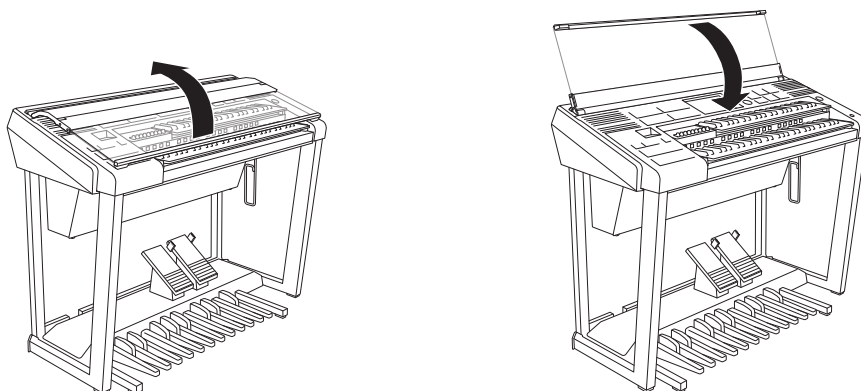
Starting Up

For information on assembling the ELS-03G/ELS-03X, refer to the “Owner’s Manual – Basic” supplied with the product.

Opening/closing the key cover (ELS-03XR/ELS-03XF only)

Hold the key cover at the center of the near side when opening and closing it.

To open the key cover, lift it gently until it is fully upright. To close the key cover, lower it gently toward you.



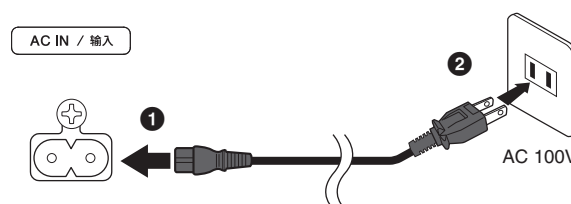
CAUTION

- Open and close the key cover slowly. Be careful to avoid catching fingers (yours or others, especially children’s) between the cover and the unit.
- Do not place anything (such as metal objects or pieces of paper) on top of the key cover. Small objects placed on the key cover may fall inside the unit and become impossible to remove, which may cause electric shock, short circuit, fire or other serious damage to the Electone.
- Do not apply excessive force on the key cover. Doing so can damage the SOFT-CLOSE™ mechanism, and possibly result in injury to your hands and fingers caught under the key cover.

Power Supply

■ ELS-03G/ELS-03X

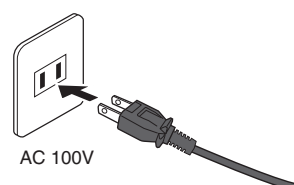
Connect the power cord to the AC IN jack in the order shown in the illustration. To confirm the location of the AC IN jack, refer to “Part Names” (page 6).



* The shapes of the plug and outlet may differ depending on your locale.

■ ELS-03XR/ELS-03XF

Insert the power plug into a nearby AC outlet.



* The shapes of the plug and outlet may differ depending on your locale.



WARNING

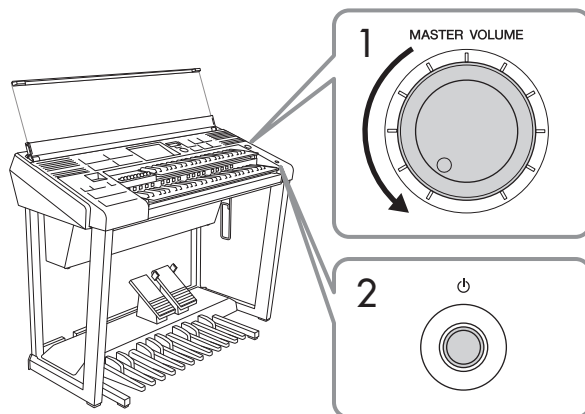
- (ELS-03G/ELS-03X) Use the supplied power cord only. Do not use the power cord for other devices. Using the wrong power cord can result in damage to the Electone or overheating.
- When setting up the product, make sure that the AC outlet you are using is easily accessible. If a problem or malfunction occurs, immediately turn the power off and disconnect the plug from the outlet.

NOTE

(ELS-03G/ELS-03X) When disconnecting the power cord, first turn off the power, and then follow this procedure in reverse order.

Turning the power on or off

- 1 Turn down the [MASTER VOLUME] dial to the minimum position.



- 2 Press the [⏻] (Standby/On) switch to turn the power on.

After a while, the Main display lights up, and then the Voice Display ([page 15](#)) appears indicating that the Electone is ready to use.

NOTICE

Press only the [⏻] (Standby/On) switch when turning the power on. Do not perform any other operations such as pressing the keys, buttons or pedals. In addition, do not operate the [⏻] (Standby/On) switch or any other controls until the Electone starts up. Doing so may cause the Electone to malfunction.

- 3 After you finish using the Electone, turn off the power by pressing the [⏻] (Standby/On) switch.

Be sure to confirm the Main display is off when you turn the power off.



WARNING

Even when the [⏻] (Standby/On) switch is in standby status, electricity is still flowing to the Electone at the minimum level. Remove the power plug from the outlet when the Electone is not to be used for extended periods of time, or during electrical storms.

Adjusting the Volume

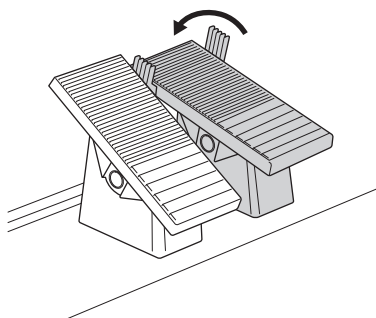
The volume adjustment function is assigned to the Expression Pedal by factory default. This section explains how to adjust the volume by using the Expression Pedal.

NOTE

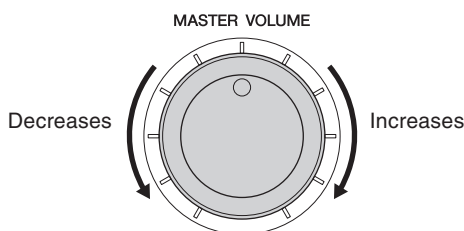
You can also assign another function to the Expression Pedal, or assign a volume adjustment function to the Second Expression Pedal or the Sliders. For details, see [page 53](#).

- 1 Press the Expression Pedal all the way forward with your foot.

This is the maximum volume position.



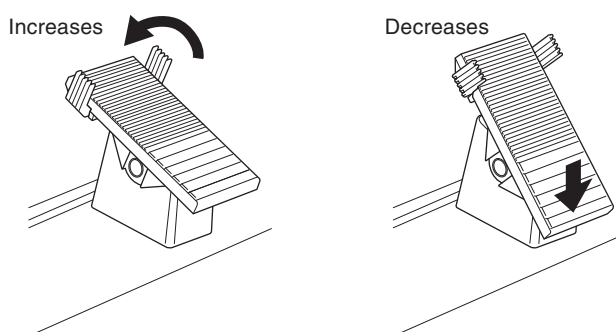
- 2** Adjust the overall volume as desired by using the [MASTER VOLUME] dial while playing the keyboards and the Pedalboard.



NOTE

Sound may not be produced when the Sliders (page 48) are lowered. Set the sliders to "VOLUME" and raise all of the sliders to maximum before adjusting the overall volume.

- 3** Adjust the volume by moving the Expression Pedal back and forth with your foot as you play. Pressing it down and forward increases the volume, while bringing it back and towards you decreases the volume.

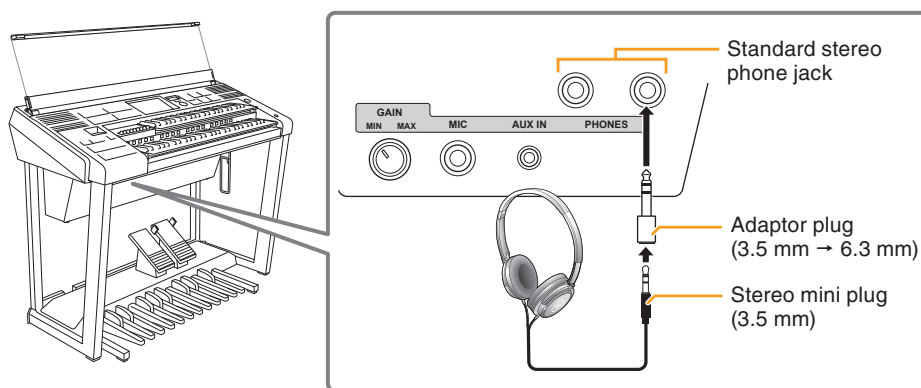


NOTE

If you want to play at higher volume, such as when performing onstage, you can connect external powered speakers to the LINE OUT jacks. For details, see page 157.

Connecting headphones

You can connect two pairs of headphones to the PHONES jacks. If you are using only one pair, insert the plug into either of these jacks. If you use headphones with a mini plug, you will need an appropriate adaptor plug as shown in the illustration.



CAUTION

Do not use the headphones for a long period of time at a high or uncomfortable volume level. Doing so may cause permanent hearing loss.

NOTE

By default, when a plug is connected to the PHONES jack, no sound will come out from the instrument's speakers. When you are not using the headphones, disconnect the headphone plug (and adaptor plug) from the jack. You can set whether the sound is output from the speakers or not (page 21).

This section explains the basic operations which are necessary when using this Electone.

Operations on the Main display

The Main display of this Electone is a touch screen which allows you to select or change the parameters by simply touching the desired item on the display. This section describes operations often used on the main display.

NOTICE

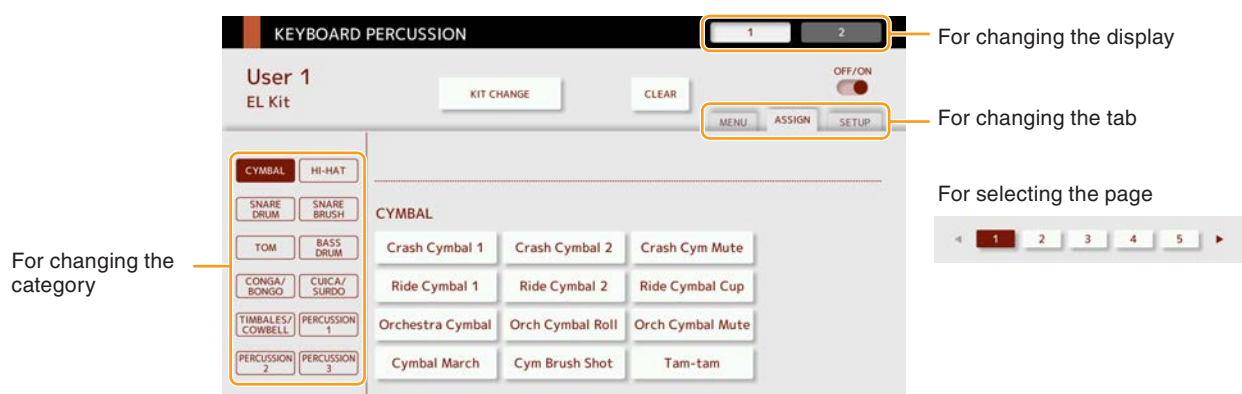
Do not use any sharp or hard tools to operate the touch screen. Doing so may damage the display.

NOTE

Keep in mind that operation by simultaneously touching two or more points on the display is not possible.

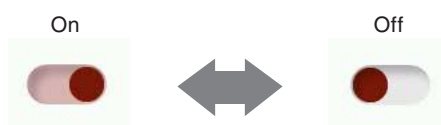
■ Changing the display/tab

Depending on the functions or the parameters, the display may contain several pages. Use the buttons or tabs at the top right to change the display. If they are divided into more categories, buttons are shown at the left of the display. When the list has multiple pages, use the numbered buttons and [◀]/[▶] or [▲]/[▼] to select the desired page.



■ Turning functions on/off

When switching between modes such as on/off and mono/poly, use the switch as shown below. Pressing this switch alternates between two modes.



■ Turning parts on/off

On displays such as the Voice Display (page 15), Rhythm Menu display (page 58) and MIXER display (page 146), pressing the button for each Voice section or Rhythm part, etc. switches between on (unmuted) and off (muted). When set to on, the button is colored; when set to off, the button turns white.

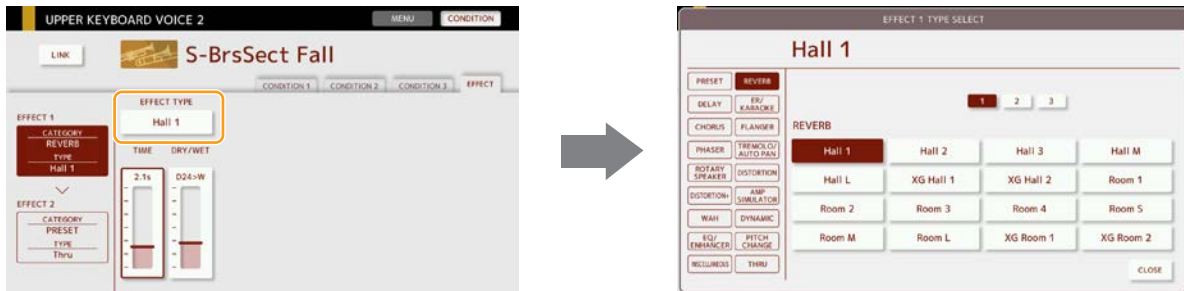


■ Selecting/executing an option

When several options are provided in the display, select the desired one to call up the setting or execute the function.

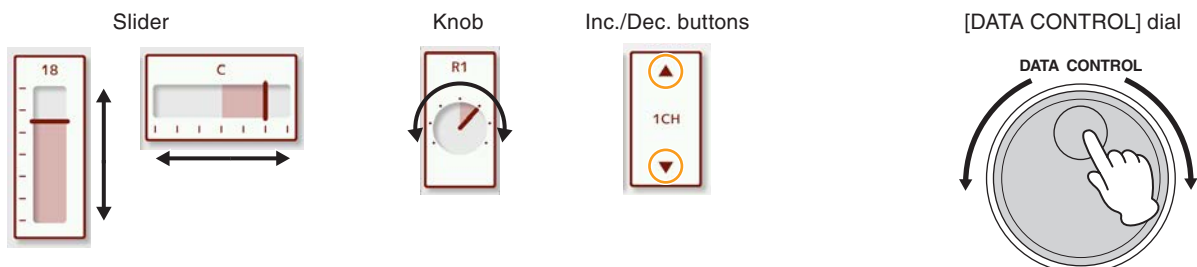


A list may be called up depending on the item you select.



■ Changing the value

For parameters which let you change values, a slider, knob or increment/decrement buttons ([◀]/[▶]) or [▲]/[▼]) are provided. Select an item on the display, and then confirm that the item for editing is framed. Moving your finger vertically or horizontally on the slider, or tracing around the knob allows you to change the value. Using the increment/decrement buttons briefly increases or decreases the value by one step; holding either button changes the value continuously. You can also use the [DATA CONTROL] dial to change these values.

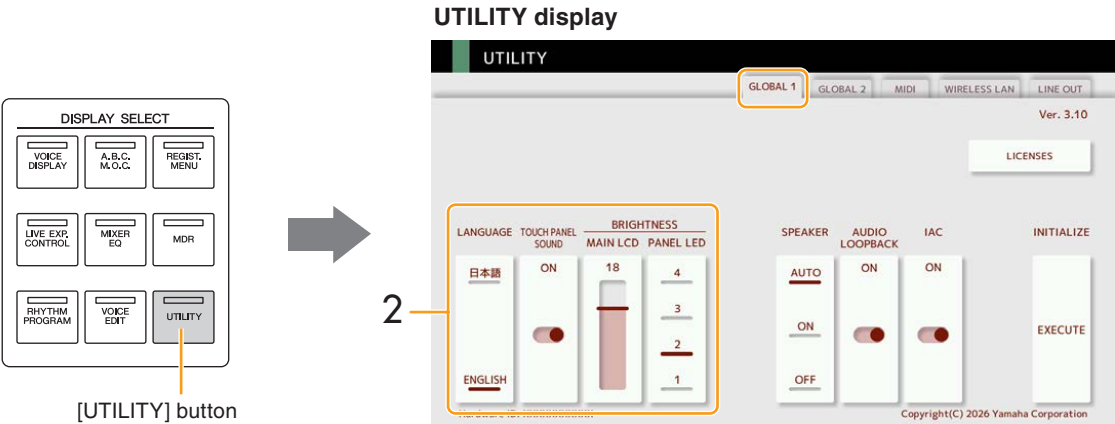


Depending on the functions, you can change the value by using the Sliders on the top panel. For details, see [page 48](#).

Making display-related settings

The display language, touch panel sound, and the brightness of the LCD and the LED can be changed.

- 1 Press the **DISPLAY SELECT [UTILITY]** button to call up the **UTILITY** display.



- 2 In the **[GLOBAL 1]** tab, make the necessary settings.

LANGUAGE		Determines the language (Japanese/English) used in the display.
TOUCH PANEL SOUND		Determines whether or not touching the display will trigger the sound.
BRIGHTNESS	MAIN LCD	Adjusts the brightness of the Main display.
	PANEL LED	Determines the brightness of the lamps for the buttons and Sliders on the control panel, and the brightness of the Tempo display.

Making Voice Guide settings

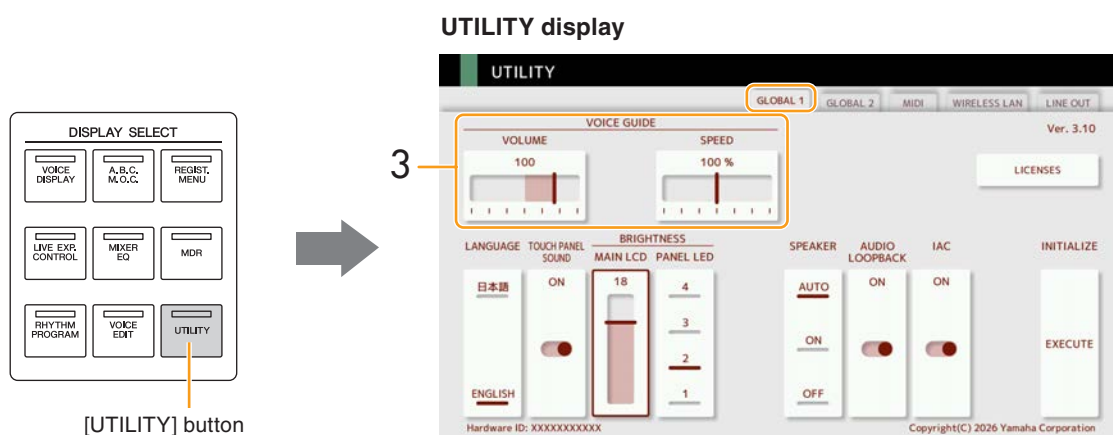
The Voice Guide function gives you audible information on the current display or operation being executed. To use this function, you need to connect the USB flash drive which contains the Voice Guide (audio) files to the Electone. The Voice Guide (audio) files and the Voice Guide Tutorial Manual (simple text file) which explains how to use the Voice Guide function can be downloaded from the website below. Enter “ELS-03” to search for the files.

Yamaha Downloads <https://download.yamaha.com/>

NOTE

Before using a USB flash drive, be sure to read the “Precautions when using the USB TO DEVICE terminal” on [page 168](#).

- 1 **Connect the USB flash drive containing the Voice Guide file to the USB TO DEVICE terminal.**
- 2 **Press the DISPLAY SELECT [UTILITY] button to call up the UTILITY display.**



- 3 **In the [GLOBAL 1] tab, move the VOICE GUIDE [VOLUME] and [SPEED] sliders to adjust the volume and speed for the Voice Guide function.**

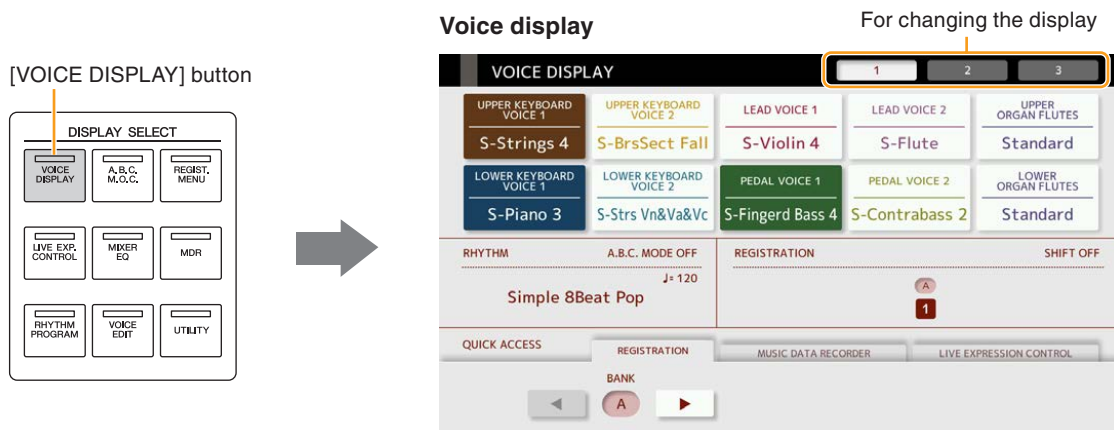
NOTE

The VOICE GUIDE sliders appear only when the USB flash drive which contains the Voice Guide files is connected.

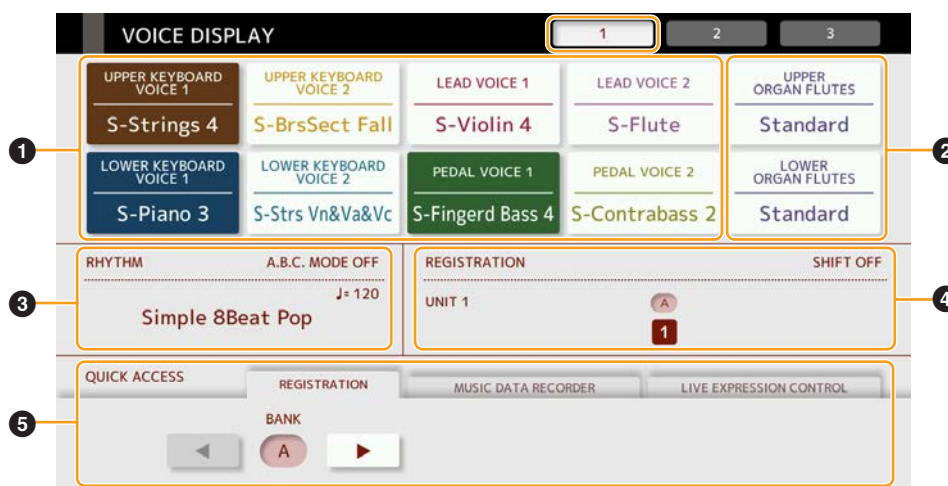
Basic display (Voice display) configuration

The display called up when the DISPLAY SELECT [VOICE DISPLAY] button is pressed is referred to as the Voice display. Here you can confirm the current basic settings and change them.

The Voice display consists of three displays which can be switched by selecting one of the [1]–[3] buttons at the upper right corner.



Display 1 (Voice display)



①	Voice	Shows the Voice names (page 25) assigned to each Voice section. Each time you press one of the Voice names in the display, the Voice is turned on (unmuted) or off (muted).
②	Organ Flutes	Shows the type name selected for the Upper/Lower Organ Flutes Voice (page 41). Each time you press one of the type names in the display, the Voice is turned on or off.
③	Rhythm	Shows the currently selected Rhythm (page 58) and its tempo. The A.B.C. (Auto Bass Chord) mode (page 64) is shown at the upper right corner.
④	Registration	Shows the Registration Unit (page 101) number and the Registration Shift (page 82) status for the current Registration.

5	QUICK ACCESS	Switches among the following three tabs.	
		REGISTRATION	You can select the Registration Bank (page 77), and control the Registration shift (page 82).
		MUSIC DATA RECORDER	Shows the Song name and the Unit number called up on the MUSIC DATA RECORDER display (page 91). As in the MUSIC DATA RECORDER display, Song controls such as playback, stop, and fast forward are available.
		LIVE EXPRESSION CONTROL	Shows the functions assigned to the Expression Pedals and Footswitches (page 53).

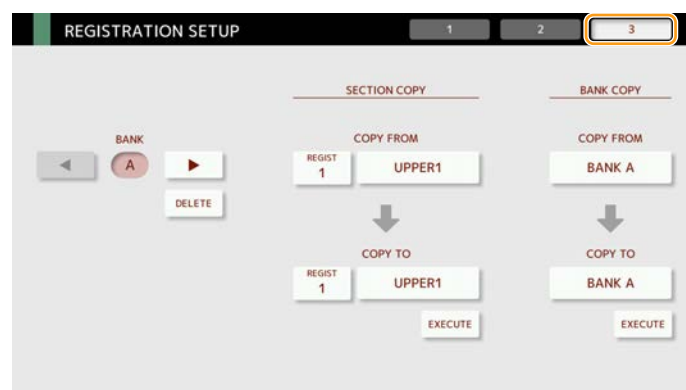
Display 2 (REGISTRATION MEMORY 1–16 display)

You can confirm parameter values such as volume, reverb and pan for each of the Registration Memory settings 1–16. Moreover, you can unify the values of a specific parameter in several Registrations. For details, see [page 86](#).



Display 3 (REGISTRATION SETUP display)

The Registrations stored to the Registration number can be copied to another Registration number for each individual section. The Registration Banks can also be copied or deleted on this display. For details, see [page 88](#).



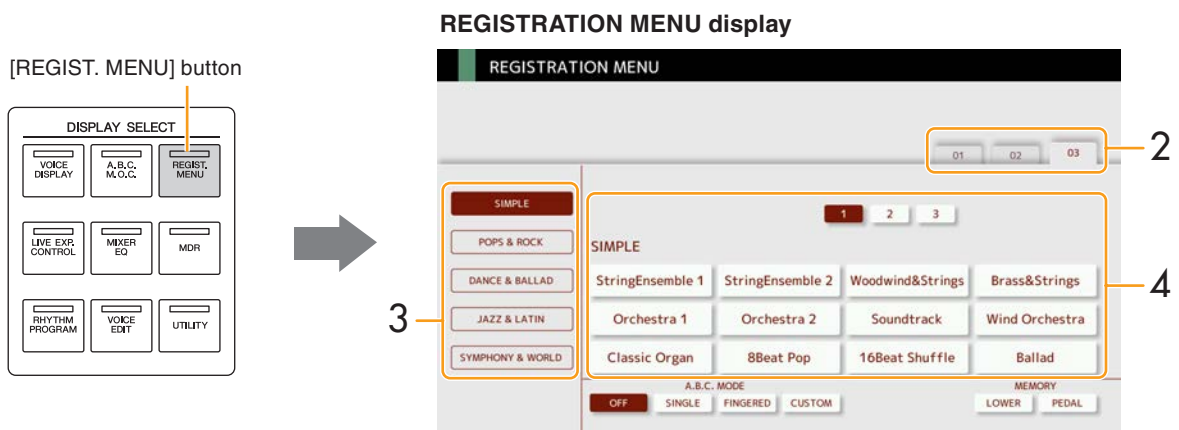
Calling up desired settings from the Registration Menu

In the Electone, a combination of settings such as Voice and Rhythm is called a “Registration.” Many sets of Registrations in various musical genres are provided in the Registration Menu. In this section, you can call up the Registration that matches your intended performance from the Registration Menu. For the list of Registration Menu settings, refer to the Data List (<https://manual.yamaha.com/mi/rt/els03/>).

NOTE

The basic Registrations are stored to each of the Registration Memory buttons 1–16 located between the Upper and Lower Keyboards (page 77).

- 1 Press the **DISPLAY SELECT [REGIST. MENU]** button to call up the **REGISTRATION MENU** display.



- 2 Select a tab.
The [03] tab contains the Registration Menu items specifically set up for the ELS-03 series. The [01] tab contains the same Registration Menu as the ELS-01 series, and the [02] tab contains the Registration Menu added for the ELS-02 series.

- 3 Select a music genre at the left side of the display.

- 4 Select the desired Registration from the list.

Since the list consists of several pages, press the number button or [◀]/[▶] to select the page, and then select the desired Registration.

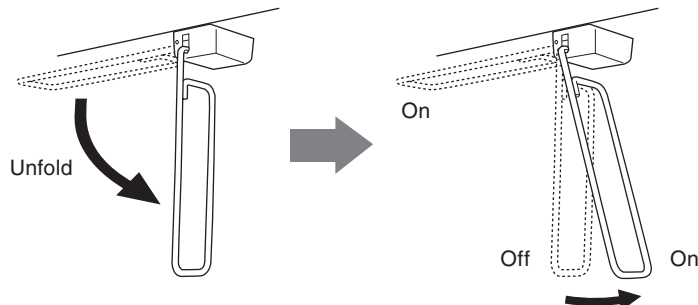
NOTE

At the bottom of the display, you can make A.B.C. (Auto Bass Chord) related settings. For details on the Auto Bass Chord function, refer to page 64.

- 5 Play the keyboard with the selected Registration.

Using the Knee Lever

The Knee Lever, located on the right bottom of the keyboard unit, can be used to turn one of the following functions on and off. When using the Knee Lever, unfold it. While you play the keyboard, press the Knee Lever to the right to turn the function on, and release it to the vertical position to turn the function off. When the Knee Lever is raised to the original position, the functions are turned on.



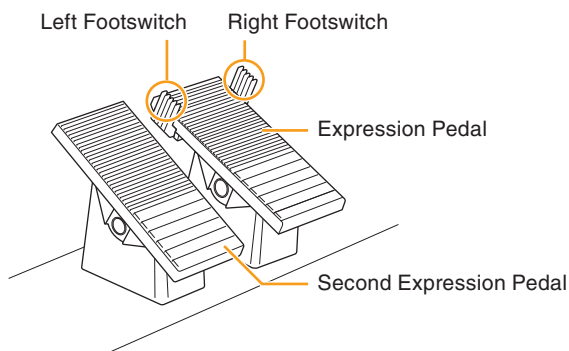
- **Sustain for the Upper or Lower Keyboard Voices:** For adding the Sustain effect to the Upper Keyboard Voices or the Lower Keyboard Voices. Make sure to press the SUSTAIN [UPPER] or [LOWER] button to turn on the lamp beforehand. For details, see [page 50](#).
- **Melody On Chord (M.O.C.) effect:** For adding harmony to the melody played on the Upper Keyboard. Make sure to set M.O.C. MODE to something other than OFF, and KNEE to ON in the AUTO BASS CHORD / MELODY ON CHORD display beforehand. For details, see [page 66](#).
- **Lead Slide effect:** For adding the slide effect to the Lead Voices. Make sure to set SLIDE to KNEE in the [CONDITION 3] tab of the Voice Condition display beforehand. For details, see [page 35](#).
- **Solo function:** For turning on/off the Solo function for the Upper Keyboard. When set to Solo, only the Lead Voice 2 sounds and other Upper Keyboard Voices are muted. When the Knee Lever is set to the “Off” position (as shown in the illustration above), the Solo function is active. Make sure to press the LEAD VOICE 2 [SOLO-KNEE-] button to turn the lamp on beforehand. For details, see [page 28](#).

NOTE

Several functions can be assigned to the Knee Lever and pressing the Knee Lever turns all these functions on/off simultaneously.

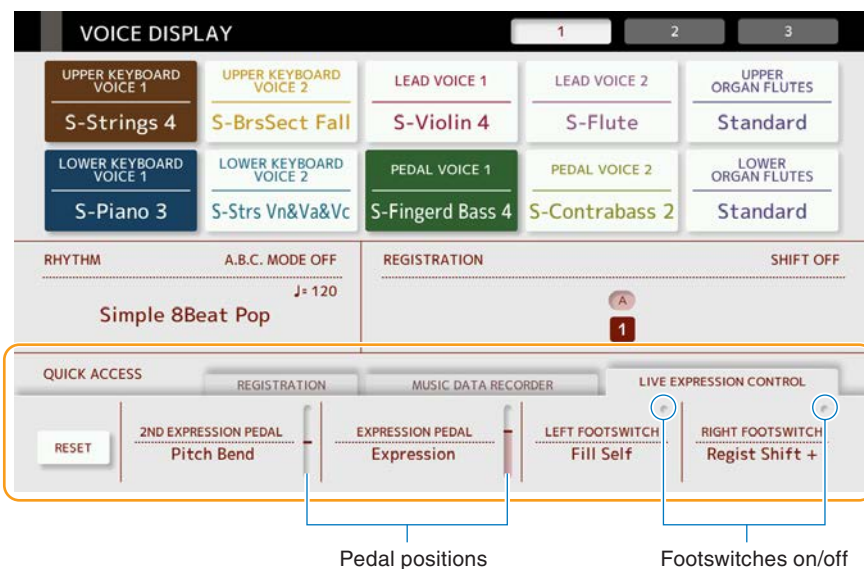
Using the Expression Pedals/Footswitches

By using the Expression Pedals and Footswitches, you can change the settings or control the Electone while playing. This frees your hands from having to control the Electone, allowing you to fully devote yourself to your performance. By default, the following functions are assigned to each controller. In addition, you can assign various functions such as part on/off and volume balance adjustment to each of them as desired. The settings are configured on the LIVE EXPRESSION CONTROL display. For details see [page 53](#).



Controller	Default function	Description
Expression Pedal	Expression	Adjusts the overall volume while playing the keyboards.
Second Expression Pedal	Pitch Bend	Bends notes up or down while playing the keyboards.
Left Footswitch	Fill Self	Adds a fill-in (page 60) during the Rhythm playback.
Right Footswitch	Register Shift +	Calls up the Registration Memory specified by the Registration Shift function (page 82).

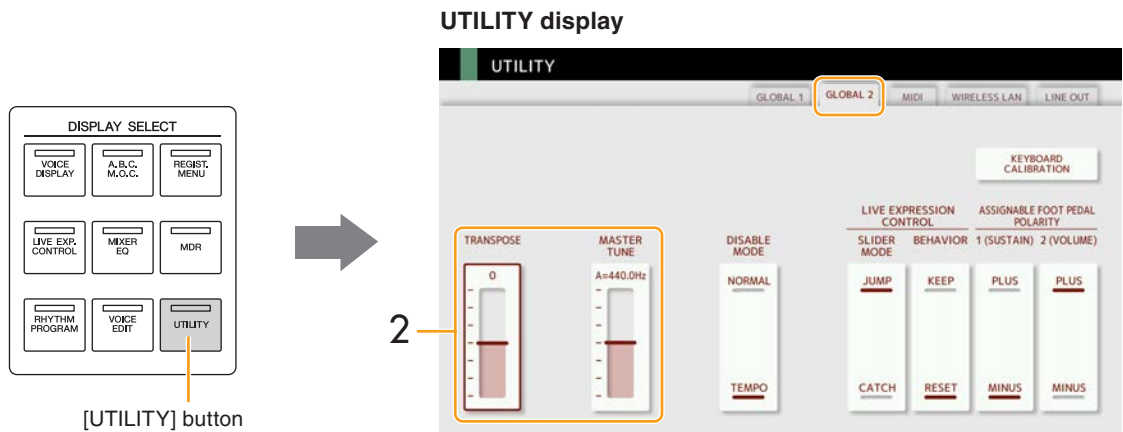
You can confirm the functions assigned to the Expression Pedals and Footswitches at the bottom of Voice display by selecting the [LIVE EXPRESSION CONTROL] tab. When you move the Expression Pedals or Footswitches, you can also conveniently check its movement visually.



Adjusting the pitch (Transpose/Master Tune)

The functions for changing the pitch of the Electone include Transpose, which adjusts the pitch in semitone steps, and Master Tune, which fine tunes the pitch in 0.2 Hz increments.

- 1 Press the **DISPLAY SELECT [UTILITY]** button to call up the **UTILITY** display.



- 2 In the **[GLOBAL 2]** tab, make the **Transpose** or the **Master Tune** setting.

TRANPOSE	Transposes the keyboard Voice or rhythm playback sound in semitone steps. Drums/SFX Voices, Keyboard Percussion, and Audio cannot be transposed.
MASTER TUNE	Fine tunes the overall instrument pitch in 0.2 Hz increments. By default, A3 is set to 440.0 Hz. Drums/SFX Voices, Keyboard Percussion, and Audio cannot be tuned.

NOTE

You can also transpose and tune each Voice section. In this case, set them in the **[CONDITION 3]** tab of the Voice Condition display. For details, see [page 34](#).

Pitch and tuning

When playing music with multiple people, such as in a band or orchestra, a process called “tuning” is always carried out before performing. For example, if an instrument produces a sound at 435 Hz, another at 440 Hz, and a third at 445 Hz when playing the note “A” (“La”) at the same time, it will result in dissonance. To prevent this from happening, the pitch of each instrument is aligned through a process called “tuning.” Depending on the instrument, this may be called “tuning” or “string tuning.”

There are two main methods of tuning.

In the first method, each player tunes their own instrument to a predetermined pitch. The pitch is accurately adjusted using a tool such as a tuning fork or tuner. Guitar ensembles often use this method. For example, in a rock band, the guitarist and bassist tune their respective instruments to the pitch “A = 440 Hz.” By doing so, they are able to produce sound with the same pitch when playing together.

When playing the Electone together with other instruments, set the **MASTER TUNE** above to match the tuning of the Electone with the other instruments. Of course, other instruments may also be tuned to the Electone.

The other tuning method has one player tune their instrument in advance (modern orchestras generally use 442 Hz) and the other players tune their instruments to match that tuning. Orchestras, brass bands, and other groups use this tuning method in most cases. You may have witnessed a scene where one musician plays a note on stage and all of the other performers play the same note in synchronization. In this case, each player relies on their own ears to tune, so it does not necessarily mean that they are all playing the exact same pitch (A = 442 Hz). Generally speaking, low notes sound higher to the human ear than they actually are, so bass instruments sound more natural and stable when they are tuned slightly lower than the correct pitch. Additionally, instruments that play solo parts stand out more when played at a slightly higher pitch than other instruments. The pitch at which harmony sounds beautiful is determined by such illusions of the human ear and the sensibilities of the players.

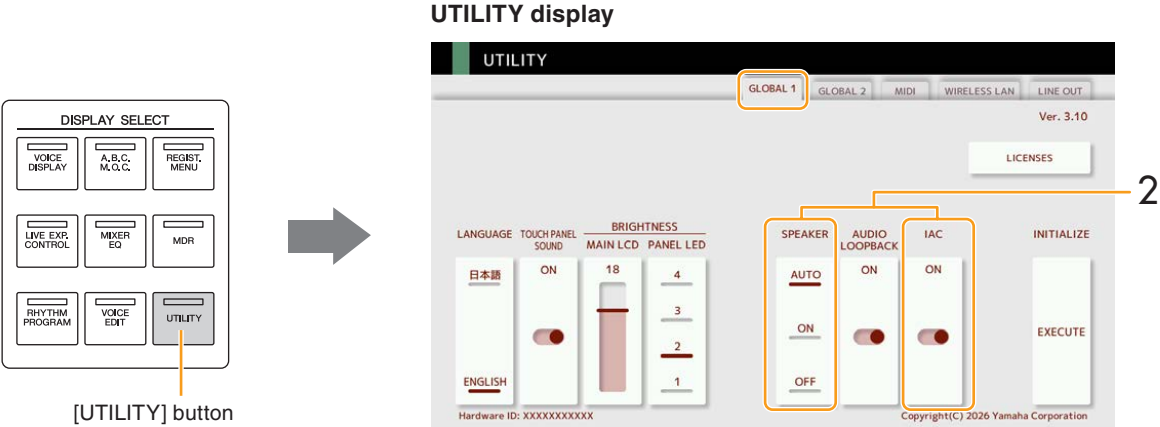
The same effect can be achieved even when playing the Electone alone by slightly offsetting the pitch of each Voice section. Try changing the **TUNE** setting on [page 35](#) to find the setting that seems just right to you.

Let's take a break!

Making speaker-related settings

You can set whether or not sound is output from the Electone’s speakers and turn the IAC function (which automatically adjusts the sound quality of the speakers’ output) on or off.

1 Press the **DISPLAY SELECT [UTILITY]** button to call up the **UTILITY** display.



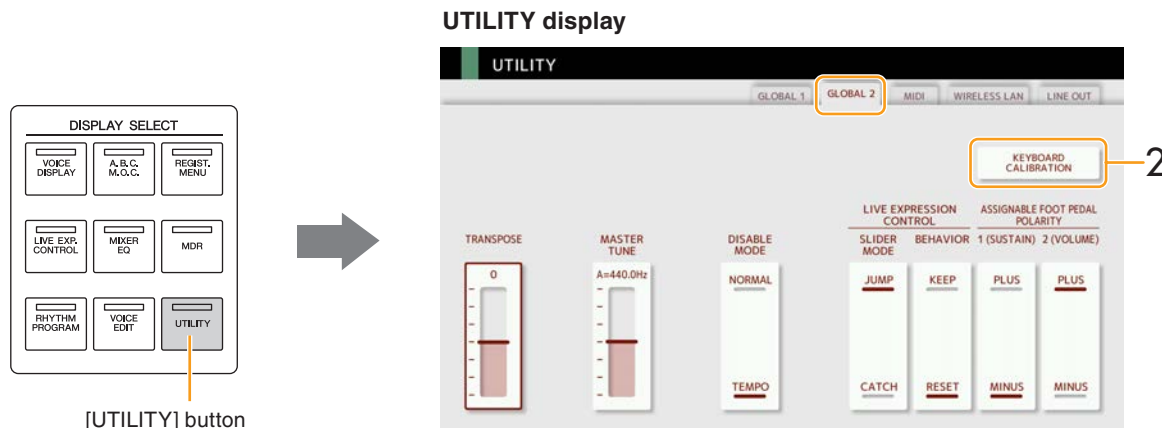
2 In the **[GLOBAL 1]** tab, make the speaker and IAC settings.

SPEAKER	Switch between outputting (ON) or not outputting (OFF) sound from the Electone speakers. • AUTO: Sound is output from the speakers only when headphones are not connected to the PHONES jack. • ON: Sound is always output from the speakers. • OFF: No sound is output from the speakers.
IAC	Turns the IAC (Intelligent Acoustic Control) function on or off. This function automatically corrects the sound quality of the speakers according to the overall volume level. When playing at lower volume, high frequencies and low frequencies are generally perceived as being quieter than the midrange. This function allows you to more clearly hear these frequencies even when the volume is low. NOTE • This function does not affect the output sound from the PHONES jacks or the LINE OUT jacks. • If the change in balance between low and high sounds bothers you, turn IAC off.

Calibrating the keyboard (ELS-03X/ELS-03XR/ELS-03XF only)

On the ELS-03X, ELS-03XR, and ELS-03XF, if you feel that the response of Polyphonic After Touch (page 32) varies depending on the keys, you can calibrate the keyboards using the following method.

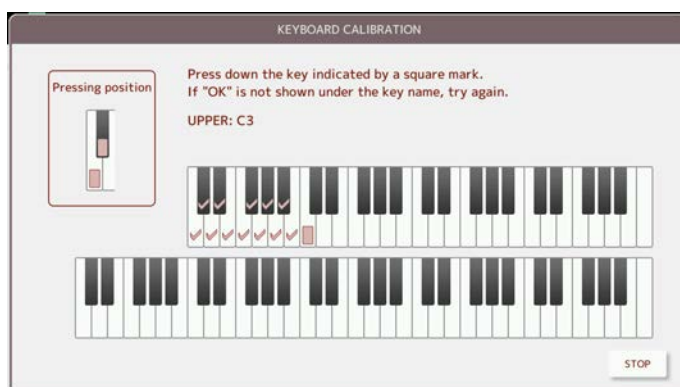
- 1 Press the **DISPLAY SELECT [UTILITY]** button to call up the **UTILITY** display.



- 2 In the **[GLOBAL 2]** tab, press **[KEYBOARD CALIBRATION]**.

- 3 Follow the on-screen instructions and press down on the actual Upper and Lower keyboards one key at a time.

Press each key one by one going from the left end to the right starting with the keys on the Upper keyboard followed by the keys on the Lower keyboard. When “OK” appears under the key name on the display, press the next key. When the calibration of all of the keys is complete, a message appears notifying you of the completion. Press [OK] to close the KEYBOARD CALIBRATION window.



Confirming the Electone version

This section explains how to confirm your Electone version. Make sure to check the version when you first use the Electone.

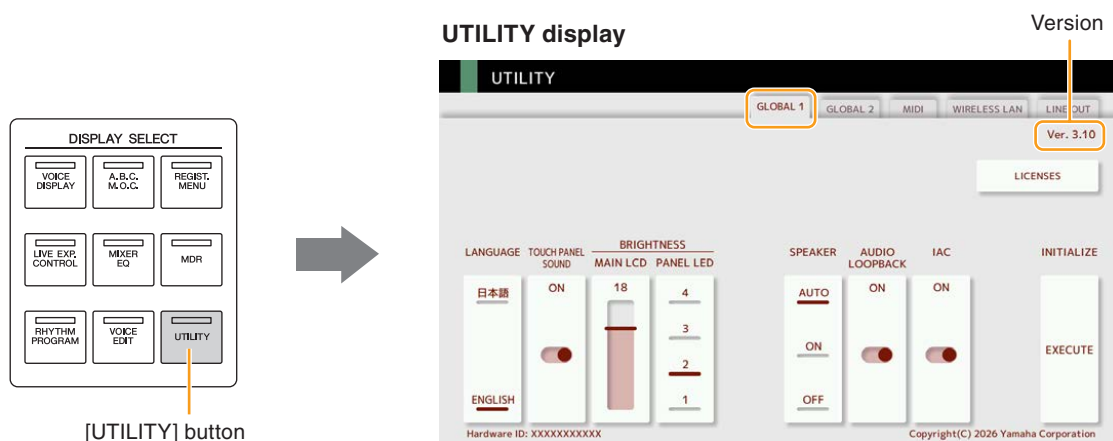
Yamaha may from time-to-time update firmware of the product without notice for improvement in functions and usability. To take full advantage of this instrument, we recommend that you always use the latest version by updating your Electone. The latest firmware and update instructions can be downloaded from the website below. Enter “ELS-03” to search for the files.

Yamaha Downloads <https://download.yamaha.com/>

NOTE

The contents of this manual apply to the version as of the publishing date.

1 Press the DISPLAY SELECT [UTILITY] button to call up the UTILITY display.



2 Select the [GLOBAL 1] tab and confirm the version at the upper right of the display.

NOTE

Pressing [LICENSES] just below the version can show the license information for the open source software used in the product firmware.

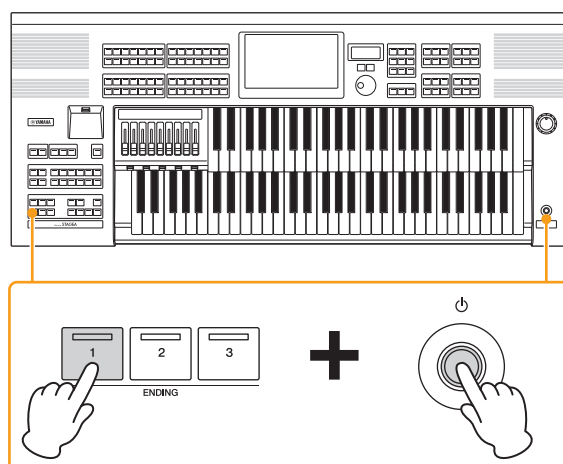
Initializing the Electone

All current settings (with the exception of the wireless LAN settings) and data can be initialized and restored to the factory defaults.

NOTICE

All data will be lost when the Electone is initialized. To prevent your important data from being lost by accident, always save it to a USB flash drive (page 98).

- 1 Turn off the power.
- 2 While holding down the RHYTHM CONTROL ENDING [1] button, press the [⏻] (Standby/On) button to turn on the power.
Hold the ENDING [1] button until the Voice display (page 15) appears.

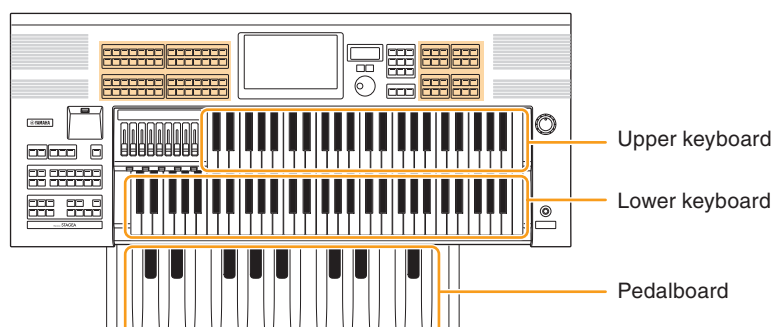
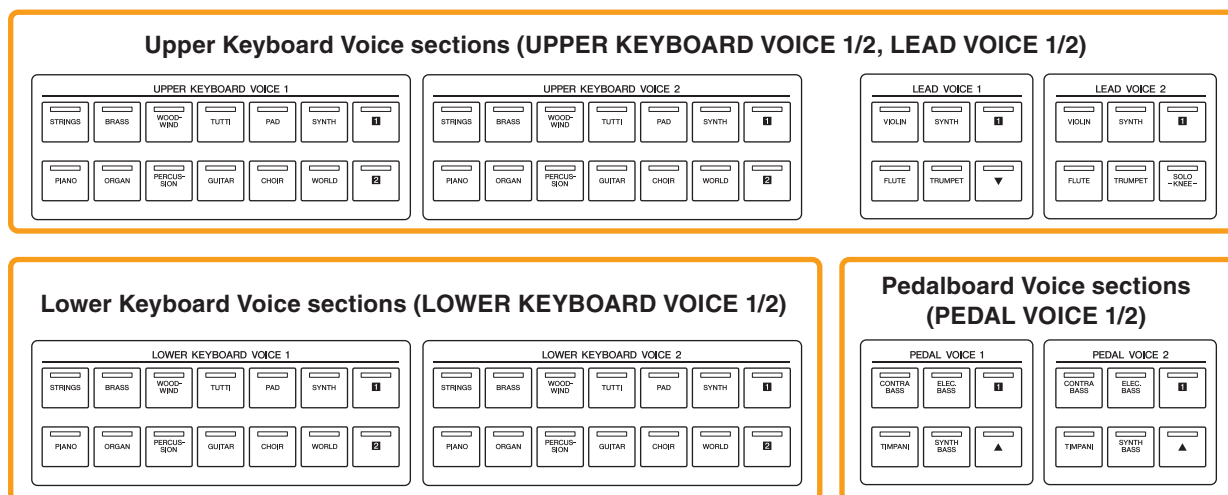


Wireless LAN settings can be initialized in the [WIRELESS LAN] tab of the UTILITY display (page 164). You can also initialize only the Registration Memory without initializing the settings of the entire instrument. The Registration Memory can be initialized in the [GLOBAL 1] tab on the UTILITY display (page 89).

2

Voices

This Electone features a wide variety of realistic instrument sounds that can be played on the Upper Keyboard, Lower Keyboard and Pedalboard. These instrument sounds are called “Voices.” Up to four Voices can be layered on the Upper Keyboard on the Lower Keyboard and Pedalboard two Voices can be layered for each. Select each Voice from the group of buttons for each Voice section.



- Upper Keyboard Voice sections (UPPER KEYBOARD VOICE 1, UPPER KEYBOARD VOICE 2, LEAD VOICE 1, LEAD VOICE 2)**

The Upper Keyboard has four Voice sections. Select a Voice by pressing a button in the UPPER KEYBOARD VOICE 1, UPPER KEYBOARD VOICE 2, LEAD VOICE 1, or LEAD VOICE 2 button groups on the panel. Lead Voice 1 and Lead Voice 2 are ideal for playing solo or monophonic instruments such as trumpet and saxophone. Only the highest note (or the last note played depending on the settings for Lead Voice 2) will sound if two or more keys are played together. Additionally, on the ELS-03X, ELS-03XR, ELS-03XF, Lead Voice 2 includes VA Voices created with a different tone generator from other Voice sections. Lead Voice 2 is the only Voice section where VA Voices can be selected.

- Lower Keyboard Voice sections (LOWER KEYBOARD VOICE 1, LOWER KEYBOARD VOICE 2)**

The Lower Keyboard has two Voice sections. Select a Voice by pressing a button in the LOWER KEYBOARD VOICE 1 or LOWER KEYBOARD VOICE 2 button groups on the panel.

- Pedalboard Voice sections (PEDAL VOICE 1, PEDAL VOICE 2)**

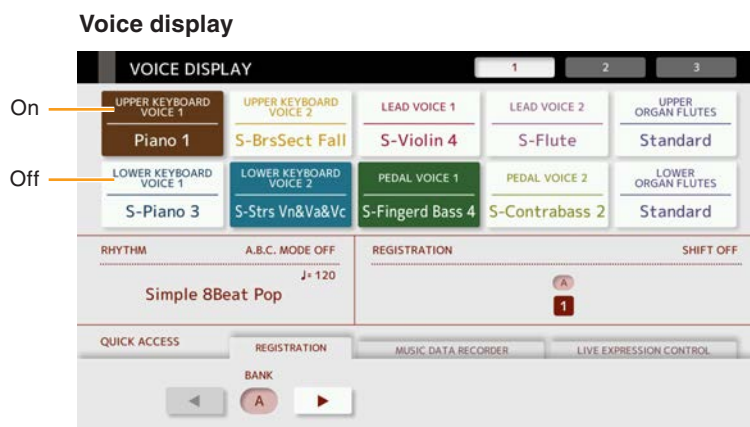
The Pedalboard has two Voice sections. Select a Voice by pressing a button in the PEDAL VOICE 1 or PEDAL VOICE 2 button groups on the panel. By default, only the highest note will sound if two or more keys are pressed on the Pedalboard. Set MONO/POLY ([page 36](#)) to on (Poly) to play multiple notes.

Selecting a Voice

The method for selecting a Voice is the same for any Voice section. For the list of preset Voices, refer to the “Voice List” and “VA Voice List” in the Data List (<https://manual.yamaha.com/mi/rt/els03/>).

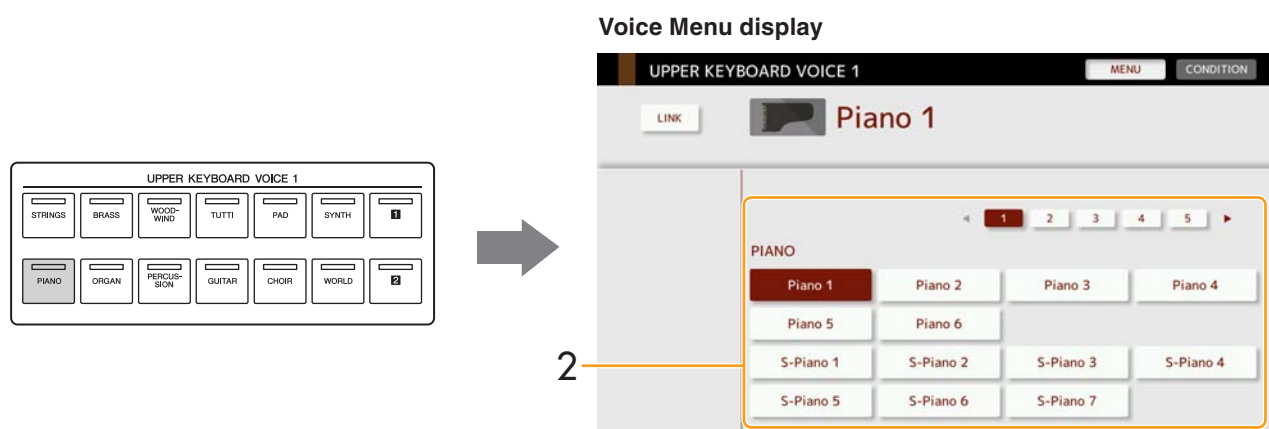
- 1 **Press the DISPLAY SELECT [VOICE DISPLAY] button to call up the Voice display, and then press the desired Voice section to turn it on.**

Turn off other Voice sections to mute them and better hear the selected Voice.



- 2 **Press one of the Voice buttons to call up the Voice Menu display.**

For example, if you press the [PIANO] button for UPPER KEYBOARD VOICE 1, the Voice Menu display for the Upper Keyboard Voice 1 is called up and the list of Voices in Piano category is shown.



NOTE

Each time you press the Voice button, the display switches between the Voice Menu display and the Voice Condition display. If the Voice Condition display is shown, press the same Voice button again. You can also switch these displays by pressing [MENU] or [CONDITION] in the upper right of the display.

- 3 **Select the desired Voice from the list.**
Since the list consists of several pages, press the number buttons or [◀]/[▶] at the top of the list and select the desired Voice. When a Voice is selected, the selected Voice name appears at the top of the display. Here, “Piano 1” is set to UPPER KEYBOARD VOICE 1.
- 4 **Make settings such as the volume and effects in the Voice Condition display to customize the Voice as needed.**
For details on the Voice Condition display, see [page 30](#).

5 Play the keyboards with the selected Voices.

As necessary, turn on/off the desired Voice sections on the Voice display.

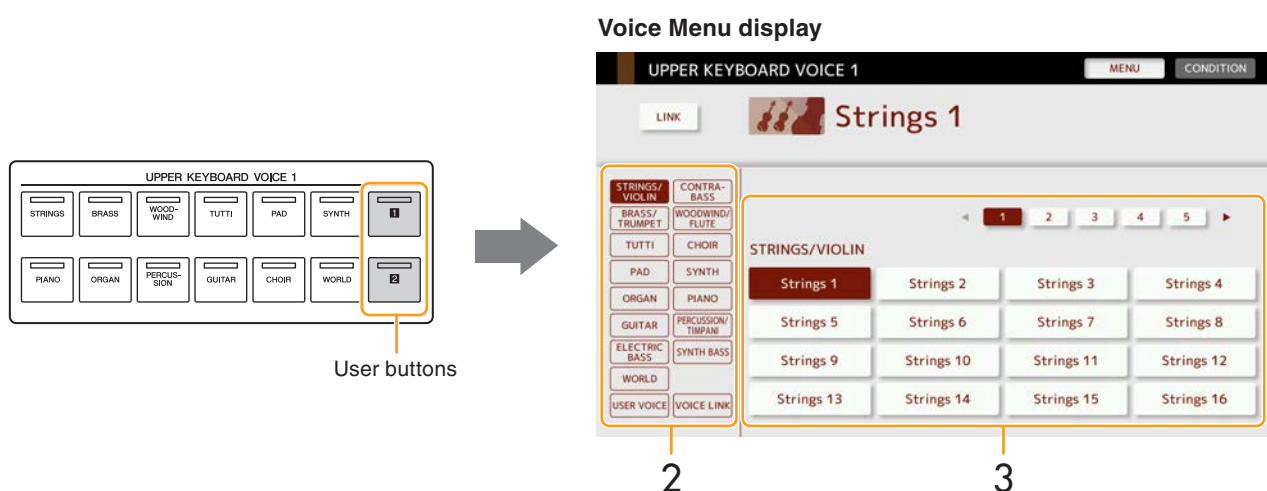
NOTE

You can use the Sliders on the left side of the Upper Keyboard to adjust the volume balance between each Voice section (page 48).

Selecting Voices with the User buttons

Each Voice section has one or two buttons with numbers called “User buttons” which can be found on the right side of each Voice section. Since the Electone has far more built-in Voices than the number of Voice buttons on the panel, it is convenient to assign Voices that you often want to recall to the User buttons. User Voices created with the Voice Edit function (page 115) and Voices registered to Voice Link (page 36) can also be selected with the User buttons. On the ELS-03X, ELS-03XR and ELS-03XF, VA Voices (page 40) for the Lead Voice 2 can also be selected with the User button.

1 Press the User button [1] or [2] for the desired Voice section to call up the Voice Menu display.



2 Select the Voice category that you want to call up with the User buttons on the left side of the display.

Select [USER VOICE] for the Voices created with the Voice Edit function (page 115), and [VOICE LINK] for the Voices registered to Voice Link (page 36). The VA Voices (page 40) can be selected from [VA VOICE].

NOTE

For Voices other than User Voices, Voice Link and VA Voices, instead of using steps 1 and 2, you can select a category by holding down a User button and pressing the Voice button (in any Voice section) of the category that you want to use.

3 Select the Voice that you want to call up from the list.

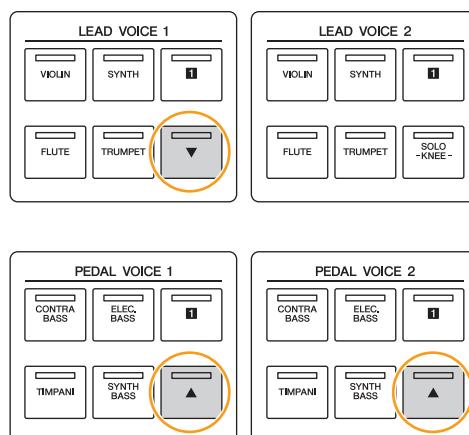
Since the list consists of several pages, press the number buttons or [◀]/[▶] at the top of the list and select the desired Voice. When a Voice is selected, the selected Voice name appears at the top of the display. The selected Voice is now assigned to the User button.

4 To play with the selected Voice, turn on the User button you pressed in step 1.

You can confirm the selected Voice by pressing the DISPLAY SELECT [VOICE DISPLAY] button to call up the Voice display.

Playing Lead Voice 1, Pedal Voice 1, or Pedal Voice 2 on another keyboard (Keyboard Assign function)

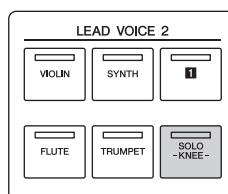
The Voices selected for the Lead Voice 1, Pedal Voice 1, or Pedal Voice 2 sections can be played on other keyboards when the [▼] or [▲] button in each Voice section is turned on. You can set which keyboard to play the Voices on “KEYBOARD ASSIGN” in the [CONDITION 1] tab of the Voice Condition display. For details, see [page 31](#). When the [▼] or [▲] button is on, the Lead Voice and Pedal Voice for that section will not sound even if you play the Upper Keyboard and Pedalboard.



Switching the Upper Keyboard to play only Lead Voice 2 (Solo function)

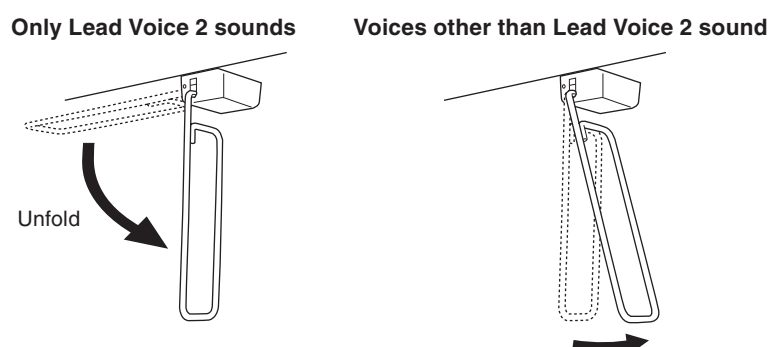
The Lead Voice 2 section features a convenient Solo function. Solo lets you instantly switch to a solo Lead Voice 2 during your performance, muting all of the other Upper Keyboard Voices.

- 1 Select the desired Voice to use for a solo performance in Lead Voice 2.
- 2 Press the LEAD VOICE 2 [SOLO-KNEE-] button to turn the lamp on.
This sets Solo to standby status.



- 3 **Unfold the Knee Lever, and then press the Knee Lever with your right knee and release it while playing the Upper Keyboard.**

When the Knee Lever is unfolded, only the Lead Voice 2 sounds, and when the Knee Lever is pressed to the right, Voices other than the Lead Voice 2 sound.



NOTE

The Live Expression Control function ([page 53](#)) allows you to use a Footswitch to turn the Solo function on/off.

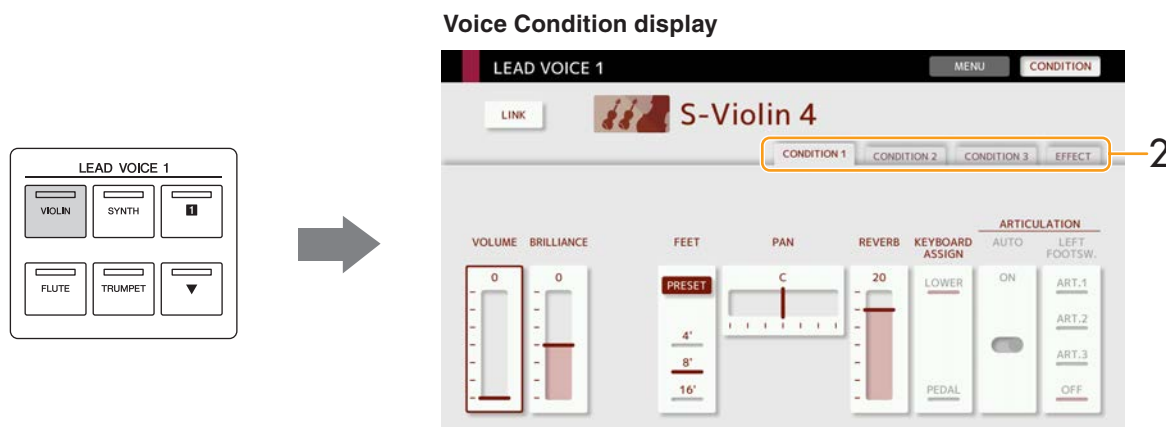
Notes on using the Solo function

- Functions other than switching Solo on/off can also be assigned to the Knee Lever ([page 18](#)). Therefore, if functions other than Solo are assigned to the Knee Lever, multiple functions will be simultaneously turned on or off when the Knee Lever is operated.
- When you release the Knee Lever while playing the keyboard, Solo is not applied to the key being pressed, but is applied from the next pressed key. When you press the Knee Lever, Solo remains active for the key being pressed, and is cancelled from the next pressed key.
- Lead Voices 1 and 2 sound only the highest note if two or more keys are played. However, in Solo mode, Lead Voice 2 sounds for the last key played.

Making Voice-related settings (Voice Condition display)

You can set the volume, effects, and other parameters for the selected Voice and apply various changes to the timbre on the Voice Condition display.

- 1 Press the Voice button for the Voice that you want to configure twice to call up the Voice Condition display.



NOTE

Each time you press the same Voice button, the display toggles between the Voice Condition display and Voice Menu display. Additionally, you can also switch between these displays by pressing [MENU] or [CONDITION] in the upper right of the display.

- 2 Select a tab and make the necessary settings.
For details on the settings available in each tab on the Voice Condition display, see the explanation starting from [page 31](#).

- 3 As necessary, set Voice Link and the Mono/Poly for the Pedal Voice at the top of the Voice Condition display.

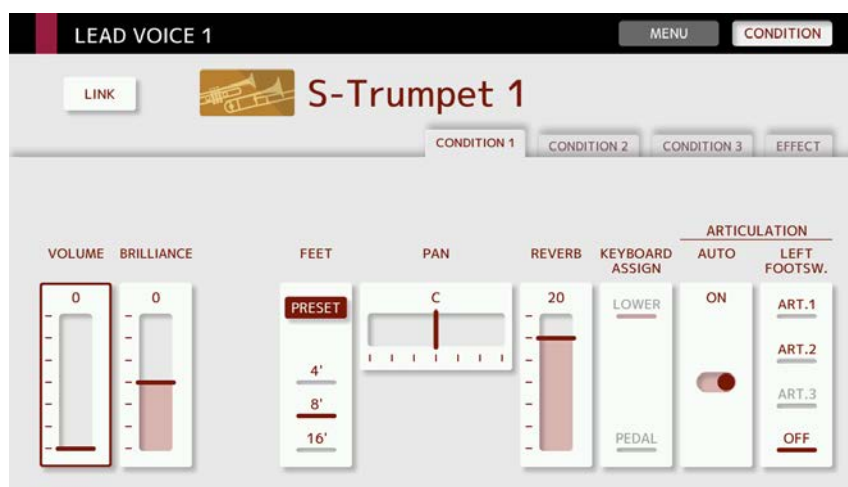
See [page 36](#) for details on Voice Link, and [page 36](#) for the Pedal Voice Mono/Poly settings.

NOTICE

Turning the Electone off erases the data you have set on the panel and display. Be sure to save any important Registrations to a USB flash drive before turning off the power ([page 98](#)).

[CONDITION 1] tab

On the [CONDITION 1] tab of the Voice Condition display, you can make basic settings for the selected Voice such as volume, brilliance, and pan. The parameters shown in the display differ depending on the selected Voice section.

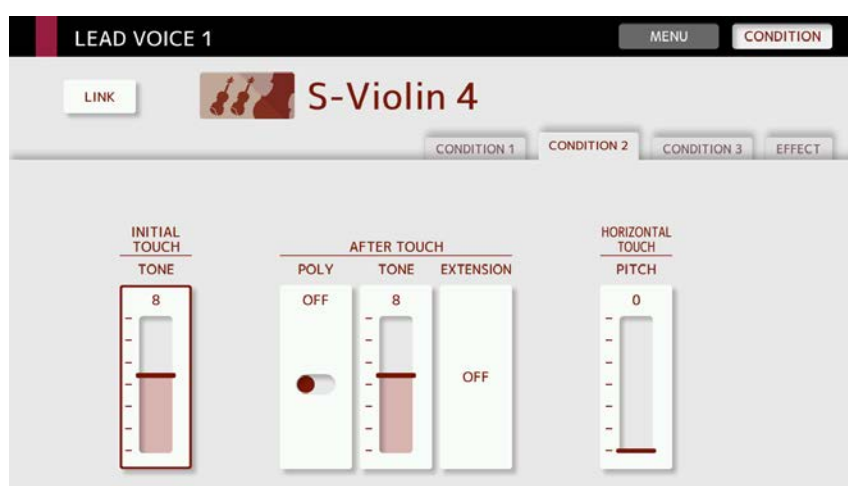


VOLUME	Sets the volume. Range: 0 – 24 NOTE You can use the Sliders on the left side of the Upper Keyboard to adjust the volume for each Voice section while playing (page 48).
BRILLIANCE	Changes the tone to make it brighter or mellow. Increasing the value brightens the tone while decreasing it makes it mellow. Range: –3 – +3 NOTE You can use the Sliders on the left side of the Upper Keyboard to adjust the brilliance of each Voice section (page 48).
FEET	Determines the octave setting of the Voice, letting you use the Voice over a wide register. There are three settings: 4', 8' and 16' (4' is highest and 16' is lowest). A 2' setting is added to the Pedal Voice. Selecting PRESET calls up the original (factory) FEET settings for the Voice.
PAN	Determines the position of the instrument sound in the stereo image. Seven pan positions are available for each Voice section. Range: L3 (leftmost) – C (center) – R3 (rightmost)
REVERB	Determines the amount of reverb applied to each Voice section. Reverb is an effect that makes the sound resonate and gives the impression of a performance in a large room or concert hall. Even if the Reverb is set to the maximum value here, the effect will not be heard unless the Reverb Depth is increased on the [MASTER] tab of the MIXER display (page 148). Range: 0 – 24
PRIORITY (Lead Voice 2 only)	Switches the sounding mode of Lead Voice 2. • LAST: Only the last played key is sounded when two or more keys are played simultaneously. • TOP: Only the highest note is sounded when two or more keys are played simultaneously. When the Solo function (page 28) is on, Lead Voice 2 sounds according to Last mode, regardless of the setting made here.
KEYBOARD ASSIGN (Lead Voice 1, Pedalboard Voice 1, 2 only)	Determines on which keyboard you play the Lead Voice 1, Pedal Voice 1, or Pedal Voice 2 when the Keyboard Assign function (page 28) is turned on.

ARTICULATION	This setting is only valid for Super Articulation Voices which have Voice names that start with “S-” (page 39). The settings here produce exquisitely timed effects (such as pitch bend and glissando) that are characteristic of the corresponding acoustic instrument, making the sound exceptionally realistic.	
	NOTE For information about what effect is produced by turning AUTO on or selecting ART.1, ART.2, or ART.3, refer to the “Super Articulation Voice Supplementary List” in the Data List (https://manual.yamaha.com/mi/rt/els03/). AUTO, ART.1, ART.2, and ART.3 are not available for some Voices.	
	AUTO	Setting this to ON will automatically apply various effects such as pitch bend and glissando to your keyboard performance.
	LEFT FOOTSW.	Determines the effect of the Articulation function produced via the Left Footswitch: ART.1, ART.2, ART.3, and OFF.

[CONDITION 2] tab

On the [CONDITION 2] tab of the Voice Condition display, you can make touch-related settings. On the Electone, the way you play the keyboard can change the volume and timbre of a Voice. The settings here provide all Voices with this expressive function, making it possible to perfectly reproduce the subtle dynamic and tonal changes of actual instruments.



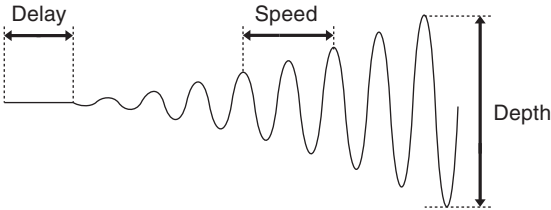
INITIAL TOUCH	TONE	Initial Touch lets you control the volume and timbre according to the strength of the initial touch when you press the keys. The harder you play the keys, the greater the volume and the brighter the timbre will become. When set to 0, Initial Touch is not applied. The higher the value, the wider the changes produced by your playing strength become. Range: 0 – 14 NOTE Initial Touch may not be effective on some organ Voices.
AFTER TOUCH	After Touch lets you control the volume and timbre of the Voice according to how strongly you press down on the keys after playing them. NOTE After Touch has no effect on percussive Voices (such as piano or vibraphone), drum/percussion sounds, or some organ Voices.	
	POLY (ELS-03X/ELS-03XR/ELS-03XF only)	Turns Polyphonic After Touch on and off. When set to ON, After Touch is applied individually to each played key. When set to OFF, After Touch is applied equally to all played keys. NOTE - Polyphonic After Touch is applied to the Upper keyboard and Lower keyboard. - This cannot be set for VA Voices (page 40).

AFTER TOUCH	TONE	Controls volume and timbre according to the pressure you apply to the keys after playing them. The harder you press down on the keys, the greater the volume and brighter the timbre will become. When set to 0, After Touch is not applied. The higher the value, the wider the changes produced by your playing strength become. Range: 0 – 14 NOTE • On the ELS-03G, After Touch is not applied to the Pedal Voices. • This setting cannot be applied to some Super Articulation Voices, which have Voice names that start with “S-,” when POLY (mentioned above) is turned on.
	EXTENSION	Determines how After Touch changes the sound. Press here to open the AFTER TOUCH EXTENSION window, which provides templates 1 through 5. After selecting a template, adjust the following items as necessary. After making the settings, press [CLOSE] to close the window. • PITCH COARSE: Sets the range of the pitch change in semitones. • PITCH FINE: Sets the range of the pitch change in one-cent steps. • CUTOFF FREQUENCY: Sets the range of the cutoff frequency change. • RESONANCE: Sets the intensity of the resonance effect. • LFO SPEED: Sets the speed of the LFO oscillation. • LFO PITCH: Sets the pitch change over time (vibrato-like effect). • LFO FILTER: Sets the timbre change over time (wah-wah-like effect). • LFO AMPLITUDE: Sets the volume change over time (tremolo-like effect). NOTE • LFO stands for “Low Frequency Oscillator.” By generating a low frequency, you can modulate the pitch, timbre (filter), and volume (amplitude) of a sound to add expressive variation to the sound. • Depending on the Voice, some items may not be set. • LFO SPEED cannot be set on some Super Articulation Voices, which have Voice names that start with “S-,” when Polyphonic After Touch is turned on. • On the ELS-03G, the Pedal Voices do not have an After Touch Extension function.
HORIZONTAL TOUCH (ELS-03X/ELS-03XR/ELS-03XF only)	PITCH	Horizontal Touch lets you control the pitch by moving the keys side-to-side while held on the Upper keyboard or Lower keyboard. As you move the keys faster and farther laterally, the pitch change increases in speed and amount, up to a maximum one-octave range. You can use this function in combination with After Touch to add expressiveness to your performance. When set to 0, Horizontal Touch is not applied. The higher the value, the wider the changes produced by your playing strength become. The Pedalboard does not have a Horizontal Touch function. Range: 0 – 14

[CONDITION 3] tab

On the [CONDITION 3] tab of the Voice Condition display, you can make vibrato, slide, transpose, and tune settings.

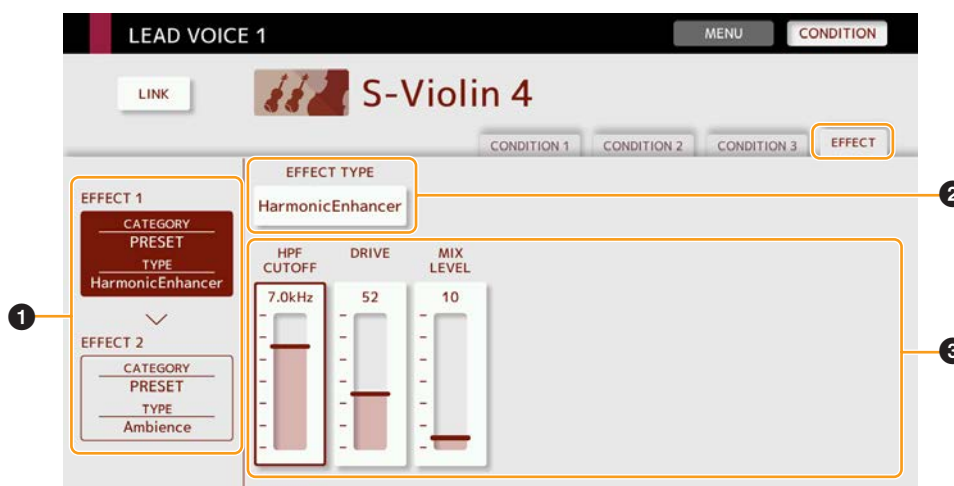


VIBRATO	The Vibrato function wavers the level of the Voices, making them sound warmer and more animated. This effect is applied independently to each Voice section. However, for some Voices, vibrato may not be effective at all or the effect may not sound as expected. • PRESET: Calls up the original (factory) vibrato settings for the Voice. In this case, the individual parameters (Delay, Depth, and Speed) cannot be set. • USER: Changes each parameter (Delay, Depth, and Speed) to set a vibrato that matches the desired effect. Vibrato Control 
DELAY	Determines the amount of time that elapses between the playing of a key and the start of the vibrato effect. Higher settings increase the delay of the vibrato onset. Range: 0 – 14 NOTE Delay cannot be set for Super Articulation Voices, which have Voice names that start with “S-.”
DEPTH	Determines the intensity (amount) of the vibrato effect. Higher settings result in a more pronounced vibrato. The minimum setting results in no vibrato. Range: 0 – 14 NOTE Depth cannot be applied to Super Articulation Voices, which have Voice names that start with “S-,” when After Touch “Poly” (page 32) is turned on.
SPEED	Determines the speed of the vibrato effect. Higher settings increase the speed of the vibrato. Range: 0 – 14 NOTE Speed cannot be set for Super Articulation Voices, which have Voice names that start with “S-.”
TOUCH VIBRATO	Turns the Touch Vibrato function on or off. Setting this to ON lets you apply vibrato to individual notes as you play them with After Touch (press down the keys hard). The harder you press down the key, the greater the vibrato will be. Setting this to OFF, the vibrato depth cannot be controlled no matter how hard you press the keys. NOTE • Touch Vibrato cannot be set for Super Articulation Voices, which have Voice names that start with “S-.” • The Pedalboard on the ELS-03G does not have a Touch Vibrato function.

SLIDE (Lead Voice 1/2 only)	Applies a portamento effect (smoothly connects two consecutive notes) when a Lead Voice is played in legato. The Slide function is effective within a one-octave range for Lead Voices. Slide has no effect when playing notes beyond a one-octave range. • ON: Slide function is applied. • KNEE: Press to the right with your knee when you want to apply the Slide effect while playing the keyboard. The Slide effect is applied to the Lead Voice while the Knee Lever is pressed. Releasing the Knee Lever turns the Slide function off. • OFF: Slide function is not applied. NOTE • Slide cannot be set for some Super Articulation Voices, which have Voice names that start with “S-.” • The Live Expression Control function (page 53) allows you to use a Footswitch to control the Slide function.	
	TIME	Determines the speed of the Slide (portamento) effect. Higher settings make the slide speed slower. Range: 0 – 14
TRANPOSE	Transposes the pitch of each Voice section in semitones. Range: -6 – +6 NOTE The overall pitch of the Electone can be set in the UTILITY display. See page 20.	
TUNE	Raises or lowers the pitch of each Voice section in one-cent increments. Range: -64 – +63 NOTE • The overall pitch of the Electone can be set on the Utility display. See page 20. • A cent is equal to one one-hundredth of a semitone (100 cents = 1 semitone).	

[EFFECT] tab

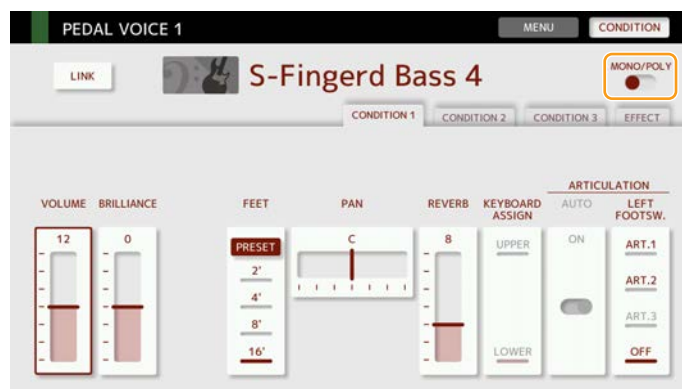
On the [EFFECT] tab of the Voice Condition display, you can make detailed effect settings. Two effects can be set for each Voice section.



①	EFFECT 1/2	Two effects can be set for one Voice section. EFFECT 2 is applied to the sound that already has EFFECT 1 applied. Select which effect you want to set here.
②	EFFECT TYPE	Determines the type of effect. Pressing here calls up the EFFECT TYPE SELECT window. After selecting a category from the left side of the display, select the effect type to be used. After selecting the type, press [CLOSE] to close the list. For information about the effects available here, refer to the “Effect Type List” in the Data List (https://manual.yamaha.com/mi/rt/els03/).
③	(Effect Parameters)	The available parameters may vary depending on the selected effect type. If the parameters do not fit on one page, [◀]/[▶] will appear in the upper right to allow switching pages and making the settings.

Switching between Mono/Poly of the Pedal Voices

By default, if two or more notes are pressed on the Pedalboard at the same time, only the highest note will sound. Turning the Poly mode on switches the Pedal Voices from monophonic to polyphonic play. This makes it possible to play the Pedalboard in various expressive ways, such as playing legato or in an ensemble. Press [MONO/POLY] in the upper right of the Voice Condition display to switch the Pedal Voice between Mono/Poly. Turning it on enables Poly, and turning it off enables Mono.



Using Voice Link

You can register the current Voice with the current settings in the Voice Condition display (except for Volume and Brilliance) to the Voice Link category as one Voice. Voices registered to Voice Link can be selected from the User buttons ([page 27](#)) for each Voice section. Collect your favorite Voices on one screen, which can then be called up quickly or conveniently during your performance. Up to 80 Voices can be registered to Voice Link.

- 1 **Make the desired settings on the Voice Condition display.**
- 2 **Press [LINK] at the upper left of the Voice Condition display (or the Voice Menu display).**
When the confirmation message appears, press [REGISTER].



NOTE

If a Voice with the same name is already registered, [REGISTER] cannot be pressed. If this occurs, press [RENAME], assign a different name to the current Voice and register it again. See [page 111](#) for instructions on entering characters.

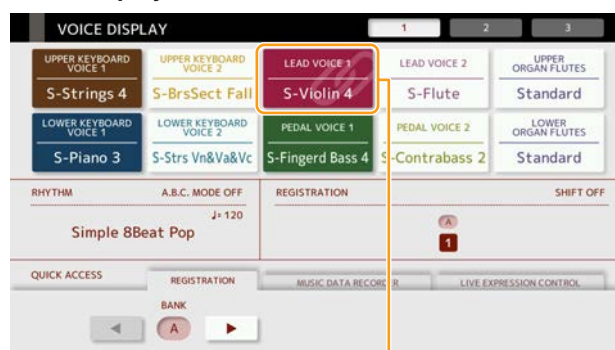
3 When the registration is complete, the Voice Condition display appears.

On the Voice Condition display, a Voice Link icon appears to the left of the Voice name. If you call up the Voice display, the same icon appears at the background of the Voice name allowing you to confirm which Voice section uses Voice Link.

Voice Condition display



Voice display



Voices registered to Voice Link

Voices registered to Voice Link can be selected from the User buttons. For details, see [page 27](#).

Changing registered Voice Links

Release, rename, or delete registered Voice Links on the Voice Menu display. Select the Voice to be changed before proceeding.

Voice Menu display



• Releasing the selected Voice from Voice Link:

If you want to change the settings on the Voice Condition display for a Voice that is already registered to Voice Link without affecting the sound of another Voice Section or Registration Memory number, you should first release the Voice from Voice Link. Press [LINK] at the upper left of the display to release the Voice Link (you can also press [LINK] on the Voice Condition display). After changing the settings, register the Voice to Voice Link once again. Change the name when re-registering a Voice.

• Changing the Voice name:

You can change the name of the Voice that is already registered to Voice Link. Select the Voice name that you want to change and press [RENAME]. See [page 111](#) for instructions on entering characters. After renaming, press [REGISTER] to register the Voice.

- **Deleting a Voice:**

Up to 80 Voices can be registered to Voice Link. When there are no empty spaces, select an unused Voice and press [DELETE] to delete it.

When you press the Registration Number button containing data using a Voice registered to Voice Link, the corresponding Voice and its settings on the Voice Condition display will be called up from its original Voice Category (not from Voice Link). This means that the Voice will sound the same as when the Voice settings were stored to the Registration Memory, regardless of changes made in the operation here.

- **Changing the settings of a Voice registered to Voice Link:**

If you change the settings on the Voice Condition display of the Voice in Voice Link, storing to the Registration Memory will apply the changed new settings to all Registrations which use the same Voice in Voice Link. After changing the settings on the Voice Condition display, hold down the [M.] (Memory) button at the left end of the Registration Memory buttons and press the desired number button to store the settings.

NOTE

When you save the Song or Unit next time, the settings of the Voice Condition display will be applied to all Units.

About the Tone Generators

This Electone is equipped with Voices created with an AWM (Advanced Wave Memory) tone generator. In addition, the ELS-03X, ELS-03XR, and ELS-03XF are also equipped with Voices created with a VA (Virtual Acoustic) tone generator. The VA Tone Generator is only used for Voices in the Lead Voice 2 voice section.

Voices that use the AWM Tone Generator are called “AWM Voices,” and Voices using the VA Tone Generator are called “VA Voices.”

AWM Tone Generator

AWM is a synthesis system based on sampled waves, or audio recordings of actual instruments. AWM Voices use multiple samples, so that they sound like a real instrument. This section also describes how to play the Super Articulation Voices, since you will need special settings and operations for playing these Voices.

What are Super Articulation Voices?

Super Articulation Voices use tone generation technology that recreates the realistic sounds and performance techniques of acoustic instruments. As a result, you can produce superbly detailed expression such as the realistic sound of finger slides on guitar and keyboard action noise of electronic piano. Moreover, these Voices will enable you to feel the breath noise of musicians which employ performance techniques such as legato, pitch bend and glissando, as well as scat singing (“Shoo-Bee-Doo-Bah,” etc.), such as adlibbed by jazz vocalists. You can freely add expressions through your playing style and Footswitch operations. Super Articulation Voices have Voice names that start with “S-.”

Examples of using Super Articulation Voices

The following expressions can be produced by setting the ARTICULATION ([page 32](#)) parameters in the [CONDITION 1] tab of the Voice Condition display.

- **Type A**

- **Example of a sound effect: S-Whistle 1**

When either ART.1 or ART.2 is selected, pressing the Footswitch will produce a sound effect.

- **Type B**

- **Example of mute and slap: S-SteelGt Amp 1**

When ART.1 is selected, playing the keyboard softly will produce a muted articulation, while playing the keyboard strongly will produce a slap articulation.

- **Type C**

- **Example of scat: S-ShoBeDoBa/Hmm**

When ART.1 is selected, playing the keyboard with the Footswitch pressed will produce a constant “Hmm” vocalization. Playing the keyboard with the Footswitch released will alternatively produce “Shoo,” “Bee,” “Doo,” and “Bah.”

- **Example of cycle: S-Ukulele Strum**

Pressing the same key repeatedly causes the sound to change naturally.

- **Type D**

- **Example of embellishment, glissando and trill: S-Piccolo 2**

When ART.1 is selected, playing the keyboard with the Footswitch pressed will add an embellishment sound. Releasing the keys with the Footswitch is pressed will produce glissando. When ART. 2 is selected, pressing or releasing the keys with the Footswitch pressed will produce glissando. When ART. 3 is selected, pressing the keys with the Footswitch pressed will produce trill. When AUTO is set to ON, playing the keyboard adds glissando automatically.

- **Type E**

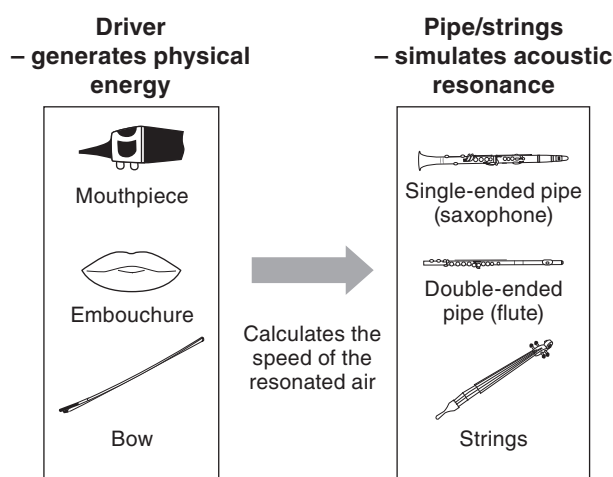
- **Example of Pitch Bend: S-PedalSteelGt 1**

When two or more notes (for example, C, E and G) are pressed simultaneously, adding Pitch Bend ([page 19](#)) will bend only the pitch of the lowest note.

VA Tone Generator (ELS-03X/ELS-03XR/ELS-03XF only)

Unlike with the AWM Tone Generator, the VA Tone Generator first designs a virtual instrument inside the Electone and then creates the sound by simulating how vibrations are transmitted in that instrument. This “virtual instrument” is called a “physical model.” In particular, the Voices provided in this Electone were created as physical model data for various actual instruments, including wind instruments such as saxophones and flutes.

For example, in the case of a wind instrument, it calculates the airflow entering the tube from the elements that trigger the sound, such as breath strength and embouchure, and faithfully reproduces the internal resonance to produce a natural and expressive lead Voice. However, since it simulates a real instrument, there are performance restrictions similar to the real instrument such as a limited Voice range and characteristic quirks of instrument control. VA Voices have Voice names that start with “V-.” These Voices can only be selected from the User buttons for Lead Voice 2 (page 27).



Notes on using VA Voices

Since the VA Voices have unique sonic characteristics and are closer in behavior to acoustic instruments than the AWM Voices, you should observe the following precautions when playing VA Voices.

- Some Voices may produce unexpected or unnatural sounds when played outside (higher or lower than) the recommended Voice range. For information about the recommended Voice range, refer to the “VA Voice List” in the Data List (<https://manual.yamaha.com/mi/rt/els03/>).
- Pitch change may not be smooth on some Voices when Horizontal Touch or After Touch is applied.
- Portamento (Lead Slide) effects may not be smooth on some Voices.
- Keep in mind that playing legato or trills may not produce any sound.

3

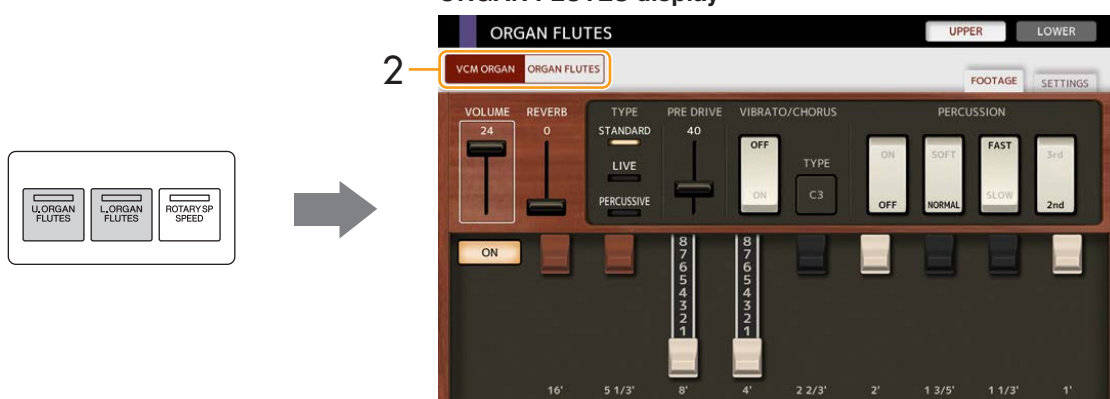
Organ Flutes

The Organ Flutes function allows you to create your own organ Voices, giving you access to an unlimited combination of organ sounds. With this function, you can recreate all of the classic organ sounds by adjusting the flute footage levels and the percussive sounds, just like on conventional organs. In addition to conventional organ flute Voices, this Electone is also equipped with VCM organ Voices created with a VCM organ tone generator (page 42) that faithfully reproduces vintage tonewheel organs.

- 1 Press the [U.ORGAN FLUTES] button (Upper Organ Flutes) or the [L.ORGAN FLUTES] button (Lower Organ Flutes) to turn on Organ Flutes.

The ORGAN FLUTES display for the Upper Keyboard or the Lower Keyboard is called up. You can also switch the displays by pressing [UPPER] or [LOWER] at the upper right of the display.

ORGAN FLUTES display



NOTE

In order to call up the ORGAN FLUTES display without turning the Organ Flutes on/off, press the [U.ORGAN FLUTES] button or the [L.ORGAN FLUTES] button while holding down the DISPLAY SELECT [VOICE DISPLAY] button.

- 2 Select the base organ type (VCM ORGAN or ORGAN FLUTES) at the upper left of the display.

VCM ORGAN is an organ Voice created with the VCM Organ tone generator. ORGAN FLUTES is a conventional transistor organ Voice. The setting here is common to Upper and Lower Keyboards.

NOTE

Since it takes time to switch between VCM ORGAN and ORGAN FLUTES, we recommend that you do not switch it during your performance.

- 3 Select the waveform type in the [FOOTAGE] tab.

You can choose from three waveform types for each of VCM ORGAN and ORGAN FLUTES. For details about each type, see page 44 or page 45.

VCM ORGAN



ORGAN FLUTES



4 Move the footage lever to adjust the level of each footage and determine the basic sound of the Organ Flutes.

The footage can also be adjusted by using the Sliders on the left side of the Upper Keyboard. Select “U.ORGAN” or “L.ORGAN” in the sub display by pressing the SLIDER [ASSIGN] button on the panel repeatedly, and then adjust the level by using the Sliders. For details, see [page 48](#).

5 Make other necessary settings.

For VCM Organ, select the [FOOTAGE] tab and the [SETTINGS] tab, and for Organ Flutes, select the [FOOTAGE] tab, [ATTACK] tab, and [EFFECT] tab to make settings. For information about each tab, refer to the explanation starting from [page 43](#).

To turn the Rotary Speaker effect on and off, use the [ROTARY SP SPEED] button or the Footswitch. For details, see [page 52](#).

6 To exit the Organ Flutes function, press the [U.ORGAN FLUTES] or [L.ORGAN FLUTES] button again to turn it off.

You can also use the ON/OFF button in the [FOOTAGE] tab of the ORGAN FLUTES display to turn it off.

VCM Organ tone generator

The VCM Organ tone generator was developed to faithfully reproduce the sound of a tonewheel-type vintage organ. VCM stands for “Virtual Circuitry Modeling™,” and is technology that emulates the functions of an analog electric circuit. This technology enables the instrument to reproduce sound with an analog-like depth, which cannot be reproduced by a simple digital sound. It can even reproduce subtle noises and distortion caused by the tonewheel and analog electrical circuits which are now considered part of the musical appeal of the instrument. VCM Organ Voices created by using this technology allow you to recreate not only the original functions of vintage organs, but also

to adjust the age-related deterioration and individual differences of vintage organs. This enables you to enjoy more realistic and expressive organ sound.

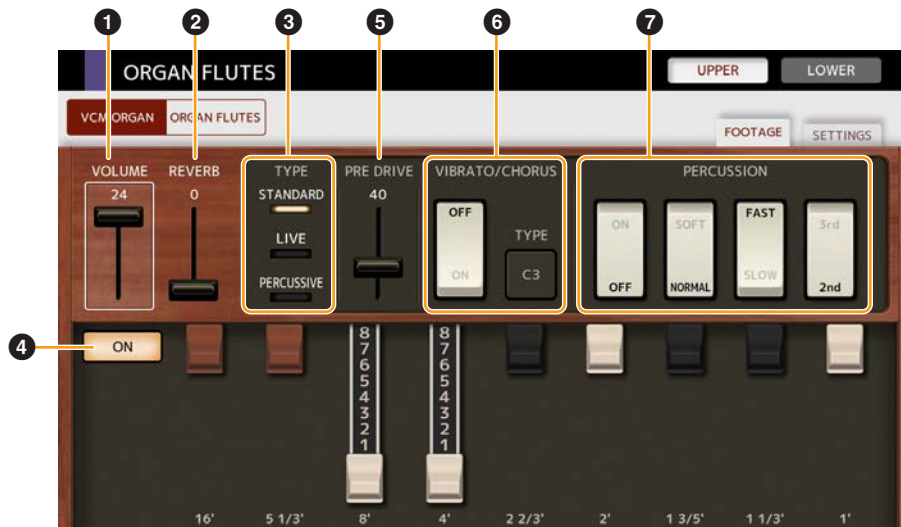
For details on the parameters that can be set for VCM Organ Voices, refer to [pages 43 and 44](#).

Let's take a break!



VCM Organ [FOOTAGE] tab

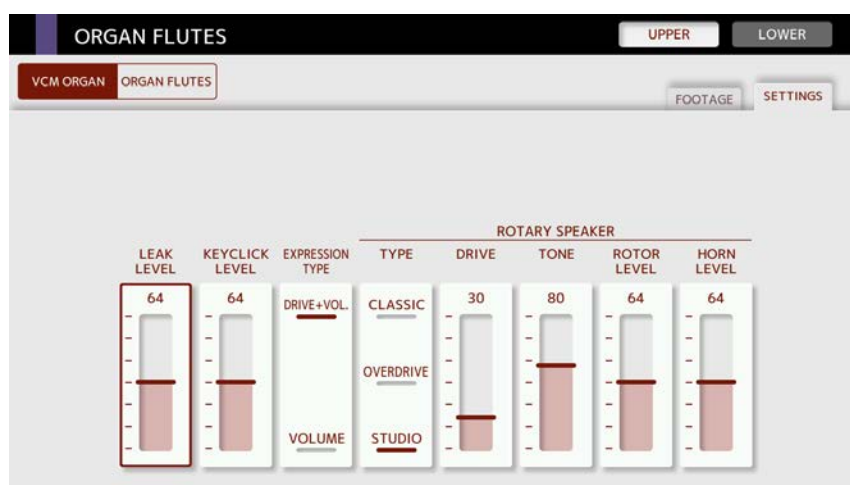
In this tab, you can set the basic timbre of the VCM Organ.



❶	VOLUME	Determines the overall volume of the VCM Organ. You can change the volume while maintaining the balance between each footage. A minimum setting here produces no VCM Organ sound. This setting is common to both the Upper and Lower Keyboards.	
❷	REVERB	Determines the amount of Reverb applied to the Organ sound. Even if the Reverb is set to the maximum value here, the effect will not be heard unless the Reverb Depth is increased on the [MASTER] tab of the MIXER display (page 148). This setting is common to both the Upper and Lower Keyboards.	
❸	TYPE	Selects the base Voice type. This setting is common to both the Upper and Lower Keyboards. • STANDARD: Faithfully reproduces a standard vintage organ. Ideal for organ solos and music which features the organ. • LIVE: Thick-sounding type characterized by a strong mid-bass sound. Ideal when you want a strong presence that does not get buried in a band or ensemble. • PERCUSSIVE: This type features a unique percussion sound. Works well with Drive and is ideal for playing fast passages.	
❹	VCM ORGAN ON/OFF	Turns the VCM Organ on/off. This functions the same way as the [U.ORGAN FLUTES] button (Upper Organ Flutes) or the [L.ORGAN FLUTES] button (Lower Organ Flutes) on the panel.	
❺	PRE DRIVE	Sets the Pre Drive (preamplifier gain) of the VCM Organ. It models the change in distortion due to the preamplifier adjustment screws inside of a vintage organ cabinet. This setting is common to both the Upper and Lower Keyboards.	
❻	VIBRATO/CHORUS	Turns on or off the Vibrato effect. The Upper and Lower Keyboards can be set independently.	
	TYPE	Selects the type of vibrato/chorus for the VCM Organ. Each time you press the button, the type switches through V1 – 3 (VIBRATO) and C1 – 3 (CHORUS). This setting is common to both the Upper and Lower Keyboards.	
❼	PERCUSSION	On the Upper keyboard, you can play percussion sounds as you press the keys.	
	ON/OFF	Switches between playing (ON) and not playing (OFF) percussion sounds when the keys are pressed.	
	SOFT/NORMAL	Switches the level of the percussion sound.	
	FAST/SLOW	Switches the decay speed of the percussion sound.	
	3rd/2nd	Switches the pitch of the percussion sound. • 3rd: When a key is pressed, the percussion sounds at the same pitch (3rd harmonic) as the [2 2/3'] footage lever. • 2nd: When a key is pressed, the percussion sounds at the same pitch (2nd harmonic) as the [4'] footage lever.	

VCM Organ [SETTINGS] tab

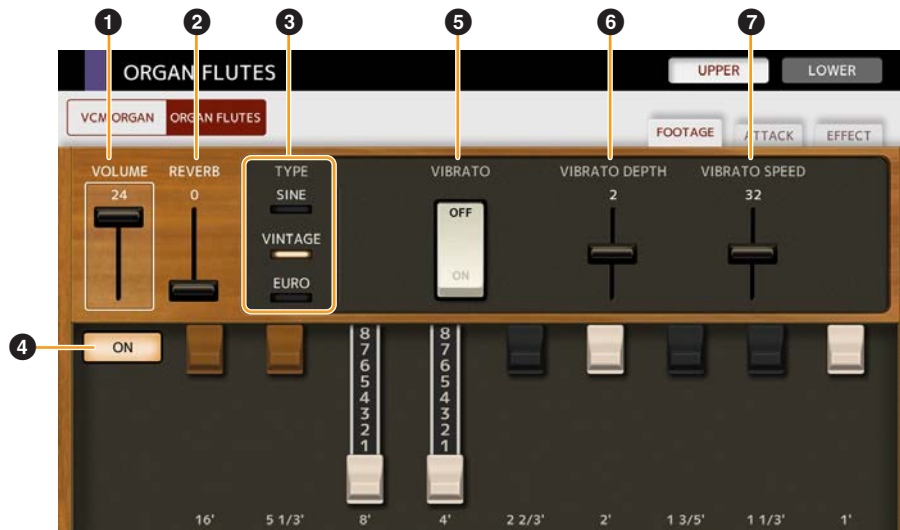
In this tab, you can make the detailed settings of the VCM Organ. The settings on this tab are common to both the Upper and Lower Keyboards.



LEAK LEVEL	Sets the volume of the leakage sound. The leakage sound is a sound reproducing the noise that leaks from the tonewheels into the electrical circuit. Range: 0 – 127	
KEYCLICK LEVEL	Sets the volume of the keyclick sound produced when the keys are pressed. It reproduces the click noise caused by the contact of the electrical switch at the moment when a key is pressed. Range: 0 – 127	
EXPRESSION TYPE	Sets which part of the organ that the Expression Pedal effect is applied to. • DRIVE+VOL.: Applies the pedal effect to the preamplifier inside the organ. Moving the pedals changes both the volume and distortion of the organ sound. The types of VCM Organ faithfully reproduces the expression pedal behavior of a vintage organ. • VOLUME: After the organ sound is generated, the pedal effect is applied just before the reverb section. Moving the pedals changes the volume of the organ sound but not the distortion.	
ROTARY SPEAKER	TYPE	Selects the rotary speaker type. • CLASSIC: Standard rotary speaker for organs. • OVERDRIVE: Rotary speaker connected to a high-distortion transistor preamplifier. • STUDIO: Rotary speaker with a three-dimensional sense of rotational movement.
	DRIVE	Adjusts the drive (level of distortion) of the speaker/amplifier sound. Range: 0 – 127
	TONE	Adjusts the tone (sound quality) of the speaker/amplifier sound. Setting this value to the center produces a flat sound quality. Increasing this value boosts the high frequencies and cuts low frequencies. Decreasing this value boosts low frequencies and cuts high frequencies. Range: 0 – 127
	ROTOR LEVEL	Sets the volume of the rotor (low-frequency side). Range: 0 – 127
	HORN LEVEL	Sets the volume of the horn (high-frequency side). Range: 0 – 127

Organ Flutes [FOOTAGE] tab

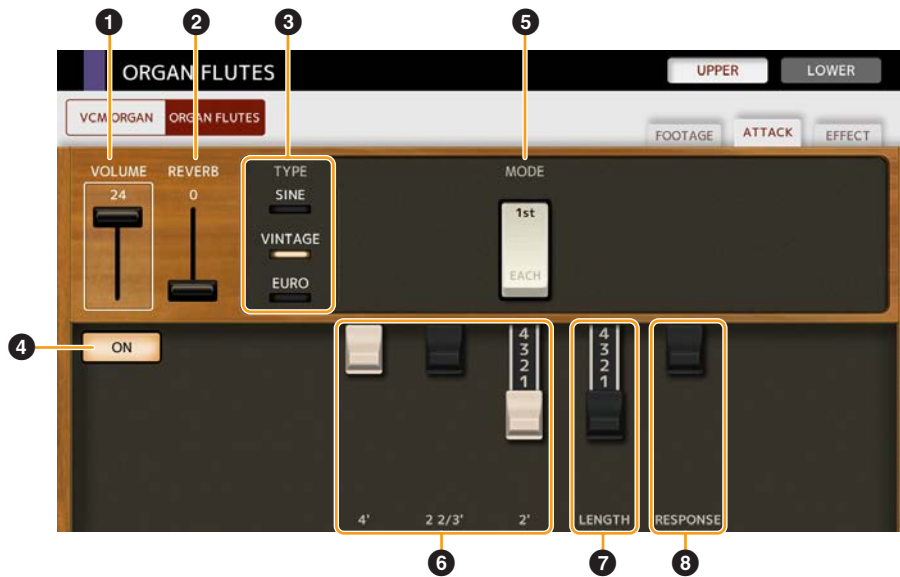
In this tab, you can set the basic timbre of the Organ Flutes. The settings on this tab can be independently configured for the Upper and Lower Keyboards.



❶	VOLUME	Determines the overall volume of the Organ Flute Voice. You can change the volume while maintaining the balance between each footage. A minimum setting here produces no Organ Flute sound.
❷	REVERB	Determines the amount of Reverb applied to the Organ sound. Even if the Reverb is set to the maximum value here, the effect will not be heard unless the Reverb Depth is increased on the [MASTER] tab of the MIXER display (page 148). Range: 0 – 24
❸	TYPE	Selects the base Voice type. • SINE: Produces the clean, clear sound of a sine wave. • VINTAGE: Produces a gritty, slightly distorted sound. • EURO: Produces the sound of a transistor electronic organ equipped with electronic tremolo.
❹	ORGAN FLUTES ON/OFF	Turns the Organ Flutes on and off. This functions the same way as the [U.ORGAN FLUTES] button (Upper Organ Flutes) or the [L.ORGAN FLUTES] button (Lower Organ Flutes) on the panel.
❺	VIBRATO	Turns the Vibrato effect on or off. The Vibrato function can be set for each Voice section to waver the sound, making it warmer or mellower.
❻	VIBRATO DEPTH	Determines the intensity (amount) of the Vibrato effect. Higher settings result in a more pronounced Vibrato. Range: 1 – 3
❼	VIBRATO SPEED	Determines the speed of the Vibrato effect. Higher settings increase the speed of the Vibrato. Range: 0 – 63

Organ Flutes [ATTACK] tab

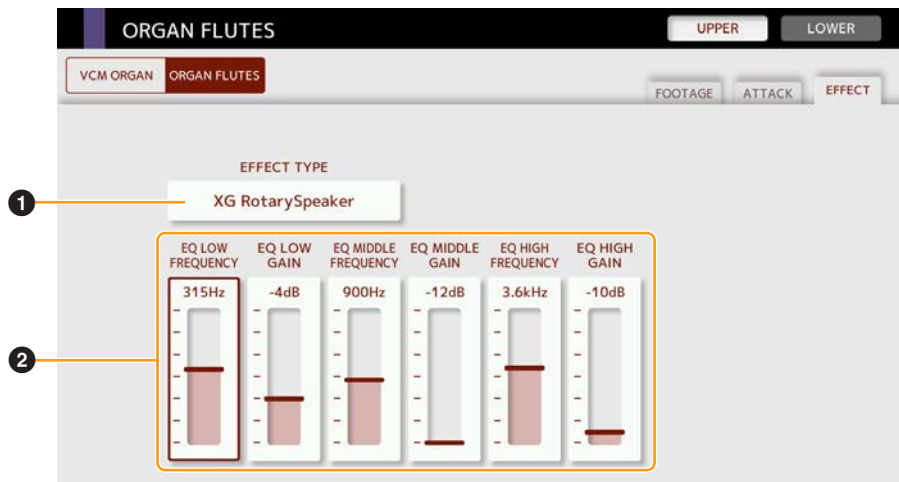
In this tab, you can set the attack for the Organ Flutes.



1	VOLUME	Same as the [FOOTAGE] tab (page 45).
2	REVERB	
3	TYPE	
4	ORGAN FLUTES ON/OFF	
5	MODE	Determines which notes in a held group of notes are given an attack sound. This parameter is common to both Upper and Lower Keyboards. • 1st: Only the first note played has an attack. • EACH: All notes played have an attack.
6	(Attack Footage)	Sets the attack footage. The Upper and Lower Keyboards can be set independently. Range: 0 – 8
7	LENGTH	Sets the duration of the attack sound. The Upper and Lower Keyboards can be set independently. Range: 0 – 8
8	RESPONSE	Determines the overall speed of the keyboard response. Moving the lever downward makes the keyboard response slower, creating a pipe organ effect. The Upper and Lower Keyboards can be set independently. Range: 0 – 8

Organ Flutes [EFFECT] tab

In this tab, you can make the rotary speaker (tremolo effect) settings specific to organ sounds. For information about the rotary speaker, see [page 52](#).



1	EFFECT TYPE	Selects the rotary speaker type. The Upper and Lower Keyboards can be set independently. Press the EFFECT TYPE button to call up a list of the effect types of rotary speaker. Select the desired type from the list. After selecting the type, press [CLOSE] to close the list. For information about the effect types available here, refer to the “Effect Type List” in the Data List (https://manual.yamaha.com/mi/rt/els03/).
2	(Effect Parameters)	The available parameters may vary depending on the selected effect type. If the parameters do not fit on one page, [◀]/[▶] will appear at the upper right to allow switching pages and making the settings.

Organ Flutes function and Pipe Organs

The Organ Flutes function simulates the structure of traditional organs. This section briefly explains how pipe organs and electric organs work.

When the keys are pressed on a pipe organ, air is sent to pipes connected to those keys, which produces a flute-like sound that is close to a sine wave from pipes equipped with reeds. The structure has many pipes with different materials and shapes, and each individual pipe is responsible for producing the harmonics that make up the timbre of the pipe organ. There are levers called “stops” that determine how much air to send to these pipes and various tones such as clarinets, oboes, and flutes can be effectively recreated by combining these stops. Sounds produced in this way echo throughout a church or hall to create a performance with a profound sense of spaciousness.

With the advance of technology, electric organs that electronically achieve a pipe organ sound appeared, which made it possible to hear performances identical to a pipe organ in small churches and restaurants, etc. The most popular type of electric organ created around 1930 is still loved all over the world today. In that organ, a single key was connected to nine sine wave oscillators, and the signal amount or volume of each sine wave was controlled by a lever. The sine wave oscillators functioned as pipes of different lengths while the levers acted like the stops assigned to each pipe to reproduce the mechanism of a

pipe organ. The Electone’s Organ Flutes functions works in the same way as this electric organ.

The numbers such as 16' and 8' shown on each footage lever represent the pipe length (footage) in a pipe organ, or in other words, the pitch. 8' stands for 8 feet while 4' means 4 feet, which produces a sound that is one octave higher than 8 feet. 16' stands for 16 feet, which produces a sound that is one octave lower than 8 feet. There are also levers that produce intervals of a third or fifth and are represented as fractions. Furthermore, electric organs were equipped with rotating speakers called “rotary speakers” that reflect sound throughout a room to recreate the wide sound field of a pipe organ. The Electone also allows you to set a rotary speaker as an effect.



Let's take a break!

By using controls such as Sliders, Expression Pedals, and Footswitches, you can turn parts on and off or add effects to change your performance in a wide variety of ways. This convenient function lets you quickly operate during your performance.

Detailed settings for each Voice such as Initial Touch and After Touch can be made in the Voice Condition display or ORGAN FLUTES display. For information, see [page 30](#) for the Voice Condition display, and [page 41](#) for the ORGAN FLUTES display. Furthermore, you can use the MIXER display to adjust the overall sound balance of the Electone. See [page 146](#).

Sliders

The Sliders located at the left side of the Upper Keyboard allow you to adjust the volume or brilliance of each Voice section, or the Organ Flutes footage levels. You can also freely assign specific desired functions for control.

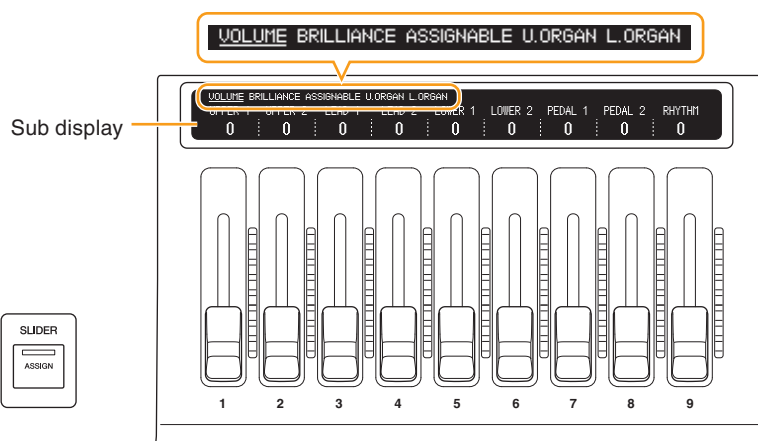
1

Press the SLIDER [ASSIGN] button repeatedly until the desired function is called up.

Each time you press the button, the function called up changes. At the top of the Sub display, an underline is shown for the selected function "VOLUME," "BRILLIANCE," "ASSIGNABLE," "U.ORGAN," or "L.ORGAN."

NOTE

The selection here can be stored to the Registration Memory ([page 79](#)).



• VOLUME

For adjusting the volume of each Voice section and Rhythm (Percussion part). This is linked with the volume setting on the Voice Condition display ([page 31](#)), Rhythm Condition display ([page 63](#)) and MIXER display ([page 147](#)).

UPPER 1	UPPER 2	LEAD 1	LEAD 2	LOWER 1	LOWER 2	PEDAL 1	PEDAL 2	RHYTHM
1	2	3	4	5	6	7	8	9

• BRILLIANCE

For adjusting the brilliance of each Voice section. This is linked with the Brilliance setting Voice Condition display ([page 31](#)) and MIXER display ([page 147](#)).

UPPER 1	UPPER 2	LEAD 1	LEAD 2	LOWER 1	LOWER 2	PEDAL 1	PEDAL 2	—
1	2	3	4	5	6	7	8	9

• **ASSIGNABLE (Functions assigned by the Live Expression Control function)**

For controlling the functions assigned to each Slider by the Live Expression Control function. For details, see [page 53](#).

• **U.ORGAN (Upper Keyboard Organ Flutes footage)**

• **L.ORGAN (Lower Keyboard Organ Flutes footage)**

For controlling each Organ Flute footage level for the Upper or Lower keyboard. The settings here affect the footage settings on the ORGAN FLUTES display ([page 41](#)).

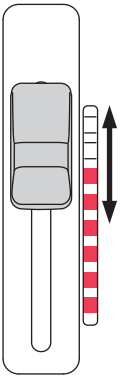
16'	5 1/3'	8'	4'	2 2/3'	2'	1 3/5'	1 1/3'	1'
1	2	3	4	5	6	7	8	9

2

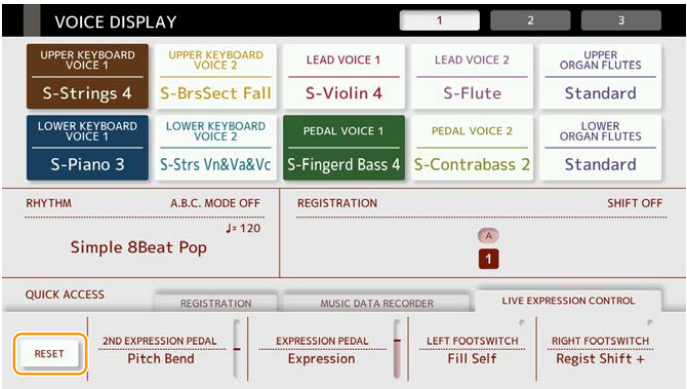
Move the Sliders during your performance to control the assigned function.

The LED meters to the right of each Slider indicate the current setting value of the function assigned to the Slider.

If the Slider position deviates from the actual setting value, you can set how it behaves when it is moved. For details, see SLIDER MODE on [page 57](#).



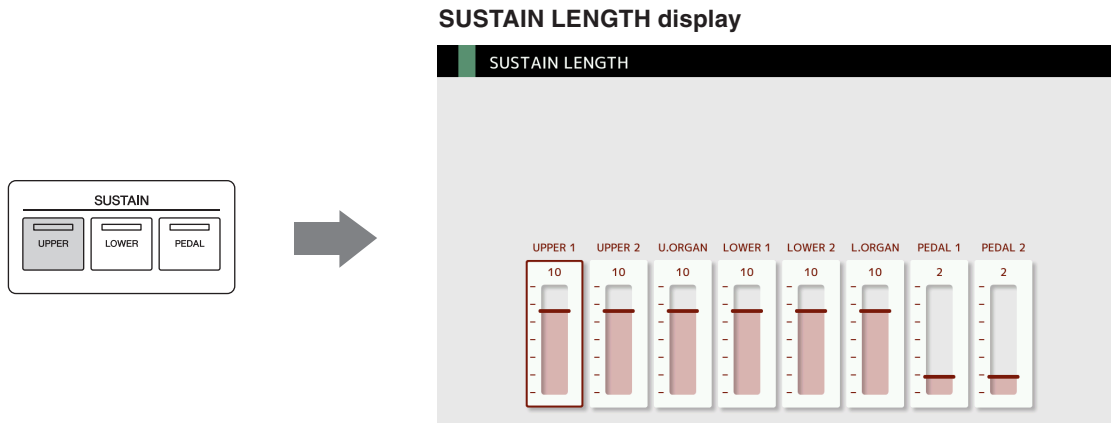
When [RESET] in the [LIVE EXPRESSION CONTROL] tab at the lower part of the Voice display is pressed, the setting values of the function assigned to the Sliders are reset. For details, see [page 54](#).



Sustain

Sustain is an effect that causes Voices to gradually fade out when you take your fingers (or foot) off the keys. The Sustain on/off setting is independent for each keyboard, and the sustain length setting is independent for each Voice section, providing maximum expressive control. Sustain cannot be applied to the Lead Voices.

- 1 Press one of the **SUSTAIN** buttons (**UPPER/LOWER/PEDAL**) to call up the **SUSTAIN LENGTH** display.



- 2 Adjust the length of the sustain to apply to each Voice section.

If you raise it to the highest position (HOLD), some Voices such as organ or synth will sound continuously even when the keys are released.

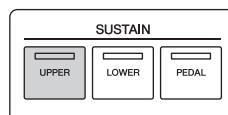
Range: 0 – 12, HOLD

NOTE

- If you change the Voice while the keys are released when the Sustain Length is set to HOLD, the Voice only changes after you play another key.
- When the Sustain Length is set to HOLD, previously played note(s) may be cut off by subsequently played notes.
- When the SUSTAIN button is turned off, the Sustain Length returns to the preset length for each Voice regardless of the settings in the SUSTAIN LENGTH display.
- Only HOLD is available for some Voices. No effect is produced when Sustain Length is set to 0 – 12. For information about the applicable Voices, refer to the "Voice List" in the Data List (<https://manual.yamaha.com/mi/rt/els03/>).
- When playing with a Pedal Voice set to HOLD, some Super Articulation Voices will continue to sound without the previously played note being cut off regardless of the Pedal Voice Mono/Poly setting (page 36). For information about the applicable Voices, refer to the "Voice List" in the Data List (<https://manual.yamaha.com/mi/rt/els03/>).

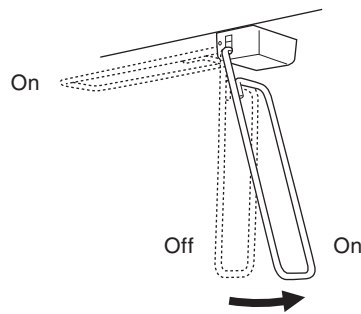
- 3 Press the **SUSTAIN** button for the keyboard that you wish to add Sustain so that the button lights up.

Turn the sustain on by pressing the [UPPER] button for the Upper keyboard, [LOWER] for the Lower keyboard, or [PEDAL] for the Pedalboard. Sustain will not be added when a button is turned off (lamp is off), so check that the SUSTAIN button for the desired keyboard is turned on before playing.



Controlling Sustain with the Knee Lever

You can turn Sustain on and off for the Upper and Lower keyboards during a performance using the Knee Lever. Unfold the Knee Lever and press it to the right with your right knee at the timing you want to add Sustain during your performance. Sustain is constantly applied while the Knee Lever is pressed. Releasing the Knee Lever turns Sustain off.



NOTE

- Several functions can be assigned to the Knee Lever and pressing the Knee Lever simultaneously turns all of these functions on/off. For details, see [page 18](#).
- The Live Expression Control function ([page 53](#)) allows you to use a Footswitch or an assignable foot pedal ([page 169](#)) to control Sustain on/off.

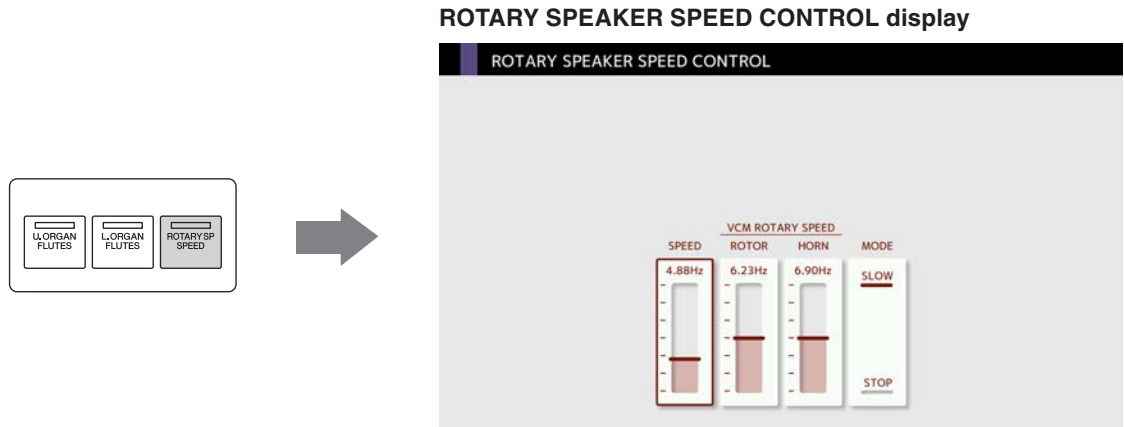
Rotary Speaker

Rotary Speaker recreates the rich, swirling sound of the popular rotating speaker effect (tremolo effect). You can use the [ROTARY SP SPEED] button on the panel or a Footswitch to turn the effect on or off in real-time during a performance. Keep in mind that the Rotary Speaker effect CANNOT be activated just by turning on the [ROTARY SP SPEED] button. The settings must be made with the following procedure.

1 Select a Rotary Speaker as the effect type for the Voice section or Organ Flutes Voice which you want to apply the tremolo effect.

To set a Rotary Speaker for the Voice in each Voice section, select an effect from the “Rotary Speaker” category in the [EFFECT] tab of the Voice Condition display (page 35). For an Organ Flutes Voice, select a Rotary Speaker in the [EFFECT] tab of the ORGAN FLUTE display (page 47). For a VCM Organ, you do not need to set the effect type.

2 Press the [ROTARY SP SPEED] button to call up the ROTARY SPEAKER SPEED CONTROL display.



3 Make the desired settings such as the rotation speed of the Rotary Speaker.

The settings here are common to all Voice sections.

SPEED	Adjusts the rotation speed of the Rotary Speaker for Voices other than VCM Organs. Range: 2.69 Hz – 39.7 Hz	
VCM ROTARY SPEAKER SPEED	ROTOR	Adjusts the rotation speed of the VCM rotary rotor (low-frequency side) speaker for VCM Organ Voices. Range: 3.16 Hz – 12.28 Hz
	HORN	Adjusts the rotation speed of the VCM rotary horn (high-frequency side) speaker for VCM Organ Voices. Range: 3.49 Hz – 13.63 Hz
MODE	Determines the mode of the Rotary Speaker when the [ROTARY SP SPEED] button on the panel is off. • SLOW: The Rotary Speaker slows down, and a warm chorus-like effect is applied. The speed is 0.6 Hz for Voices other than the VCM Organ, 0.8 Hz for the VCM Organ horn, and 0.7 Hz for the VCM Organ rotor. • STOP: The Rotary Speaker effect turns off.	

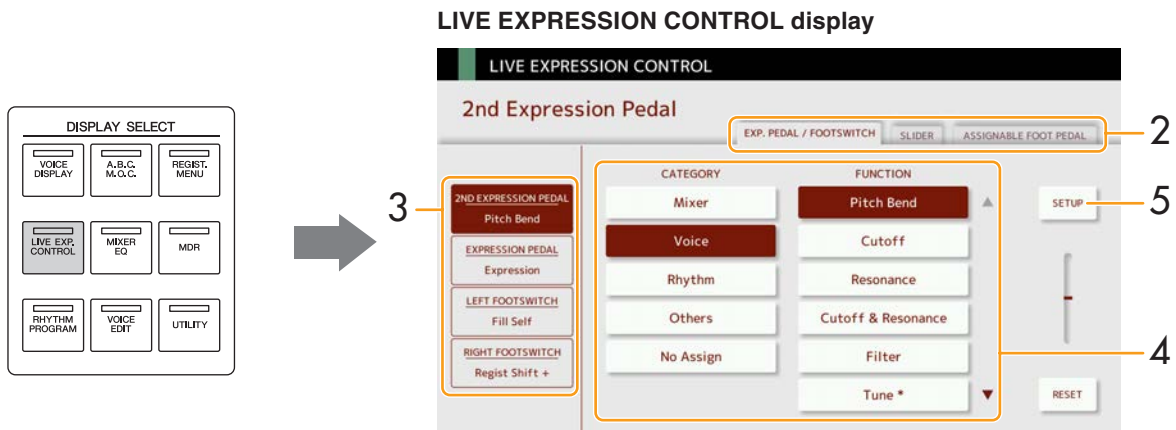
4 Use the [ROTARY SP SPEED] button or Footswitch to turn the Rotary Speaker on and off.

Control the tremolo effect by turning the [ROTARY SP SPEED] button on/off or using a Footswitch or pedal connected to the ASSIGNABLE FOOT PEDAL jack. To control the rotary speaker using a Footswitch or pedal, you need to make certain Live Expression Control settings. For details, see page 53.

Live Expression Control

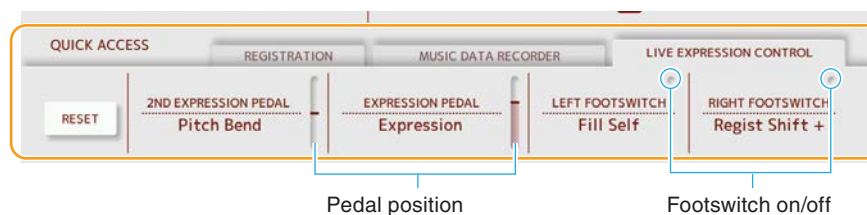
The Live Expression Control function allows you to assign the desired function to the Expression Pedal, Second Expression Pedal, Left and Right Footswitches, Sliders and pedal connected to the ASSIGNABLE FOOT PEDAL jack ([page 169](#)). This is convenient to assign frequently used functions so that you can quickly use them during a performance.

- 1 Press the **DISPLAY SELECT [LIVE EXP. CONTROL]** button to call up the **LIVE EXPRESSION CONTROL** display.



- 2 Select the tab for the specific controller to which you want to assign the function.
- 3 Select the controller to which you want to assign the function from the left side of the display.
- 4 Select **CATEGORY** followed by **FUNCTION** for the function that you wish to assign to the selected controller.
For details about assignable functions, see [page 54](#).
- 5 Press **[SETUP]** to make the detailed settings for the selected function as necessary.
For functions with no items to set, **[SETUP]** is grayed out and cannot be pressed.
- 6 Check that you can operate the assigned function.
To use a function assigned to a Slider, press the **SLIDER [ASSIGN]** button and select “ASSIGNABLE” in the Sub display. For details, see [page 48](#).

You can confirm the functions assigned to the Expression Pedal, Second Expression Pedal, and Left and Right Footswitches at the bottom of the Voice display by selecting the **[LIVE EXPRESSION CONTROL]** tab. When you move the Expression Pedals or Footswitches, you can also conveniently check its movement visually. If you press **[RESET]** at the left, you can reset the setting value. For details on **[RESET]**, see [page 54](#).



Functions that can be assigned by Live Expression Control

The assignable functions differ for each controller. Target functions can be assigned to controllers marked with a “✓” in the table below. The functions marked with “*” indicate that the current value of the function is memorized when you store a Registration to the Registration Memory.

Pressing [RESET] at the lower right of the LIVE EXPRESSION CONTROL display resets the setting values for the functions assigned to the Sliders. Keep in mind that the functions assigned to other controllers than the Sliders will not be reset. [RESET] at the QUICK ACCESS (LIVE EXPRESSION CONTROL) in the Voice display also works in the same way.

Category	Function	Description	Sliders	Expression Pedal	2nd Expression Pedal	Footswitches (left/right)	Assignable Foot Pedals
Mixer	Expression	Adjusts the Electone's overall volume.	✓	✓	✓	—	✓
	Part On/Off	Switches the specified parts on/off. Press [SETUP] to specify the parts.	—	—	—	✓	✓
	Volume*	Adjusts the volume of the specified parts. Press [SETUP] to specify the parts.	✓	✓	✓	—	✓
	Brilliance*	Adjusts the brilliance of the specified parts. Press [SETUP] to specify the parts	✓	✓	✓	—	✓
	Balance	Adjusts the volume balance. Press [SETUP] to set the parts, whose volume you want to control using the pedal or slider, to A or B. • A: Pressing the pedal forward (or raising the slider) increases the volume while pressing it down toward you (or lowering the slider) decreases the volume. • B: Pressing the pedal down toward you (or lowering the slider) increases the volume while pressing the pedal forward (or raising the slider) decreases the volume.	✓	✓	✓	—	✓
	Pan*	Adjusts the pan (page 147) of the specified parts. Press [SETUP] to specify the parts.	✓	✓	✓	—	✓
	Reverb Depth*	Adjusts the depth of the reverb (page 147) applied to the specified parts. Press [SETUP] to specify the parts.	✓	✓	✓	—	✓
	Effect 1/2 Depth*	Adjusts the depth of Effect 1 or Effect 2 (page 147) for the specified parts. Press [SETUP] to specify the parts.	✓	✓	✓	—	✓
Voice	Pitch Bend	Raises and lowers the pitch of the specified parts. Press [SETUP] to specify the parts and set the pitch bend range.	✓	—	✓	—	—
	Pitch Bend Up	Raises the pitch of the specified parts. Press [SETUP] to specify the parts and set the pitch bend range.	✓	✓	—	—	✓
	Pitch Bend Down	Lowers the pitch of the specified parts. Press [SETUP] to specify the parts and set the pitch bend range.	✓	✓	—	—	✓
	Articulation 1 – 3	When using a Super Articulation Voice, pressing a Footswitch or pedal applies the effect to the specified parts. Press [SETUP] to specify the parts.	—	—	—	✓	✓
	Cutoff	Adjusts the cutoff frequency (the frequency band above which the filter cuts off signals) of the specified parts. Press [SETUP] to specify the parts.	✓	✓	✓	—	✓

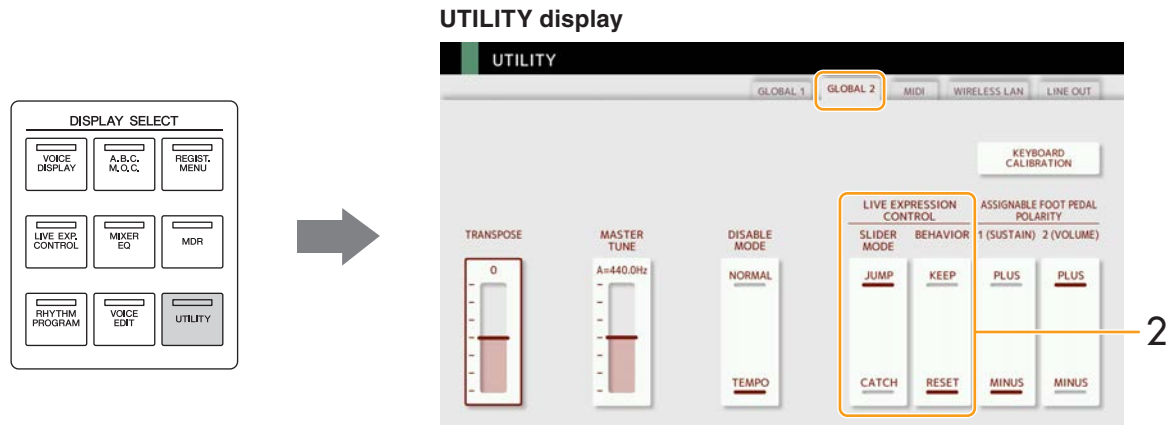
Category	Function	Description	Sliders	Expression Pedal	2nd Expression Pedal	Footswitches (left/right)	Assignable Foot Pedals
Voice	Resonance	Adjusts the depth of the resonance (effect that boosts the volume near the cutoff frequency) applied to the specified parts. Press [SETUP] to specify the parts.	✓	✓	✓	—	✓
	Cutoff & Resonance	Adjusts the cutoff frequency and filter resonance of the specified parts. Press [SETUP] to specify the parts.	✓	✓	✓	—	✓
	Filter	Adjusts the degree for the filter of the specified parts. Press [SETUP] to specify the parts.	✓	✓	✓	—	✓
	Tune*	Raises and lowers the pitch of the specified parts in one-cent increments (page 35). Press [SETUP] to specify the parts.	✓	✓	✓	—	✓
	Sustain	Turn on the SUSTAIN button (page 50) and press a Footswitch or pedal to add a long sustain to the performance sound. When released, the sustained sound stops. Press [SETUP] to set the sustain depth for each part.	—	—	—	✓	✓
	Glide Up	Press a Footswitch or pedal to raise the pitch of the specified parts by a semitone. When released, the pitch returns to the original. Press [SETUP] to specify the parts and set the glide time.	—	—	—	✓	✓
	Glide Down	Press a Footswitch or pedal to lower the pitch of the specified parts by a semitone. When released, the pitch returns to the original. Press [SETUP] to specify the parts and set the glide time.	—	—	—	✓	✓
	Slide	Set SLIDE to ON in the Voice Condition display (page 35), and then press a Footswitch or pedal to apply a slide effect to the specified lead Voice. Press [SETUP] to specify the parts.	—	—	—	✓	✓
	Slide Time*	Adjusts the speed of the slide (page 35) applied to the specified Lead Voices. Press [SETUP] to specify the parts.	✓	✓	✓	—	✓
	Mono/Poly	Switches between playing the Pedal Voice between monophonic (single note) and polyphonic (multiple notes) modes (page 36).	—	—	—	✓	✓
	Rotary Speaker Speed	Switches the rotation speed of the Rotary Speaker (page 52) between fast and slow.	—	—	—	✓	✓
	Solo	Turns the Solo function (page 28) on/off.	—	—	—	✓	✓
	M.O.C. On/Off	Turns the Melody On Chord function (page 66) on/off.	—	—	—	✓	✓
Rhythm	Rhythm Part Mute A*	Turns the Rhythm playback part on/off. Pressing the pedal forward or raising the Slider turns on and increases the playback parts in the following order: Main Drum, Add Drum, Chord 1, Chord 2, Pad, Phrase 1, and Phrase 2.	✓	✓	✓	—	✓
	Rhythm Part Mute B*	Turns the Rhythm playback part on/off. Pressing the pedal forward or raising the Slider turns on and increases the playback parts in the following order: Chord 1, Chord 2, Pad, Phrase 1, Phrase 2, Add Drum, and Main Drum.	✓	✓	✓	—	✓

Category	Function	Description	Sliders	Expression Pedal	2nd Expression Pedal	Footswitches (left/right)	Assignable Foot Pedals
Rhythm	Rhythm Control	Controls the Rhythm playback. Press [SETUP] to specify the section that plays when a Footswitch or pedal is pressed. Selecting [STOP] allows you to play/stop the Rhythm.	–	–	–	✓	✓
	Fill Down	Inserts a fill before shifting to the Main section on the immediate left.	–	–	–	✓	✓
	Fill Self	Inserts a fill.	–	–	–	✓	✓
	Fill Up	Inserts a fill before shifting to the Main section on the immediate right.	–	–	–	✓	✓
	Acmp On/Off	Switches between turning on the Rhythm's accompaniment parts (Chord 1/2, Pad, Phrase 1/2) specified by the current Registration setting, or turning all parts off.	–	–	–	✓	✓
	Synchro Start On/Off	Functions in the same way as the [SYNCHRO START] button (page 60) on the panel.	–	–	–	✓	✓
MDR	Song Play/Pause	Functions in the same way as the [▶] or [■] on the MUSIC DATA RECORDER (MDR) display (page 102).	–	–	–	✓	✓
	Score Page +/-	Advances or moves back the score by one page when the Song is stopped.	–	–	–	✓	✓
Others	Regist Shift +/-	Calls up the next/previous Registration set by the Registration Sequence (page 139).	–	–	–	✓	✓
	Tempo	Increases or decreases the tempo on the basis of the tempo set by the TEMPO [△]/[▽] buttons (page 61) on the panel.	✓	–	✓	–	✓
	Talk On/Off	Switches between the vocal and talk settings (page 153) for the microphone.	–	–	–	✓	✓
	VH On/Off	Switches the harmony (page 154) on/off for the Vocal Harmony.	–	–	–	✓	✓
	VH Lead Volume*	Adjusts the volume of the microphone input (lead sound, page 155) when using Vocal Harmony.	✓	✓	✓	–	✓
	VH Harmony Volume*	Adjusts the volume of the harmony sound (page 155) when using Vocal Harmony.	✓	✓	✓	–	✓
	VH Effect On/Off	Switches the effect applied to the harmony sound (page 155) for Vocal Harmony on/off.	–	–	–	✓	✓
	VH Lead Effect Depth*	Adjusts the effect depth (page 155) applied to the lead sound for Vocal Harmony.	✓	✓	✓	–	✓
	Reset	Resets the current value for the functions assigned by Live Expression Control (page 53) to its default setting or to the value of the last played Registration.	–	–	–	✓	✓
No Assign	No Assign	No function is assigned.	✓	✓	✓	✓	✓

Setting up the Live Expression Control

Sets how the Live Expression Control behaves when switching the Registration Memory or changing the function assigned to a controller.

- 1 Press the **DISPLAY SELECT [UTILITY]** button to call up the **UTILITY** display.



- 2 In the **[GLOBAL 2]** tab, set the **Live Expression Control**.

SLIDER MODE	Sets how the setting value changes when a Slider is moved if the Slider position is out of sync with the actual value after switching the Registration Memory, etc. • JUMP: The setting value immediately changes to match the Slider position when the Slider is moved. • CATCH: The setting does not change even if the Slider is moved until the Slider position matches the actual setting value.
BEHAVIOR	Sets how the function behaves when the function assigned to the controller is changed. • KEEP: The effect of the previous function continues to be applied. • RESET: The effect of the previous function stops.

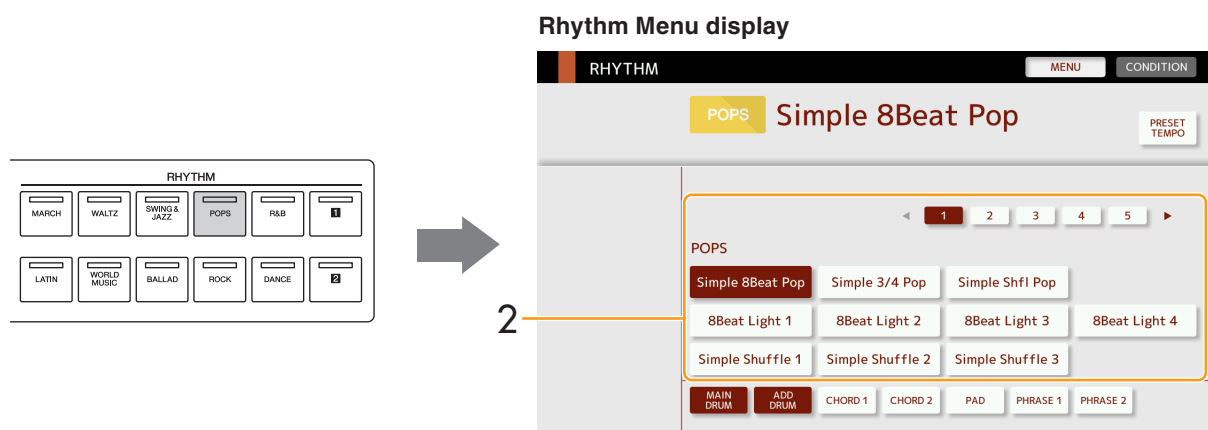
This Electone features real Rhythm patterns created with actual drum and percussion sampled sounds. You can add elements such as arpeggios and chord backing, etc. to enjoy various kinds of rhythmic accompaniment.

Selecting a Rhythm

For the list of available Rhythms, refer to the “Rhythm List” in the Data List (<https://manual.yamaha.com/mi/rt/els03/>).

1 Press one of the RHYTHM buttons to call up the Rhythm Menu display.

For example, pressing the [POPS] button shows a list of Rhythms in the Pops category on the Rhythm Menu display.



NOTE

Each time you press the Rhythm button, the display switches between the Rhythm Menu display and the Rhythm Condition display. If the Rhythm Condition display is shown, press the same Rhythm button again. You can also switch these displays by pressing [MENU] or [CONDITION] in the upper right of the display.

2 Select the desired Rhythm from the list.

Since the list consists of several pages, press the number buttons or [◀]/[▶] at the top of the list and select the desired Rhythm.

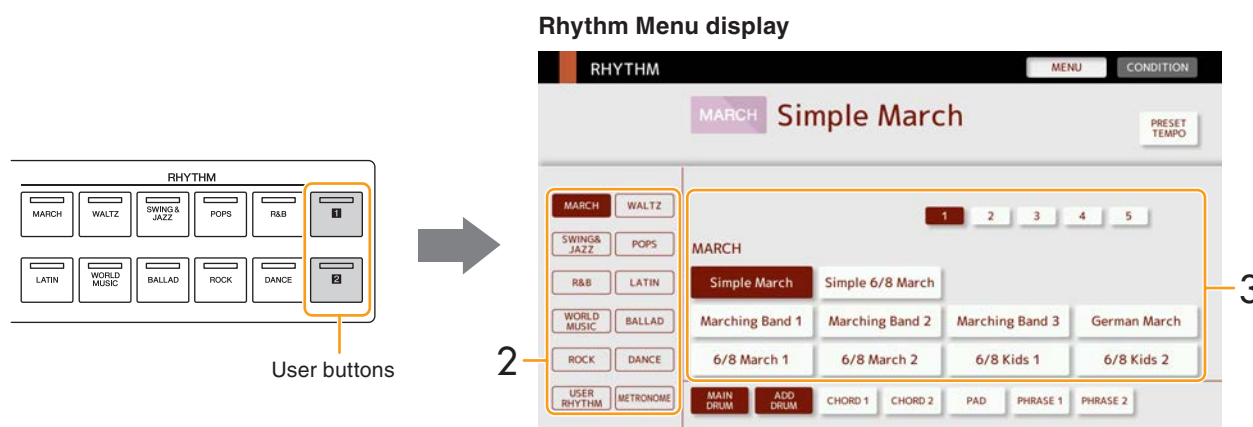
3 To play back the Rhythm, make sure that the RHYTHM button selected in step 1 is turned on, and then play it.

For instructions on playing back, see [page 60](#).

Selecting a Rhythm from the User buttons

Buttons [1] and [2] to the right of the Rhythm buttons are called the User buttons. Rhythms created with the Rhythm Pattern Program (page 123) can be selected using the User buttons. Furthermore, if you want to call up different rhythms in the same category with panel buttons, it is convenient to assign one to a Rhythm button and another to a User button for immediate switching. The metronome can also be selected from the User buttons.

- 1 Press one of the RHYTHM User buttons to call up the Rhythm Menu display.



- 2 Select the rhythm category that you want to call up with the User buttons on the left side of the display.
Select [USER RHYTHM] for Rhythms created with the Rhythm Pattern Program. Select [METRONOME] to play the metronome.
NOTE
For categories other than User Rhythm and Metronome, instead of following steps 1 and 2, you can select the category by holding down a User button and pressing the Rhythm button of the category that you want to use.
- 3 Select the desired Rhythm from the list.
Since the list consists of several pages, press the number buttons or [◀]/[▶] at the top of the list and select the desired Rhythm.

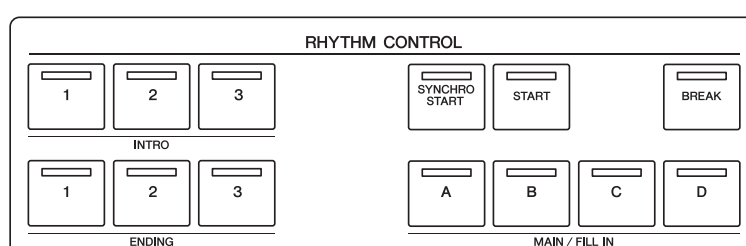
Playing Rhythms

You can start/stop Rhythm playback or switch the sections as desired by using the RHYTHM CONTROL buttons on the panel. By combining sections, you can add dynamic variation to your performance.

Rhythm sections

Each Rhythm is made up of the following types of “sections.” Since each section is a rhythmic variation of the basic rhythm, you can use them to add “spice” to your performance and mix up the beats while you are playing.

- **INTRO:** This is used for the beginning of the Song. The number of measures varies depending on the Rhythm.
- **MAIN:** This is used for playing the main part of the Song. It repeats a Rhythm pattern of several measures.
- **FILL IN:** A one-measure Rhythm pattern that adds breaks to the Song flow and livens up the performance.
- **BREAK:** A one-measure Rhythm pattern that adds dynamic variations and breaks in the Rhythm.
- **ENDING:** This is used for the ending of the Song. The number of measures varies depending on the Rhythm.



• [START] button

Pressing this button starts Rhythm playback. If pressed while the Rhythm is playing, the Rhythm stops.

• [SYNCHRO START] button

Pressing this button sets the Rhythm playback to standby. The Rhythm starts as soon as you start playing the Lower Keyboard or Pedalboard. This is referred to as the Synchro Start function.

When the A.B.C. MODE (page 64) is set to OFF, pressing the [SYNCHRO START] button once again stops the Rhythm.

When the A.B.C. MODE is set to something other than OFF, releasing the keys on the Lower keyboard stops the Rhythm.

When the A.B.C. MODE is set to CUSTOM, releasing the keys on both the Lower Keyboard and the Pedalboard stops the Rhythm.

• INTRO [1] – [3] buttons

Three Intro sections are provided for each Rhythm. If you press one of the INTRO [1] – [3] buttons before starting Rhythm playback, the intro automatically plays before moving to the Main section. The lamp for the selected INTRO button lights up while the Intro is playing. In addition, the BAR/BEAT display (Tempo display) counts down using negative numbers.

• ENDING [1] – [3] buttons

Three Ending sections are provided for each Rhythm. When you press one of the ENDING [1] – [3] buttons while the Rhythm is playing back, the Rhythm will automatically stop after the Ending phrase is played. The lamp for the selected ENDING button lights up while the Ending is playing.

You can have the Ending tempo gradually slow down (ritardando) by pressing the ENDING button once again while the Ending is playing.

• MAIN/FILL IN [A] – [D] buttons

Four Main sections are provided for each Rhythm. Select a Main section with the MAIN/FILL IN [A] – [D] buttons and start Rhythm playback. You can also switch to another Main section by pressing one of the MAIN/FILL IN [A] – [D] buttons during the Rhythm playback. The lamp for the selected MAIN/FILL IN button lights up while the Main section is playing.

If you press the lit MAIN/FILL IN [A] – [D] button once again during Rhythm playback, the fill in will play. The lamp for the selected MAIN/FILL IN button flashes while the fill in is playing. When one measure pattern of a fill in finishes playing, the Rhythm automatically shifts to the Main section.

• [BREAK] button

Pressing the [BREAK] button during the Rhythm playback inserts a Break. When the one-measure Break pattern finishes playing, the Rhythm automatically shifts to the Main section.

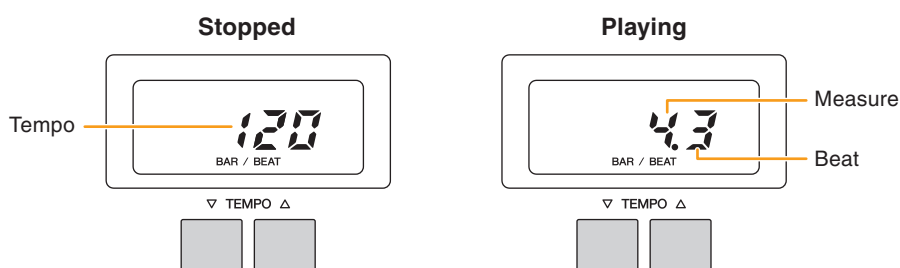
NOTE

- When an Intro or Ending pattern is playing, the Lower Keyboard cannot be played.
- Pressing the ENDING [1] button during playback of the Main section will automatically insert a one-bar Fill In before the Ending 1 pattern.
- The Live Expression Control function (page 53) allows you to use a Footswitch to control Rhythm playback.
- When AUTO FILL is set to ON in the Rhythm Condition display (page 63), a Fill in pattern automatically plays whenever you switch sections with the MAIN/FILL IN [A] – [D] buttons.
- You can record the currently selected section to the Registration Memory (page 77). However, the “Auto Fill” on/off setting cannot be saved.

Adjusting the Rhythm tempo

To adjust the Rhythm tempo, use the TEMPO [Δ]/[▽] buttons. Pressing the [Δ] button increases the tempo, while pressing the [▽] button decreases the tempo. Holding down the button continuously changes the value. The tempo can also be adjusted by using the [DATA CONTROL] dial. Simultaneously pressing the TEMPO [Δ] and [▽] buttons resets the tempo to the default setting of the selected Rhythm. You can also reset the tempo to the default value by pressing [PRESET TEMPO] at the upper right of the Rhythm Menu display.

The Tempo display (BAR/BEAT display) shows the Rhythm tempo (beats per minute) while the Rhythm is stopped. The current measure (bar) and the beat are displayed while the Rhythm is playing back.



The Rhythm tempo can also be confirmed in the Voice display (page 15).

NOTE

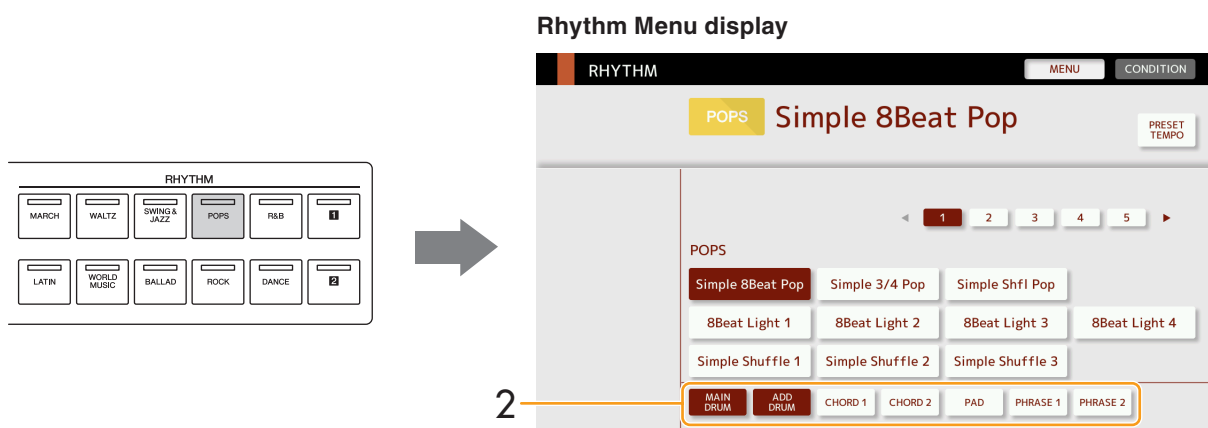
Keep in mind that the default tempo of the Rhythm may differ from the default tempo of the Registration.

Turning the Rhythm parts on/off

A Rhythm consists of two percussion parts and five accompaniment parts. Percussion parts are made up of drum/percussion instruments, which serves as the core of the Rhythm. The accompaniment is the part which contains an accompaniment pattern with a variety of instrumental embellishments. Using the accompaniment makes your performance more dynamic and realistic.

Set whether each part plays or not on the Rhythm Menu display or Rhythm Condition display.

- 1 Press the Rhythm button of the desired Rhythm to call up the Rhythm Menu display.



2

Turn the parts that you want to play on, and the parts that you do not want to play off.

Not all parts contain accompaniment data. Some parts may be empty depending on the selected Rhythm. Additionally, if you turn all of the parts off, nothing will play even when the Rhythm is started.

Percussion

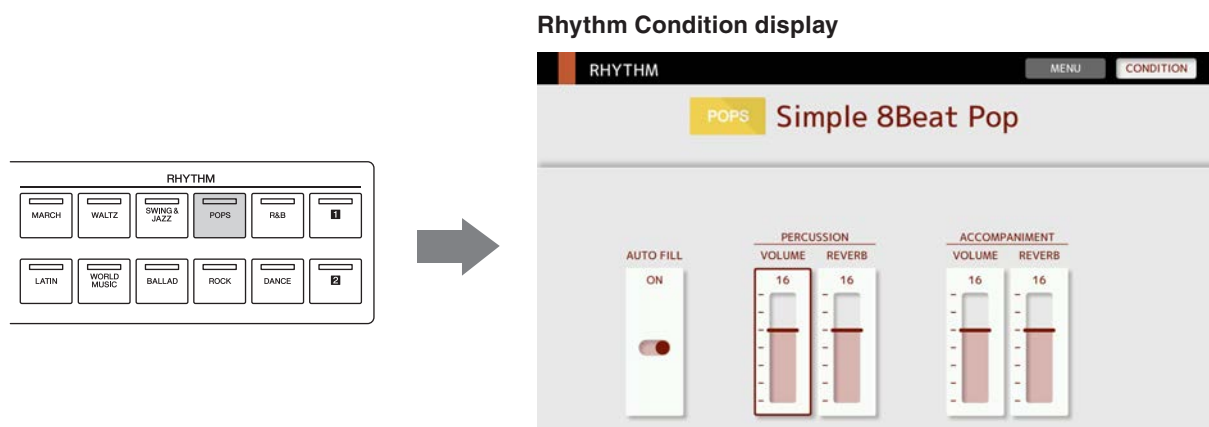
MAIN DRUM	Contains the main percussion sounds.
ADD DRUM	Contains additional percussion sounds such as tambourines and triangles, etc.

Accompaniment

CHORD 1, CHORD 2	These are the rhythmic chord backing parts such as piano and guitar.
PAD	Performances such as strings and organs, etc.
PHRASE 1, PHRASE 2	Chord arpeggios and brass section accents, etc. These parts are used for various embellishments and riffs within the accompaniment that enhance the song.

Configuring Rhythm-related settings (Rhythm Condition display)

- 1 Press one of the Rhythm buttons twice to call up the Rhythm Condition display.



NOTE

Each time you press the same Rhythm button, the display toggles between the Rhythm Condition display and Rhythm Menu display. Additionally, you can also switch these displays by pressing [MENU] or [CONDITION] in the upper right of the display.

- 2 Make the necessary settings.

AUTO FILL	When this is set to ON, the Fill In pattern is automatically played whenever you switch sections with the MAIN/FILL IN [A] – [D] buttons.	
PERCUSSION	VOLUME	Adjusts the volume of the percussion parts (Main Drum, Add Drum). Range: 0 – 24
	REVERB	Adjusts the Reverb Depth for the percussion parts (Main Drum, Add Drum). Even if the Reverb is set to the maximum value here, the effect will not be heard unless the Reverb Depth is increased on the [MASTER] tab of the MIXER display (page 148). Range: 0 – 24
ACCOMPANIMENT	VOLUME	Adjusts the volume of the accompaniment parts (Chord 1, Chord 2, Pad, Phrase 1, Phrase 2). Range: 0 – 24
	REVERB	Adjusts the Reverb Depth for the accompaniment parts (Chord 1, Chord 2, Pad, Phrase 1, Phrase 2). Even if the Reverb is set to the maximum value here, the effect will not be heard unless the Reverb Depth is increased on the [MASTER] tab of the MIXER display (page 148). Range: 0 – 24

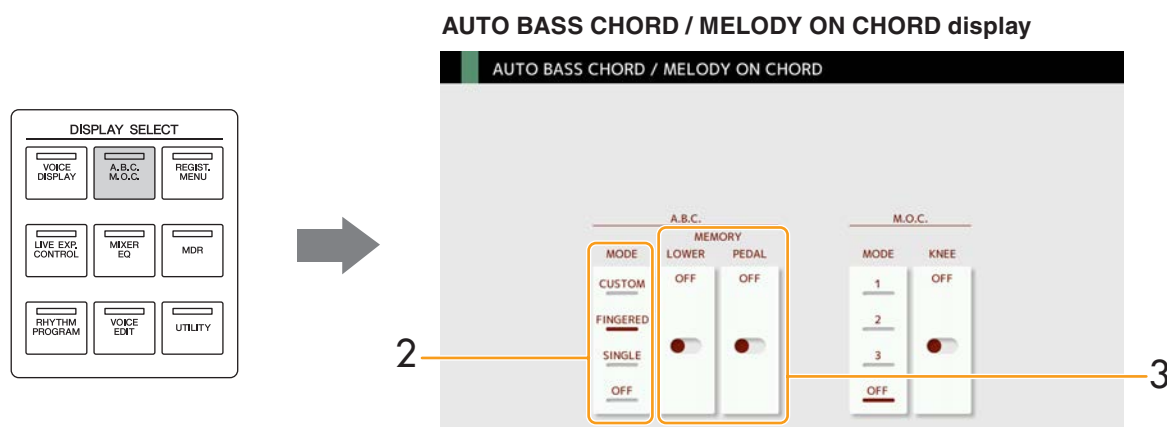
NOTE

You can use the Sliders on the left side of the Upper Keyboard to adjust the volume balance for each Voice section and the percussion (page 48).

Automatically adding bass accompaniment (Auto Bass Chord/A.B.C.)

The Auto Bass Chord (A.B.C.) function automatically produces bass accompaniment to match your performance in sync with the Rhythm. A bass pattern that matches the selected Rhythm is automatically chosen. To use A.B.C., set MONO/POLY (page 36) to off (Mono). If it is set to on (Poly), the A.B.C. bass pattern will not sound.

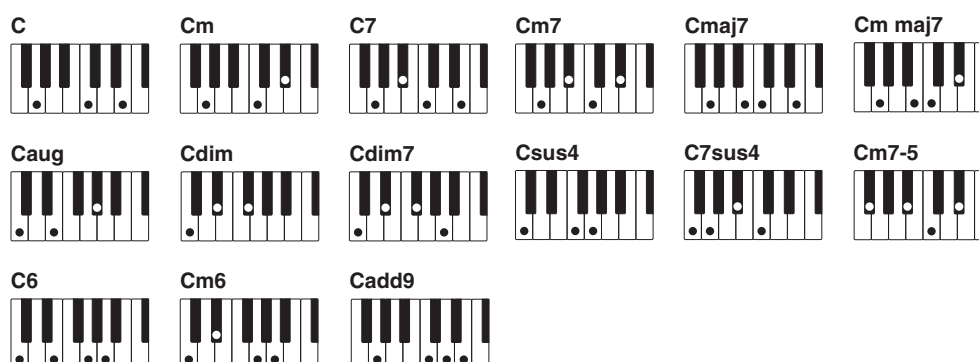
- 1 Press the [A.B.C. M.O.C.] button to call up the AUTO BASS CHORD / MELODY ON CHORD display.



- 2 Select the A.B.C. mode.

- **CUSTOM** (Custom A.B.C.): Allows you to add bass accompaniment by playing a note on the Pedalboard along with the chords you play on the Lower keyboard. Using this function allows you to expand the harmonic flexibility of your performance.
- **FINGERED** (Fingered Chord): Automatically produces bass accompaniment for chords played in the Lower keyboard. Fingered Chord can detect various chords in addition to major and minor chords, which provides bass accompaniment that is suitable for the chord played on the Lower keyboard. If you play only one or two notes on the Lower keyboard, the appropriate chord will sound based on the previously played chord. If you use Fingered Chord without Rhythm playback, you will hear full continuous chords. The representative chords that can be detected in Fingered Chord are as follows.

Key of C



NOTE

When playing certain chords (aug, dim7, sus4, 6, and m6), make sure to play the root of the chord as the lowest note in that chord.

- **SINGLE** (Single Finger): Automatically adds chord and bass accompaniments simply by playing one to three notes on the Lower Keyboard. Major, minor, 7th, and minor 7th chords are detected by simply using one, or at most, two or three fingers to play the chords. The chord produced will sound in the same octave regardless of where it is played on the Lower keyboard. If you use Single Finger without Rhythm playback, you will hear full continuous chords.

Key of C

C



Major chords:

Press the root of the chord (the note that corresponds to the chord's name).

Cm



Minor chords:

Simultaneously press the root and any one black key to the left of it.

C7



7th chords:

Simultaneously press the root and any one white key to the left of it.

Cm7



Minor 7th chords:

Simultaneously press the root as well as any black key and any white key to the left of it.

- **OFF**: Turns the Auto Bass Chord function off.

3

Set the MEMORY as needed.

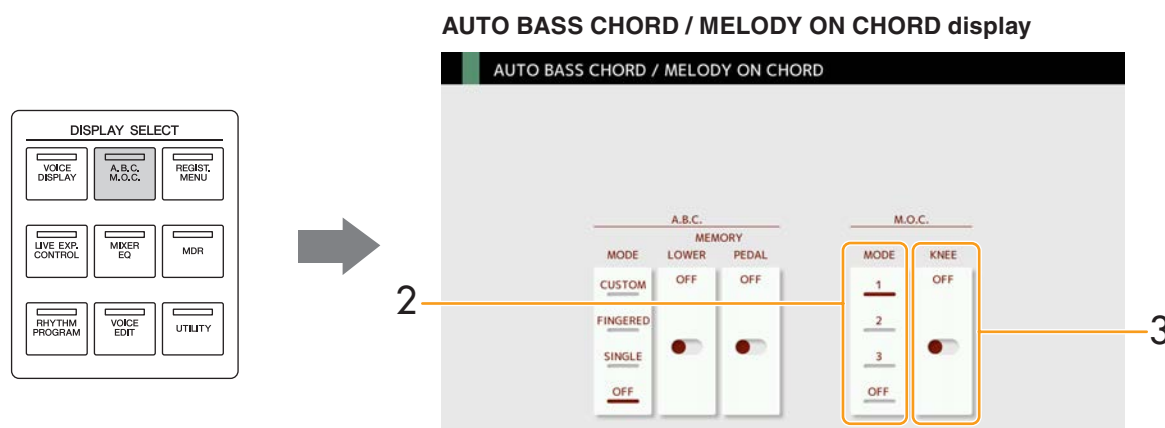
When using Auto Bass Chord to start the rhythm with Synchro Start, set the MEMORY to on. When set to off, releasing your hands or feet from the Lower keyboard or Pedalboard during the performance also stops the rhythm.

- **LOWER** (Lower keyboard): When this is set to ON, the Lower Keyboard Voices and chord accompaniment keep playing even after you release your fingers from the Lower keyboard, while the Rhythm plays.
- **PEDAL** (Pedalboard): When this is set to ON, the Pedal Voices and bass accompaniment keep playing even after you release your foot from the Pedalboard, while the Rhythm plays. In the Single Finger and Fingered Chord modes, when this is set to ON, the bass accompaniment of the Pedal Voices keeps playing even after you release your fingers from the Lower keyboard.

Adding harmony to the melody (Melody On Chord/M.O.C.)

Melody On Chord (M.O.C.) is a function that automatically adds harmony to the melody line played on the Upper Keyboard based on the chords played on the Lower Keyboard. You can also use the Knee Lever to control Melody On Chord. Melody On Chord cannot be heard when the volume of the Upper Keyboard Voice is set to 0. Melody On Chord is not applied to the Lead Voices.

- 1 Press the [A.B.C. M.O.C.] button to call up the AUTO BASS CHORD / MELODY ON CHORD display.

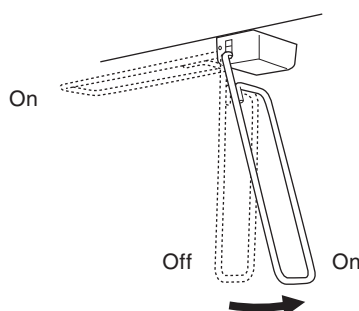


- 2 Select the M.O.C. MODE.

- **1**: Produces harmonies of up to two notes in a range close to the melody played.
- **2**: Produces harmonies of up to three notes in a range close to the melody played.
- **3**: Produces harmonies of up to four notes in a range relatively distant from the melody played.
- **OFF**: Turns the Melody On Chord function off.

- 3 If you want to use the Knee Lever to turn Melody On Chord on/off, set KNEE to ON.

Unfold the Knee Lever and press it to the right with your right knee when you want to apply Melody On Chord during your performance. The M.O.C. effect is continuously applied while the Knee Lever is pressed. When it is released, the M.O.C. effect is turned off.



NOTE

- Several functions can be assigned to the Knee Lever and pressing the Knee Lever simultaneously turns all of these functions on/off. For details, see [page 18](#).
- The Live Expression Control function ([page 53](#)) allows you to use a Footswitch or an assignable foot pedal ([page 169](#)) to control the M.O.C. on/off.

6

Keyboard Percussion

The Keyboard Percussion function lets you play percussion on the Upper, Lower Keyboards and Pedalboard by assigning percussion sounds such as drum, Latin percussion and ethnic percussion, and other sound effects to each of the keys.

Keyboard Percussion has two different modes, Preset and User. Preset Keyboard Percussion pre-assigns percussion sounds to each key, allowing you to try playing percussion performance. User Keyboard Percussion lets you freely assign the percussion sounds to any key you want. Moreover, you can also assign and play audio data with User Keyboard Percussion.

Using the Preset Keyboard Percussion

In Preset Keyboard Percussion, drum and percussion sounds as well as sound effects are pre-assigned to each key. For information about which percussion sounds or sound effects are assigned to which keys, refer to the “Preset Keyboard Percussion Kit List” in the Data List (<https://manual.yamaha.com/mi/rt/els03/>).

- 1 **Lower the volume of the Upper Keyboard, Lower Keyboard, or Pedalboard so that the normal keyboard Voices do not sound.**

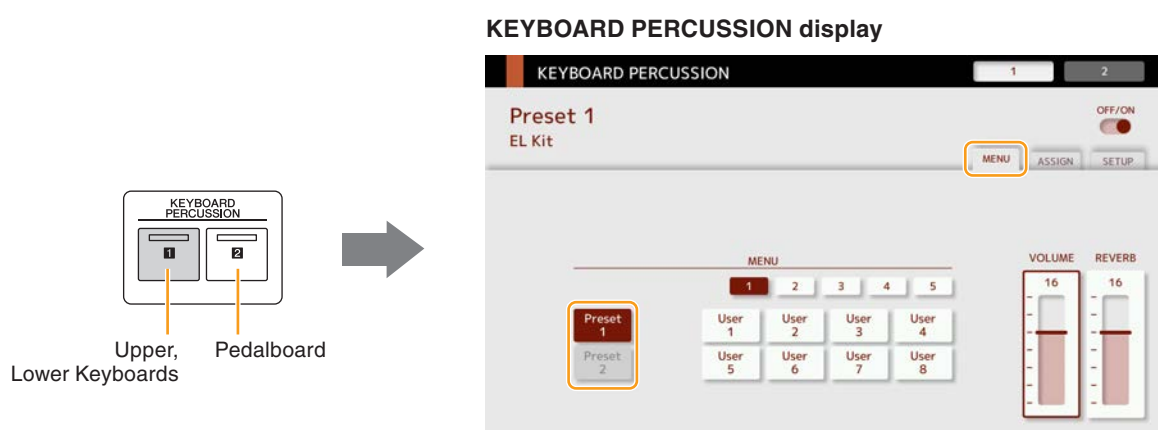
Use the Sliders on the left side of the Upper Keyboard to set the volume to 0 (page 48). Alternatively, turn each Voice section off in the Voice Display (page 26).

- 2 **Press the KEYBOARD PERCUSSION [1] or [2] button to call up the KEYBOARD PERCUSSION display.**

Turning the [1] button on calls up the settings in the KEYBOARD PERCUSSION display [1], allowing you to play drum/percussion instruments or sound effects on the Upper and Lower Keyboards. Turning the [2] button on calls up the settings in the KEYBOARD PERCUSSION display [2], allowing you to play drum/percussion instruments or sound effects on the Pedalboard. You can also switch the setting displays by pressing [1] or [2] at the upper right of the KEYBOARD PERCUSSION display or turn them on and off by pressing [OFF/ON].

NOTE

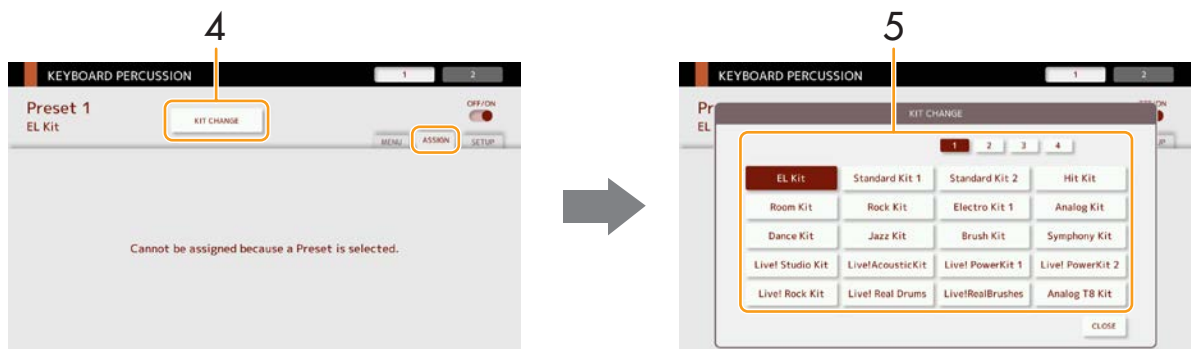
Turning on both the KEYBOARD PERCUSSION buttons [1] and [2] allows you to use both at the same time.



- 3 **In the [MENU] tab, confirm that [Preset 1] or [Preset 2] is selected.**

On the KEYBOARD PERCUSSION display [1], only [Preset 1] can be selected while on Keyboard Percussion display [2], only [Preset 2] can be selected.

- 4** In the [ASSIGN] tab, press [KIT CHANGE] at the top of the display to call up the KIT CHANGE window.



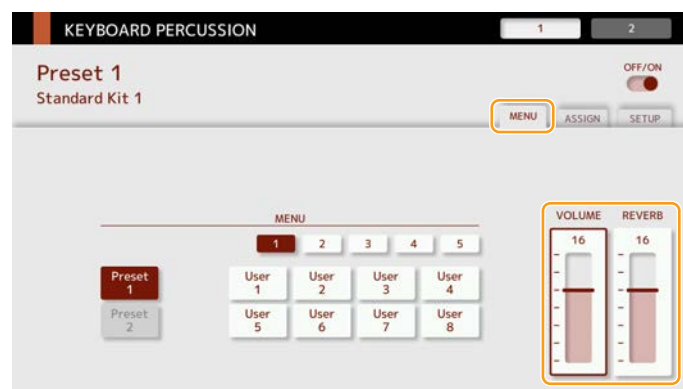
- 5** Select the desired Keyboard Percussion kit and press [CLOSE].

NOTE

When selecting a kit, the message, “Change the kit?” may appear. Select [CLEAR & CHANGE] to clear all settings in the [SETUP] tab and call up the selected kit on the panel in the default state. Select [CHANGE ONLY] to call up the selected kit on the panel without clearing the settings in the [SETUP] tab.

- 6** In the [MENU] tab, adjust the volume and reverb.

The settings here determine the volume and reverb for the entire Keyboard Percussion, not for each percussion sound. To adjust the volume and reverb of each percussion sound, see [page 76](#).



- 7** Press the Upper keyboard, Lower keyboard, or Pedalboard to play the selected kit.

Press the desired KEYBOARD PERCUSSION [1] or [2] button to turn it on. You can also turn them on and off by pressing [OFF/ON] at the upper right of the KEYBOARD PERCUSSION display.

Creating a User Keyboard Percussion

You can create your own original Keyboard Percussion by assigning a percussion sound to each key on the keyboard. To do this, assign any kit to each User Keyboard Percussion (any of User 1 – 40), and then assign desired percussion sound to each key of the Upper/Lower Keyboards and the Pedalboard. For information on available kits for assignment and the percussion sounds contained in the kits, refer to the “User Keyboard Percussion Kit List” in the Data List (<https://manual.yamaha.com/mi/rt/els03/>). The created User Keyboard Percussion Kits (User 1 – 40) can be called up via the KEYBOARD PERCUSSION [1] or [2] buttons on the panel. For the KEYBOARD PERCUSSION [1], you can also assign an audio file in the connected USB flash drive to each key and play it.

In the example below, assign percussion sounds to “User 1” and called up with the KEYBOARD PERCUSSION [1] button on the panel.

NOTE

By default, the same data as “EL Kit” in Preset 1 and Preset 2 is stored to User 1 and User 2.

1

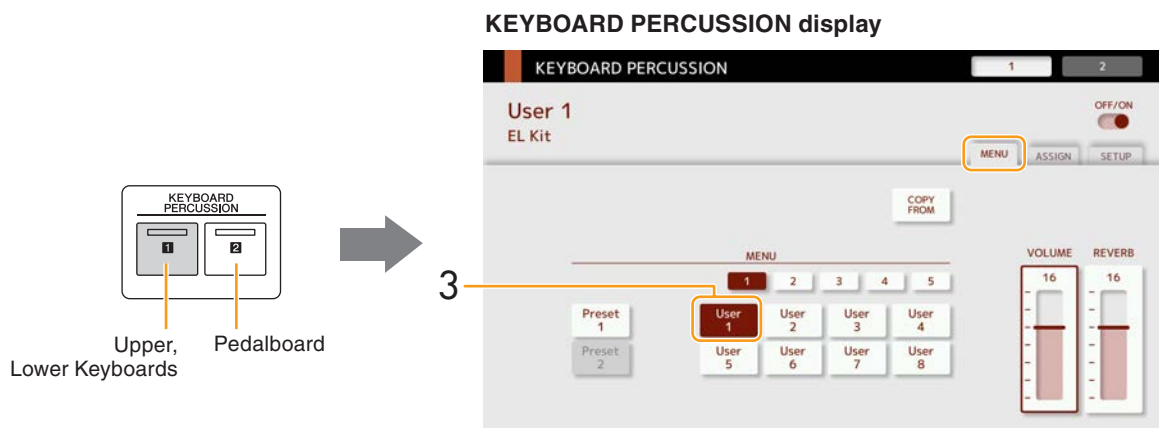
Lower the volume of the Upper Keyboard, Lower Keyboard, or Pedalboard so that the normal keyboard Voices do not sound.

Use the Sliders on the left side of the Upper Keyboard to set the volume to 0 (page 48). Alternatively, turn each Voice section off in the Voice display (page 26).

2

Press the KEYBOARD PERCUSSION [1] or [2] button to call up the KEYBOARD PERCUSSION display.

When playing percussion sounds on the Upper Keyboard or Lower Keyboard, press the button [1] to call up KEYBOARD PERCUSSION display [1]. When playing percussion sounds on the Pedalboard, press the button [2] to call up KEYBOARD PERCUSSION display [2]. You can also switch the setting displays by pressing [1] or [2] at the upper right of the KEYBOARD PERCUSSION display.



NOTE

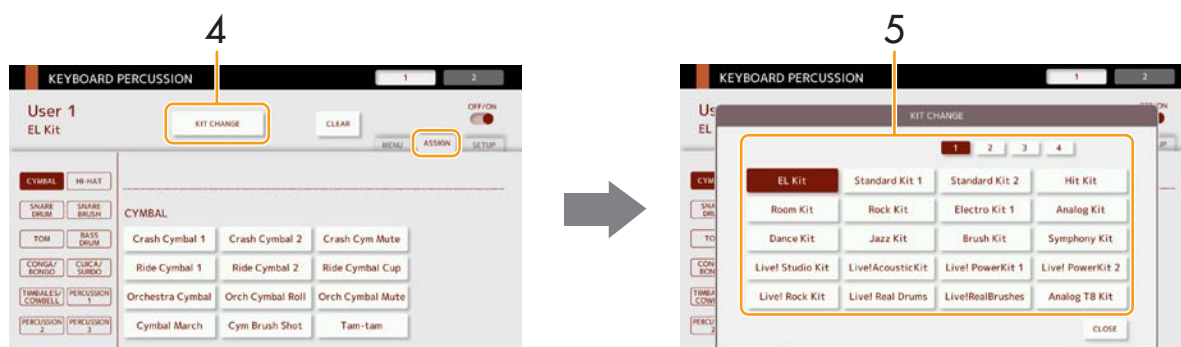
To assign audio files in the connected USB flash drive to the keys, call up the KEYBOARD PERCUSSION display [1]. For details, see page 71.

3

In the [MENU] tab, select a User number (in this example, [User 1]).

The User Percussion selected here will be called up to the keyboard the next time when the KEYBOARD PERCUSSION button is pressed.

- 4 In the [ASSIGN] tab, press [KIT CHANGE] at the top of the display to call up the KIT CHANGE window.

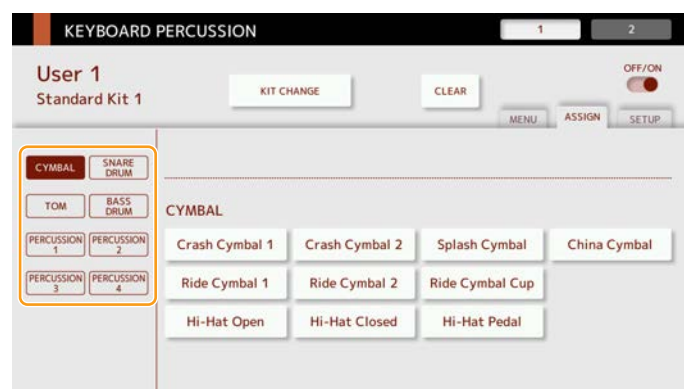


- 5 Select the desired Keyboard Percussion Kit and press [CLOSE].

NOTE

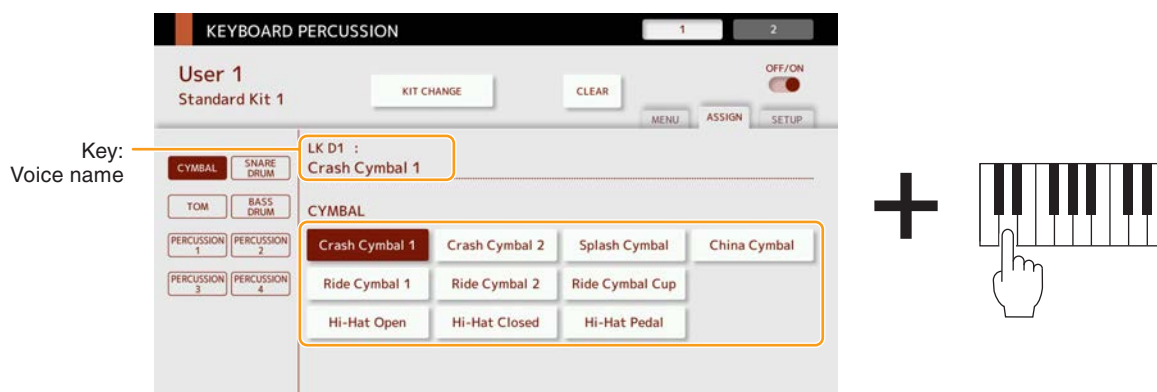
When selecting a kit, the message “Change the kit?” may appear. Select [CLEAR & CHANGE] to clear all settings in the [ASSIGN] tab and [SETUP] tab and call up the selected kit on the panel in the default state. Select [CHANGE ONLY] to call up the selected kit on the panel without clearing the settings on the [ASSIGN] tab and [SETUP] tab.

- 6 Select the percussion category that you want to assign to the keys from the left side of the display.



- 7 Assign the percussion instrument to any key.

While holding down the desired percussion name (Voice name) on the display, press the key to which you want to assign that percussion sound. The key and the percussion name assigned to that key are shown in the middle of the display. The assigned percussion sound is saved to the User number selected in step 2 (in this example, User 1).



NOTICE

The Keyboard Percussion settings you have made are automatically stored when you close the KEYBOARD PERCUSSION display. Be careful not to turn off the power while the KEYBOARD PERCUSSION display is called up, or the data will be lost.

8 Repeat steps 6 – 7 to assign the necessary percussion instruments to the keys.

To clear the percussion sound assigned to a key, hold down [CLEAR] on the display and press the key corresponding to the percussion sound that you want to erase.

To delete all User Percussion data you are setting, simply press [CLEAR] and immediately release your finger. When the confirmation message appears, press [CLEAR] to actually delete the data.

9 To call up the User Keyboard Percussion, select the desired User number in the [MENU] tab of the KEYBOARD PERCUSSION display.

For example, if you select “User 1” on KEYBOARD PERCUSSION display [1], the Keyboard Percussion stored to User 1 will be called up when the KEYBOARD PERCUSSION [1] button is turned on.

NOTE

The User Keyboard Percussion data is not stored to the Registration Memory. The Registration Memory only stores the on/off status of the KEYBOARD PERCUSSION [1]/[2] buttons on the panel and information regarding which Keyboard Percussion (Preset 1/2, User 1 – 40) was selected. If you want to save the User Keyboard Percussion data together with the current Registration Memory data, save it to the USB flash drive (page 98). A set of all 40 User Keyboard Percussion can be saved for each Unit.

Playing audio data with Keyboard Percussion

For the KEYBOARD PERCUSSION [1], you can assign audio data to the keys on the Upper Keyboard or Lower Keyboard and play them. The audio data in the following file format can be assigned.

1 Prepare the audio data to use on the Keyboard Percussion by using a computer.

The audio data should be in the following file format.

- Format: WAV (44.1 kHz, 16-bit, stereo)
- File name: KBP_xxx.wav (xxx: numbers 001 – 100)

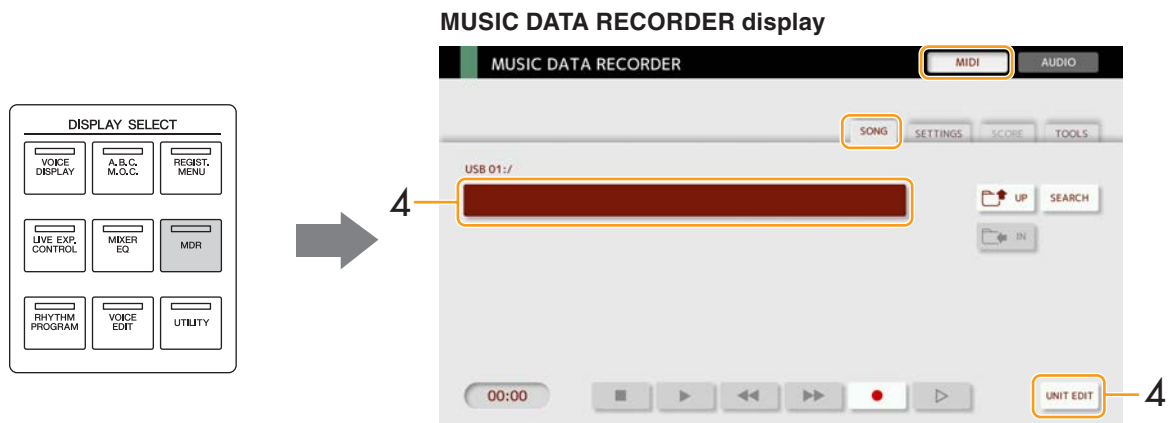
2 Connect a USB flash drive to the USB TO DEVICE terminal of the Electone.

NOTE

Before using a USB flash drive, be sure to read the “Precautions when using the USB TO DEVICE terminal” on page 168.

3 Press the DISPLAY SELECT [MDR] button to call up the MUSIC DATA RECORDER display.

If [AUDIO] is selected at the upper right corner of the display, press [MIDI] to switch the display.



4 In the [SONG] tab, select an empty Song and press [UNIT EDIT].

This allows you to create a Song Unit which serves as a location to save the audio data for playing on the Keyboard Percussion.

5 When the UNIT EDIT window appears, press [SAVE] followed by [CLOSE].

“SONG_xxx” (xxx: numbers 001 – 100) appears in the [SONG] tab. This indicates that a folder named “SONG_xxx” has been created in the USB flash drive.



6 Connect the USB flash drive to the computer, and then place the prepared audio files (KBP_xxx.wav) directly in the folder “SONG_xxx” created in step 5.

Up to 100 audio files can be placed in the folder.

NOTICE

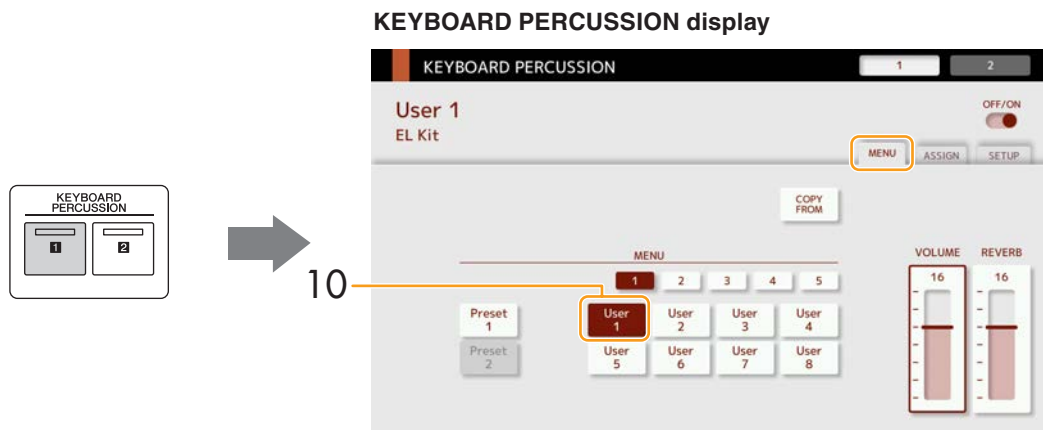
When managing data in the USB flash drive by using the computer, do not copy, move or delete the folders. In particular, copying or moving the folder of a protected Song may result in the data becoming unusable.

7 Connect the USB flash drive containing the audio files to the USB TO DEVICE terminal of the Electone.

8 Call up the MUSIC DATA RECORDER (MIDI) display, and then select the folder “SONG_xxx” which contains the audio files.

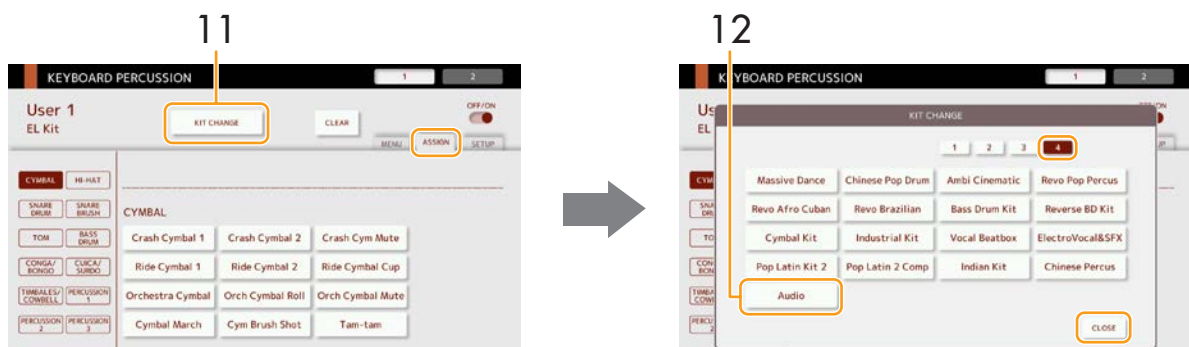


- 9 Press the **KEYBOARD PERCUSSION [1]** button to call up the **KEYBOARD PERCUSSION** display.

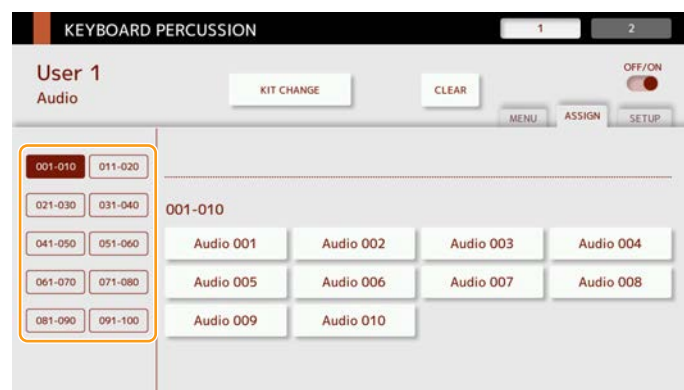
**NOTE**

KEYBOARD PERCUSSION [2] cannot use audio data.

- 10 In the **[MENU]** tab, select the desired **User** number as the save destination.
- 11 In the **[ASSIGN]** tab, press **[KIT CHANGE]** at the top of the display to call up the **KIT CHANGE** window.

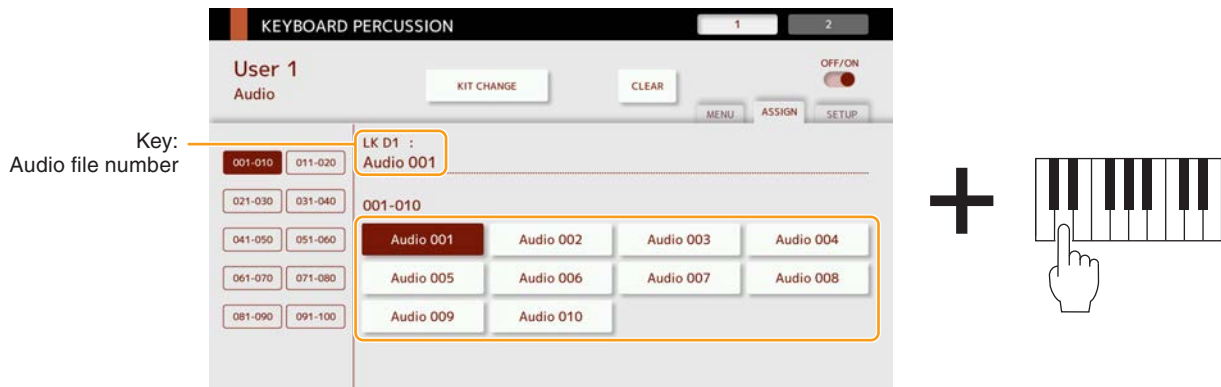


- 12 Select **[Audio]** on page 4 and press **[CLOSE]**.
- 13 Select the number range that contains the audio file number you want to assign to the keys from the left side of the display.



14 Assign the audio file to any key on the Upper Keyboard or Lower Keyboard.

While holding down the desired audio file number (Audio 001 – Audio 100) in the display, press the key to which you want that audio file to be assigned. The key and the audio file number assigned to that key are shown in the middle of the display. The assigned audio file is saved to the User number selected in step 10 (in this example, User 1).



NOTICE

The Keyboard Percussion settings you have made are automatically stored when you close the KEYBOARD PERCUSSION display. Be careful not to turn off the power while the KEYBOARD PERCUSSION display is called up, or the data will be lost.

15 When assigning other audio files, repeat steps 13 – 14.

Up to four files can be assigned per User Keyboard Percussion. An identical file can be assigned to multiple keys.

To clear the audio file assigned to a key, hold down [CLEAR] on the display and press the key corresponding to the audio file that you want to erase.

To delete all User Percussion data you are setting, simply press [CLEAR] and immediately release your finger. When the confirmation message appears, press [CLEAR] to actually delete the data.

16 Save the audio data to the Song Unit created in step 5 by overwriting it.

On the UNIT EDIT window used in step 5, select the Unit and then press [SAVE] to overwrite the data.

Copying the Keyboard Percussion settings

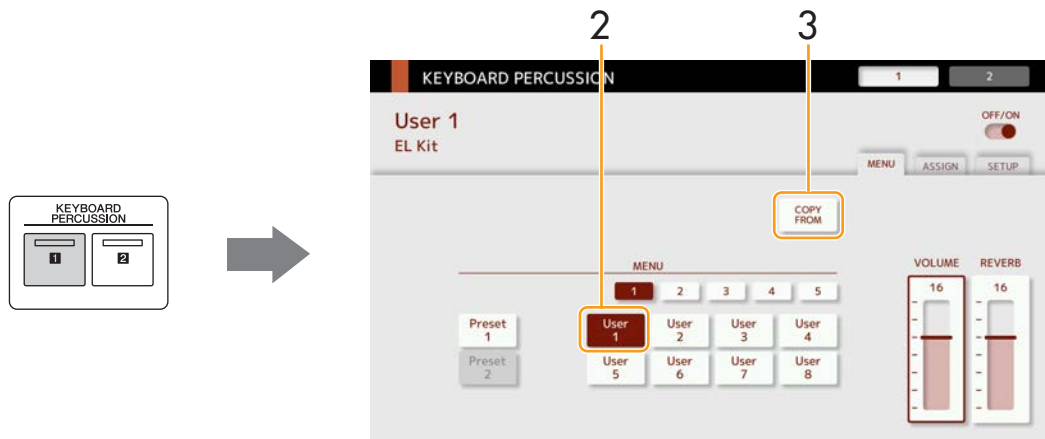
You can copy a Preset Keyboard Percussion or an already created User Keyboard Percussion settings to another User number and use it to create a new User Keyboard Percussion. In the instructions below, we'll use an example of copying "Preset 1" to "User 1."

- 1 Press the **KEYBOARD PERCUSSION [1] or [2]** button to call up the **KEYBOARD PERCUSSION** display.

To copy "Preset 1," press the [1] button. Similarly, to copy "Preset 2," press the [2] button. To copy a User Keyboard Percussion, either the [1] button or the [2] button can be used.

NOTE

When you are copying the User Keyboard Percussion contains to audio file, press the **KEYBOARD PERCUSSION [1]** button.



- 2 In the **[MENU]** tab, select the desired User number as the copy destination.
In this example, select [User 1].

- 3 Press **[COPY FROM]** to call up the **COPY FROM** window.

- 4 Select the keyboard percussion that you want to copy and press **[COPY]**.
In this example, select [Preset 1].



- 5 When the confirmation message appears, press **[COPY]** to actually copy the keyboard percussion.

A copy completion message appears on the display.

Detailed settings for each percussion instrument

You can make settings such as volume, reverb, and pan, or change the drum tuning for each percussion instrument to create your own custom percussion sounds. If the same percussion instrument is assigned to multiple keys, the settings cannot be changed for each key. Furthermore, because there is only one global setting for the Electone, the settings cannot be changed for each Registration.

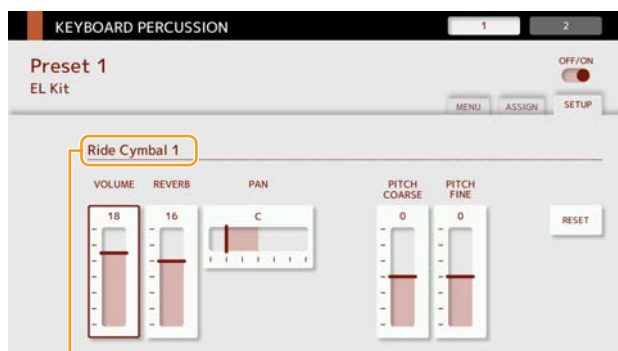
- 1 Select the [SETUP] tab in the **KEYBOARD PERCUSSION** display.
- 2 Press the key to which the desired percussion instrument or audio file for changing the settings is assigned.

The percussion name (Voice name) or audio file number is shown on the display.

- 3 Make the necessary settings for the selected percussion instrument or audio file.

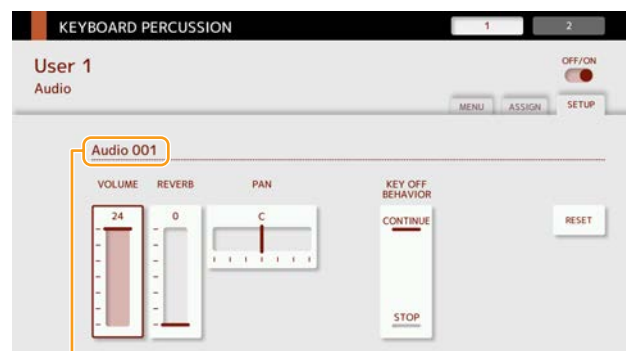
The available parameters differ between percussion instruments and audio files.

For percussion instruments



Voice name

For audio files



Audio file number

VOLUME	Determines the volume of the currently selected percussion instrument or audio file. Range: 0 – 24
REVERB	Determines the amount of reverb applied to the currently selected percussion instrument or audio file. Range: 0 – 24
PAN	Determines the position of the currently selected percussion instrument in the stereo image or audio file. Seven pan positions are available.
PITCH COARSE (Percussion instrument only)	Determines the pitch of the currently selected percussion instrument, adjustable in 100-cents steps. Range: –64 – +63
PITCH FINE (Percussion instrument only)	Determines the pitch of the currently selected percussion instrument, adjustable in 1-cent steps. Range: –64 – +63
KEY OFF BEHAVIOR (audio files only)	Selects how audio playback behaves when you release your finger from a key while an audio file is assigned to that key. • CONTINUE: Audio playback continues to the end even after you release your finger from the key. • STOP: Audio playback stops as soon as you release your finger from the key.
RESET	Resets all settings such as pan, pitch, and reverb to their default values. When the confirmation message appears, press [RESET] to reset the settings. To stop the reset, select [CANCEL] in the confirmation message.

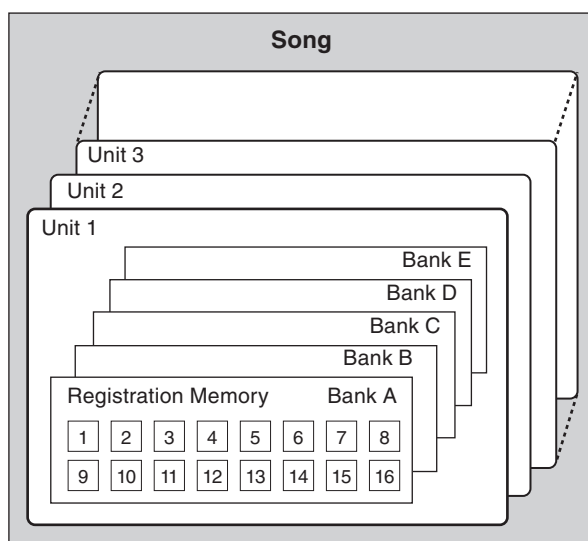
Registration Memory is a function for registering (storing) and calling up settings such as Voices and Rhythms (collectively called Registrations) using the number buttons 1 – 16 located between the Upper and Lower keyboards. You can call them up not only by pressing the numbered buttons during your performance, but also by using a footswitch, once you have pre-programmed a recall Sequence beforehand.



Banks and Units

This Electone lets you create up to five Registration Banks A – E, each of which consists of 1 – 16 Registration Memories. Although various preset Registrations (referred to as “Signature Registrations”) are set to the number buttons 1 – 16 of Bank A, you can replace them with your own original Registrations. Your original Registrations can also be stored to empty Banks B – E, up to a maximum of 80 Registrations.

The Registration Memory data (16 × up to 5 Banks) stored to internal memory of the Electone will be handled as a “Unit.” If you want to create more than 80 (16 × 5 Banks) Registrations, create an additional Unit to use more Registrations. A Unit can be edited in the MUSIC DATA RECORDER (MDR) function. See [page 98](#).



To reset all Registrations to the default, initialize the Registration Memory ([page 89](#)). This recalls the Signature Registrations to the 1 – 16 buttons of Bank A, and then resets the created Registrations of Banks B – E to their original empty (blank) status.

Signature Registrations

Memory number	Genre	Description
1	Orchestra	Registration inspired by a full orchestra. Moving the Second Expression Pedal lets you control the volume of the brass and strings parts. Pressing the Right Footswitch turns the timpani part on/off.
2	Woodwind	Registration designed to evoke a woodwind ensemble. Moving the Second Expression Pedal lets you control the volume of the woodwind and horn parts. Pressing the Right Footswitch turns the oboe part on/off.

Memory number	Genre	Description
3	Soundtrack	Registration inspired by a soundtrack. Moving the Second Expression Pedal lets you control the volume of the horn and trumpet parts. Moving the Sliders adds various effects to the Voices. The ELS-03X, ELS-03XR and ELS-03XF feature Polyphonic After Touch.
4	Big band	Registration inspired by a big band. Moving the Second Expression Pedal lets you control the volume of the saxophone ensemble parts. Pressing the Right Footswitch turns the tenor saxophone part on/off.
5	Jazz combo	Registration inspired by a jazz combo. Moving the Second Expression Pedal lets you control the volume of the trumpet and tenor saxophone parts.
6	Bossa nova	Registration inspired by a medium-tempo bossa nova. It features a bass trombone. The articulation function is set to the Left Footswitch. Pressing the Right Footswitch turns on/off the strings and vocal parts. The ELS-03X, ELS-03XR and ELS-03XF feature Polyphonic After Touch.
7	Ballad	Registration inspired by a 16-beat ballad. Pressing the Right Footswitch turns on/off the M.O.C. function. Moving the Sliders adds various effects to the Voices.
8	Rock	Registration inspired by medium-tempo rock music. Moving the Second Expression Pedal lets you control the volume of the guitar and synth parts. Moving the Sliders adds various effects to the Voices.
9	Pops	Registration inspired by a pop band sound. Pressing the Left Footswitch turns on/off the Solo of the guitar Voice. Holding the Right Footswitch turns on the M.O.C. function. Moving the Sliders adds various effects to the Voices.
10	Dance	Registration inspired by electronic dance music. Moving the Expression Pedal lets you control the cutoff frequency. Pressing the Right Footswitch turns on/off the Upper and Lower Keyboard parts. Moving the Sliders adds various effects to the Voices.
11	Chillout	Registration inspired by a chillout style. Moving the Expression Pedal lets you control the volume of the synth part on the Upper Keyboard. Pressing the Right Footswitch turns on/off the Upper and Lower Keyboard parts. Moving the Sliders adds various effects to the Voices. The ELS-03X, ELS-03XR and ELS-03XF feature Polyphonic After Touch.
12	Jazz organ	Registration inspired by a jazz organ. It features an authentic organ sound with a VCM organ Voice. Moving the Expression Pedal lets you control the entire volume of the parts except for the Rhythm part. Moving the Sliders controls the footage levers.
13	Classic organ	Registration inspired by a pipe organ. Moving the Expression Pedal lets you change the pipe organ Voice. Pressing the Right Footswitch changes the Voice.
14	Electro	Registration inspired by an electro sound. After Touch Extension is available on the Lower Keyboard, and it lets you control the timbre by pressing down further on the keys. Moving the Expression Pedal lets you control the volume of the synth part on the Lower Keyboard. Pressing the Right Footswitch changes the Voice. Moving the Sliders adds various effects to the Voices.
15	Celtic	Registration inspired by Celtic music. It features the “S-Celtic flute” Voice. The articulation function is set to each of the Right and Left Footswitch.
16	Latin jazz	Registration inspired by Latin jazz. Pressing the Right Footswitch turns the trumpet part on/off.

NOTE

A variety of other preset Registrations (Registration Menu) are provided. For instructions on the Registration menu, refer to [page 17](#).

Storing a Registration to a numbered button

Newly created Registrations can be stored to the Registration Memory number buttons. All Registrations in Registration Memory can also be saved to a USB flash drive for future recall.

- 1 In the [REGISTRATION] tab at the bottom of the Voice display, select the Bank to store the Registration.

Voice display

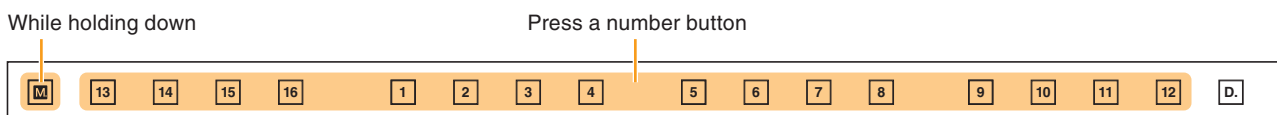


You can select the Banks from A (at the top) to an empty Bank next to the last Bank containing data. When Banks A and B contain Registration data, for example, you can select up to Banks A, B, and C (which is empty). By default, Signature Registrations are set for the number buttons 1 – 16 of Bank A, and Bank A is selected. While Bank A is selected, you can save Registrations to Bank A or Bank B. A maximum of five Banks (A – E) can be saved. The color of the Bank name (A – E) will be red if the Bank already contains data or gray if it contains no data.

- 2 Set up the Electone with the Voices, Rhythms, and other settings that you want to store.

- 3 While holding down the [M.] (Memory) button at the left end of the Registration Memory buttons, press the number button to which you want to store the Registration.

Once registering starts, the numbered button flashes until the operation is complete.



NOTICE

Do not turn the power off while the numbered button is flashing. The Registration will not be stored.

- 4 To store different settings to other buttons, repeat steps 2 – 3.

Up to five Banks (Banks A – E) of the 16 Registration Memories stored to the Electone can be saved together as a single Unit to a USB flash drive. In addition to Registration Memory data, data such as Keyboard Percussion and Rhythm Sequences can also be saved together. For details, see [page 98](#).

Functions that cannot be saved

The following are global Electone settings that cannot be stored to a Registration Memory number. In addition, they cannot be saved to a USB flash drive.

- Display-related settings ([page 13](#))
- Speaker settings ([page 21](#))
- Audio Loopback on/off ([page 167](#))
- Voice Guide settings ([page 14](#))
- Assignable Foot Pedal polarity ([page 169](#))
- MIDI related settings ([page 160](#))
- Wireless LAN settings ([page 163](#))
- LINE OUT settings ([page 158](#))
- Score-related settings ([page 104](#))
- Vocal/Talk settings other than volume and reverb ([page 152](#))

The following settings cannot be set individually for each Registration number. They can be saved to a USB flash drive as Registration data of a Song ([page 98](#)).

- Voice Link ([page 36](#))
- Transpose/Master Tune ([page 20](#))
- Attack mode in Organ Flute Voices ([page 46](#))
- Live Expression Control settings in the UTILITY (GLOBAL 2) display ([page 57](#))
- Registration Shift ([page 82](#))
- Auto Fill ([page 63](#))
- User Voices ([page 115](#))
- User Rhythms ([page 123](#))
- User Keyboard Percussion ([page 69](#))
- Rhythm Sequences ([page 136](#))
- Disable on/off, Disable mode ([page 81](#))
- Reverb type ([page 148](#))
- Master Compressor settings ([page 149](#))
- Master EQ settings ([page 150](#))
- Pitch Detect setting for the microphone ([page 153](#))
- IAC on/off ([page 21](#))

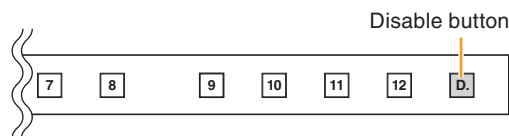
Selecting Registrations

Select a Bank in the [REGISTRATION] tab at the bottom of the Voice display, and then simply press the numbered button on the panel that corresponds to your desired Registration to recall. For instructions on calling up the Registrations saved in the USB flash drive, see [page 101](#).

- There is also a method for conveniently calling up Registrations using a Footswitch (Registration Shift) instead of pressing the buttons by hand. For instructions on Registration Shift, see [page 82](#).
- There is also a function (Registration Sequence) that allows you to conveniently program Registration changes in advance as part of a Rhythm Sequence. For instructions on Registration Sequence, see [page 139](#).

Using the Disable function

If you turn on the [D.] (Disable) button at the right end of the Registration Memory, when you press a number button to switch Registrations, the Rhythm and tempo will remain the same, but other settings will change. For example, this is useful when you want to practice at a slower tempo than the original Song, or maintain a constant tempo during your performance.

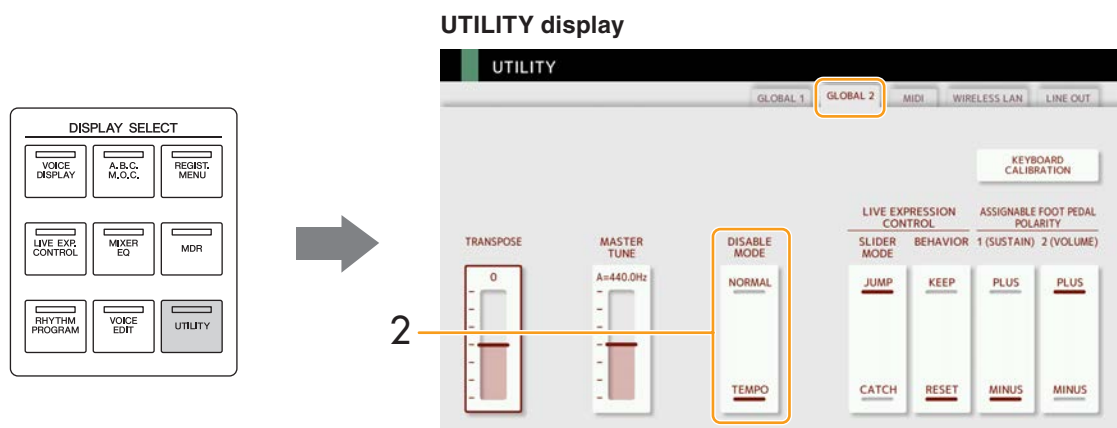


NOTE

The Disable function is effective even after changing the Bank.

The behavior when the [D.] (Disable) button is turned on differs depending on the Disable mode. The Disable mode includes “Normal,” which affects Rhythm and its volume, etc. while “Tempo” affects the tempo only. These modes can be set as follows.

- 1 Press the **DISPLAY SELECT [UTILITY]** button to call up the **UTILITY** display.



- 2 In the **[GLOBAL 2]** tab, switch the **Disable mode**.

- **NORMAL:** When the [D.] (Disable) button is on, the following settings will not change even if you change the Registration.
 - Rhythm type, Rhythm section, Rhythm tempo, Rhythm volume, Rhythm reverb, Reverb time
 - Accompaniment volume, Accompaniment reverb, On/Off status of Accompaniment parts
 - A.B.C. mode, A.B.C. memory
 - M.O.C. mode, Knee Lever control for M.O.C.
- **TEMPO:** When the [D.] (Disable) button is on, the Rhythm tempo will not change even if you change the Registration.

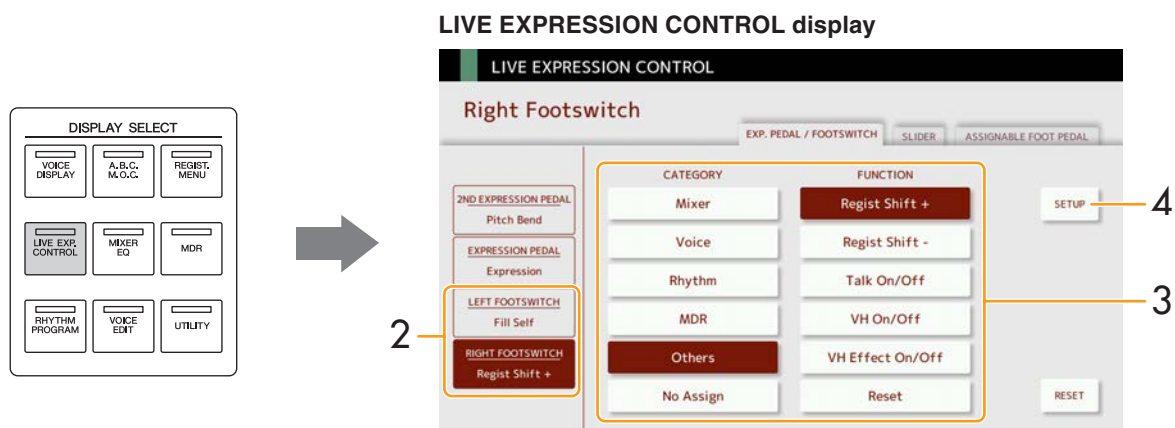
Switching Registrations during a performance with a Footswitch (Registration Shift)

Registration Shift is a part of the Live Expression Control function and it allows you to use the Footswitches located on the left and right sides of the Expression pedal to switch Registrations. You can change Registrations during a performance without having to use your hands, letting you focus on your playing. You can call up a specific Registration or call up Registrations in numerical order or a custom order that you have set.

NOTE

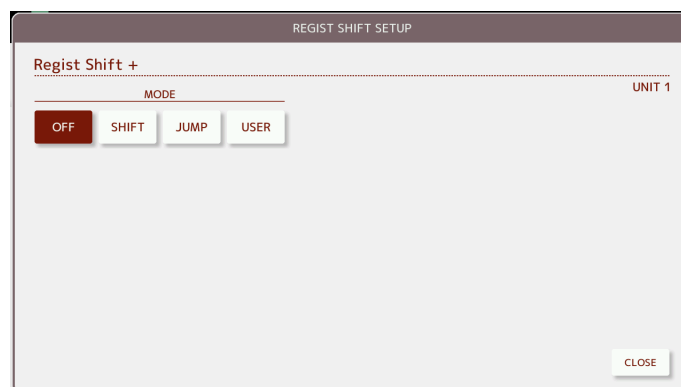
- If you connect a separately sold Footswitch (FC4A or FC5) to the ASSIGNABLE FOOT PEDAL jack, you can also use that Footswitch to switch Registrations. In that case, select the [ASSIGNABLE FOOT PEDAL] tab in step 2.
- If you use the Registration Sequence function ([page 139](#)), the Registrations can be switched automatically without controlling the Registration Memory buttons or the Footswitch.

- 1 Press the **DISPLAY SELECT [LIVE EXP. CONTROL]** button to call up the **LIVE EXPRESSION CONTROL** display.



- 2 In the **[EXP. PEDAL / FOOTSWITCH]** tab, select **[LEFT FOOTSWITCH]** or **[RIGHT FOOTSWITCH]**.
- 3 Assign **[Regist Shift +]** or **[Regist Shift -]** in the **[Others]** category.
Select **[Regist Shift +]** to move forward by one registration with the Footswitch or **[Regist Shift -]** to move back by one.
- 4 Press **[SETUP]** to call up the **REGIST SHIFT SETUP** window.

REGIST SHIFT SETUP window



5 In the setup window, select the **Regist Shift** mode, make the necessary settings, and then press **[CLOSE]**.

- **OFF**: Disables the Registration Shift function. When OFF is selected, you cannot switch Registrations using the Footswitch.
- **SHIFT**: When [Regist Shift +] is assigned, each press of the Footswitch advances the Registration Memory by one in numerical order from 1 to 16. After 16, the sequence returns to 1 in the same Bank. When [Regist Shift –] is assigned, each press of the Footswitch moves the Registration Memory by one in reverse order from 16 to 1. After 1, the sequence returns to 16 in the same Bank. The selected number button lights up.

NOTE

In SHIFT, Registrations in other Banks cannot be selected.

- **JUMP**: Pressing the Footswitch jumps to select the designated Registration. Press [◀]/[▶] in the display to specify the target Registration number for the jump. It will behave in the same whether you assign [Regist Shift +] or [Regist Shift –].



- **USER**: Set the Registration order for calling up in advance. When [Regist Shift +] is assigned, each press of the Footswitch calls up the Registration Memory in the order you set. When [Regist Shift –] is assigned, each press of the Footswitch calls up the Registration Memory in the reverse order that you set. For instructions on how to set the order, see [page 84](#).

6 Press the **DISPLAY SELECT [VOICE DISPLAY]** button to call up the Voice display and check the **Registration Shift** settings.

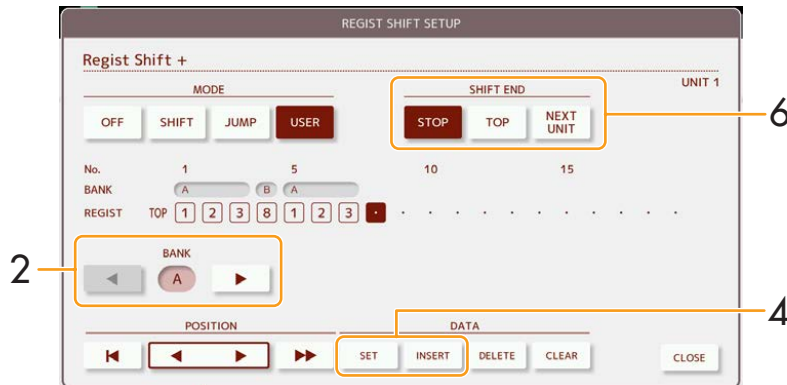


7 Try switching the registration by pressing the Footswitch.

Setting the order for calling up the Registrations in the USER mode

When USER is selected as the Regist Shift mode, you can set the order for calling up Registrations.

- 1 Select [USER] on the REGIST SHIFT SETUP window.
- 2 Select the Bank containing the Registrations that you want to enter.



- 3 Press one of the number buttons of the Registration Memory to enter.



- 4 Press [SET] or [INSERT] at the bottom of the display.
The Bank letter and Registration number appear in the middle of the display, indicating that the Registration is entered. For details about [SET], [INSERT], and the other buttons at the bottom of the display, see [page 85](#).
- 5 Repeat steps 2 – 4 to enter the Registration Memories in the order you want to call them up.
- 6 Set the operation when Registration Shift reaches the end (SHIFT END).

- **STOP:** The Registration Shift function closes when the last Registration number is called up (the Registration number will not move even if the Footswitch is pressed).
- **TOP:** After the last Registration number is reached, the first Registration number is called up again, repeating the Sequence over again from the beginning.
- **NEXT UNIT:** After the last Registration number is called up, the next Unit in the Song ([page 141](#)) is automatically loaded. This setting is effective when multiple Units are saved in a single Song.

The Shift End mark ( or ) appears at the end of the last Registration number in the display when TOP or NEXT UNIT is selected as the Shift End.

NOTE

- To play the Song that uses the Next Unit function, press the [▶] (Start) button instead of the [▷] (Custom Play) button in the MUSIC DATA RECORDER display to start playback.
- When you use the Next Unit function during Rhythm playback, the Rhythm Sequence and User Rhythm cannot be loaded.

Editing the USER Registration Shift

When USER is selected as the Regist Shift mode, you can add numbers between previously entered numbers or delete unnecessary numbers.



POSITION	Moves the cursor. The cursor can be moved between the Registration shift numbers you have set, which lets you freely edit the Registration shift. Up to 400 steps (Registrations) can be memorized.	
		Moves the cursor to the first position.
		Moves the cursor one step to the left.
		Moves the cursor one step to the right.
		Moves the cursor five steps to the right.
DATA	Sets or edits the User Registration Shift.	
	SET	Inserts a Registration at the cursor position. Used to replace the Registration number at the cursor position with a different Registration number. To enter a number, press the desired Registration Memory number button, and then press [SET] in the display. The entered Registration number will appear in the middle row. After entry, the cursor moves to the right.
	INSERT	Insert another Registration number just before the current cursor position. First move the cursor to the next Registration number position. Then, press the desired Registration Memory number button, and press [INSERT] in the display. The new Registration number is inserted at the cursor position and all other numbers to the right of the cursor are moved to accommodate the new numbers. Registration numbers cannot be entered beyond the Registration Shift function's capacity of 400. If the INSERT operation exceeds 400 entries, a "Data Full" message appears and the insertion cannot be executed.
	DELETE	Deletes a Registration number at the current cursor position. Move the cursor to the Registration number you want to delete and press [DELETE].
	CLEAR	Erases all current user Registration Shift settings. Pressing [CLEAR] calls up a confirmation message. Pressing [CLEAR] erases all data and temporarily shows a message indicating that the erasure is complete. Pressing [CANCEL] aborts the operation without erasing anything.

Unifying the Registration settings in a Bank

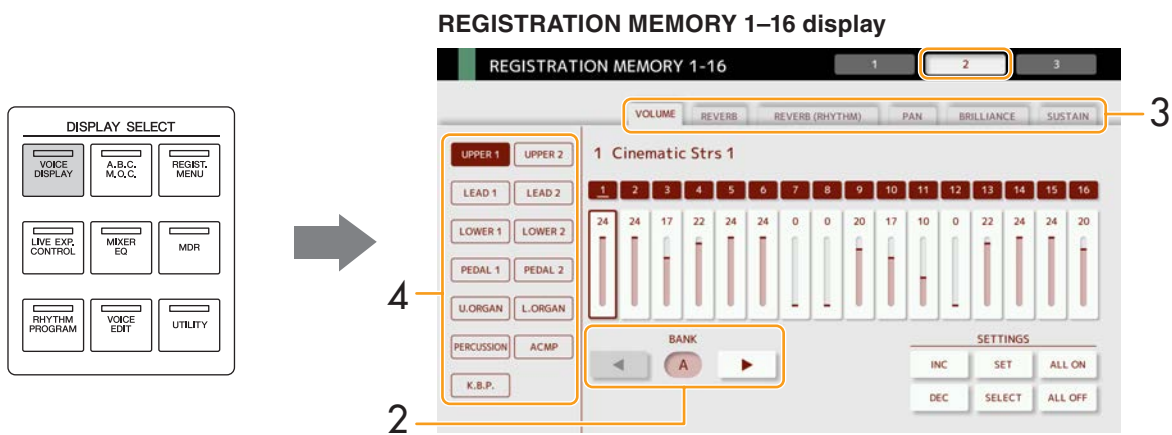
In Voice display 2 (REGISTRATION MEMORY 1–16 display), you can conveniently unify the values or settings of a specific parameter used in the current Registration Bank at one time. The settings changed here overwrite the existing Registrations. This is useful when you are changing, for example, the Voice Brilliance setting for the Upper Keyboard and want the same setting to be applied to all Registrations in the Bank.

Parameters that can be batch unified

Volume, Reverb, Reverb (Rhythm), Pan, Brilliance, Sustain

1 Press the DISPLAY SELECT [VOICE DISPLAY] button to call up the REGISTRATION MEMORY 1–16 display (Voice display 2).

If another display appears, press [2] at the upper right of the display to switch the display. The next time the [VOICE DISPLAY] button is pressed, the previously opened display will appear.



2 Select the desired Bank to change the settings.

NOTE

A parameter can only be unified within the current Bank.

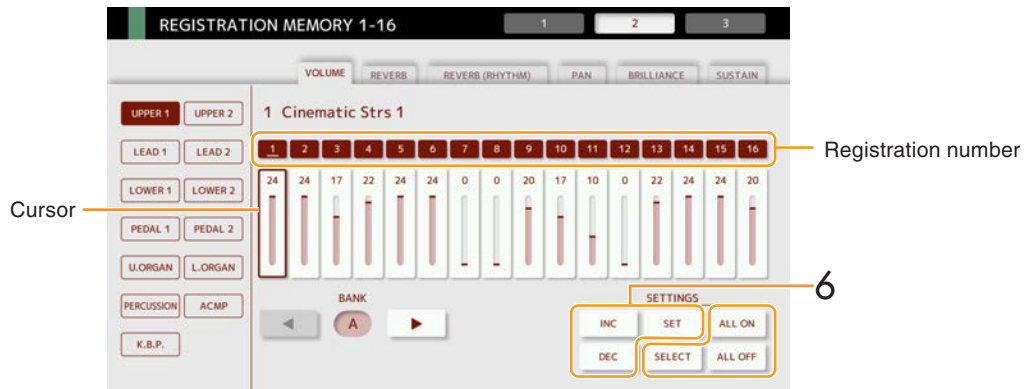
3 Select the desired parameter tab to change the settings.

4 Select the part at the left of the display.

5

Turn on all target Registration numbers to unify the value.

Press each Registration number to turn it on/off or use the buttons at the lower right of the display to turn them all on/off.



- **SELECT:** Turns on all Registrations with underlined numbers. The underlines are shown for Registrations using the same Voice as the selected Registration when a Voice section (Upper Keyboard 1, Lead 1, etc.) is selected as a part in step 4.
- **ALL ON:** Selects all Registration memory numbers.
- **ALL OFF:** Cancels the selection of all Registration memory numbers.

6

Unify the parameter values for the Registration numbers that are turned on in step 5.

Two methods are available: unifying the values to the currently selected Registration (at the cursor position), or increasing/decreasing each Registration value by 1 from its current value.

- **SET:** Unifies the currently turned on Registration numbers setting values to the one in the currently selected Registration (at the cursor position). The cursor position can be changed by pressing the destination. When the confirmation message appears, press [UNIFY]. To cancel, press [CANCEL].
- **+/-:** Increases or decreases all values by 1. The values can also be adjusted using the [DATA CONTROL] dial.

If the setting value of any Registration reaches the maximum or minimum during the operation, a confirmation message appears. Pressing [OK] changes the values ignoring those parameters at the maximum or minimum value. If [CANCEL] is pressed, the settings remain unchanged.

NOTICE

Once the values are unified, the Registrations are overwritten and cannot be restored. Be careful when making such changes.

NOTE

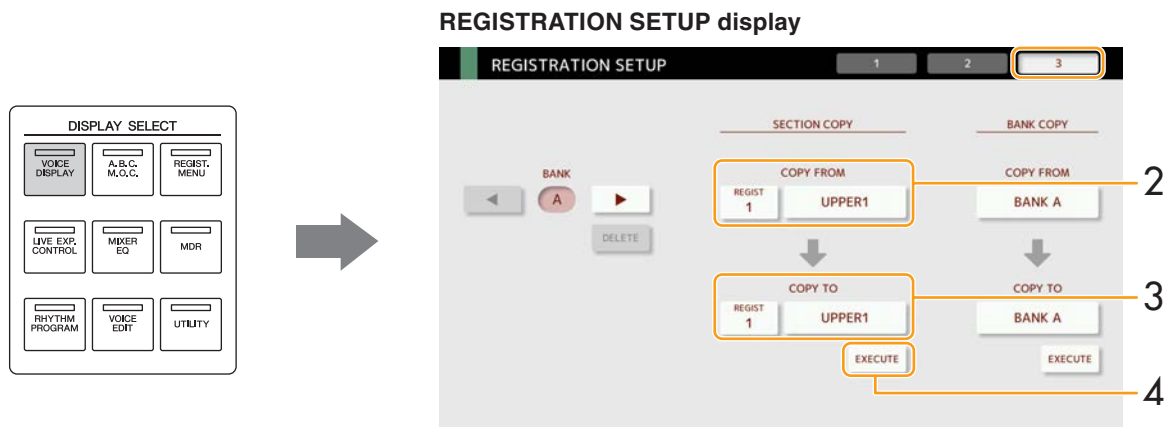
The settings in the REGISTRATION MEMORY 1–16 display do not change the current settings loaded to the Electone. It means that they do not affect the values set by Live Expression Control. It also means that if you store the settings by simultaneously pressing the [M.] (Memory) button and the Registration Memory number button, the current Electone settings are stored to the number button. The settings in the REGISTRATION MEMORY 1–16 display are not stored to the number button.

Copying Registrations

In Voice display 3 (REGISTRATION SETUP display), you can copy a Registration saved to a certain Registration Memory number to another number according to the specific section (Voices, Rhythm, Keyboard Percussion), with a function called Section Copy. This is useful, for example, when you want the Upper Keyboard Voice in Registration number 4 to be the same as in Registration number 1. Additionally, you can also copy Registration data by Bank (Bank Copy). The following explanation uses Section Copy as an example. Bank Copy is similar to Section Copy in that you can copy simply by selecting the Copy From and Copy To.

1 Press the DISPLAY SELECT [VOICE DISPLAY] button to call up the REGISTRATION SETUP display (Voice display 3).

If another display appears, press [3] at the upper right of the display to switch the display. The next time the [VOICE DISPLAY] button is pressed, the previously opened display will appear.



2 On the “SECTION COPY” side, select the COPY FROM Registration number and the Regist section.

3 In the same way, select the COPY TO registration number and Regist section.

The COPY TO Regist section depends on the Regist section selected for COPY FROM.

NOTE

If you change the source Regist section after changing the destination Regist section, the destination may automatically change to the section selected as the source Regist section.

4 Press [EXECUTE] on the SECTION COPY side.

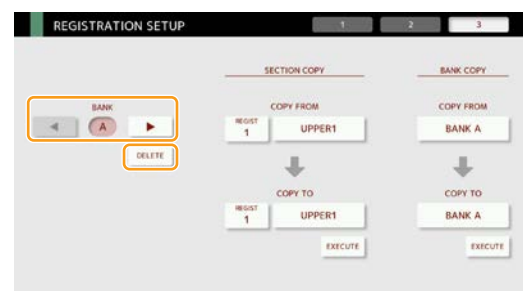
When the confirmation message asking if you want to execute the copy appears, select [COPY]. When the copy is complete, a message appears notifying you of the completion. Select [CANCEL] to abort the operation without copying anything.

Deleting a Bank

Use [◀]/[▶] to select the Bank on the REGISTRATION SETUP display and press [DELETE].

NOTE

When the selected Bank is deleted, the contents saved in subsequent Banks are moved up to the previous Bank. For example, deleting Bank A will move the data of Bank B to Bank A, Bank C to Bank B, Bank D to Bank C, and Bank E to Bank D.

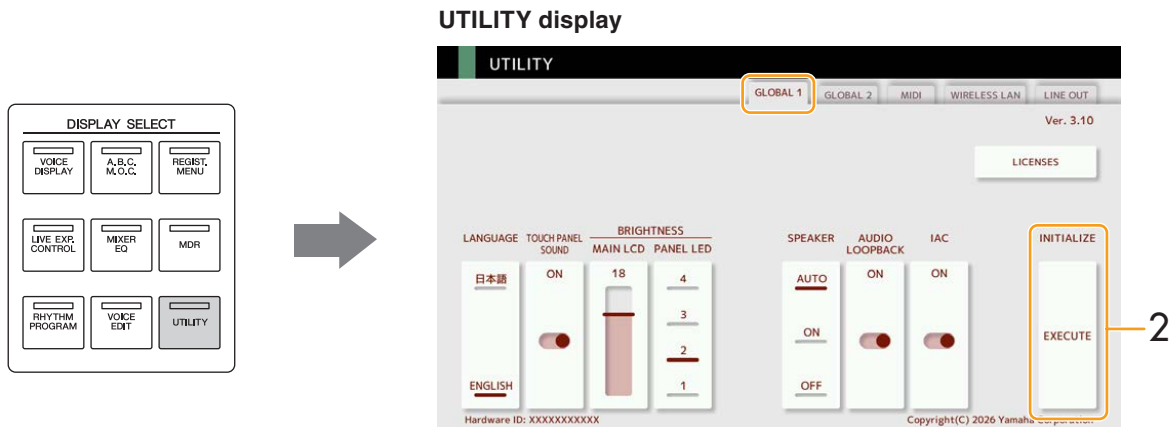


Initializing Registration Memory

Registration Memory data can be initialized to the default status. When initialized, the Registration data in all Banks is erased, recalls the Signature Registrations to the 1 – 16 buttons of Bank A, and then resets the created Registrations of Banks B – E to their original empty status.

In order to avoid inadvertently losing your important data, save it to a USB flash drive. For instructions on saving to a USB flash drive, see [page 98](#).

- 1 Press the **DISPLAY SELECT [UTILITY]** button to call up the **UTILITY** display.



- 2 In the **[GLOBAL 1]** tab, press **INITIALIZE [EXECUTE]**.

When the confirmation message appears, press **[INITIALIZE]** to initialize the settings. When the initialization is complete, the Electone will restart. Pressing **[CANCEL]** returns to the **UTILITY** display without performing the initialization.

NOTE

For instructions on how to reset all of the Electone data and restore the default state, see [page 24](#).

The MDR (Music Data Recorder) is a function that lets you save Registrations to a USB flash drive (page 98), record your performance data (pages 94, 106), and play back the data (pages 102, 108). The MDR function of this Electone handles both Songs and Audio. For the difference between Songs and Audio, see the column below.

Songs and Audio

A Song refers to the Electone data for a piece of music, recorded to a USB flash drive. One Song consists of the following files.

- Performance data (file extension: .MID): MIDI file which contains the performance recorded on the Electone. This data records the performance information such as the pressing and releasing of keys instead of the actual performance sound.
- Registration and other data (file extension: .B00): This file contains not only the Registrations but also data such as the User Voices, User Rhythms, Rhythm Sequences, and Registration Shifts.

In addition, a Song also includes management files (file extension: .NAM) used to manage what files are stored on the USB flash drive and what data is contained in each folder. One management file is automatically created in each folder. These management files do not appear in the Electone display.

Audio refers to an audio file (.WAV extension) that records the actual sound of a performance. On this Electone, you can record a performance as an audio file to a USB flash drive. Since audio files can be played on a computer or audio player, you can use and enjoy the data in various ways such as sharing performance data with a friend or creating an original CD.

NOTE

An extension is an identifier used by Windows and other computers to identify the file format. The file extension does not appear in the Electone display.

To protect your data and ensure stable use of Songs and audio files, follow the notices below.

- Use a USB flash drive that has been confirmed to work with the Electone. For a list of the compatible USB devices, access the Yamaha website below. Before using a USB flash drive, be sure to read the precautions on page 168.
Yamaha Downloads <https://download.yamaha.com/>
- It is recommended that you format a USB flash drive after confirming that it does not contain any important data, and to use separate drives for Songs and Audio. Sharing the same drive for Songs and Audio may lead to file fragmentation, resulting in longer search times for free space or files, which may cause recording or playback to stop.
- Insert the USB flash drive firmly and take care that the USB flash drive does not loosen from the connection due to sudden shaking while performing, etc. during recording or playback. This may result in data corruption in the USB flash drive.

NOTICE

When turning off the Electone, make sure that the instrument is NOT accessing the USB flash drive by playback/recording or file management (during Save, Copy, Delete, Format, and other operations). Failure to do so may corrupt the device and the data.

NOTE

Some USB flash drives are equipped with a write-protect function to prevent data from being accidentally erased. If important data is saved on a drive, apply the write-protect function to prevent it from being overwritten. If you are saving data to the USB flash drive, be sure to confirm that the write-protect function is disabled before using the USB flash drive.

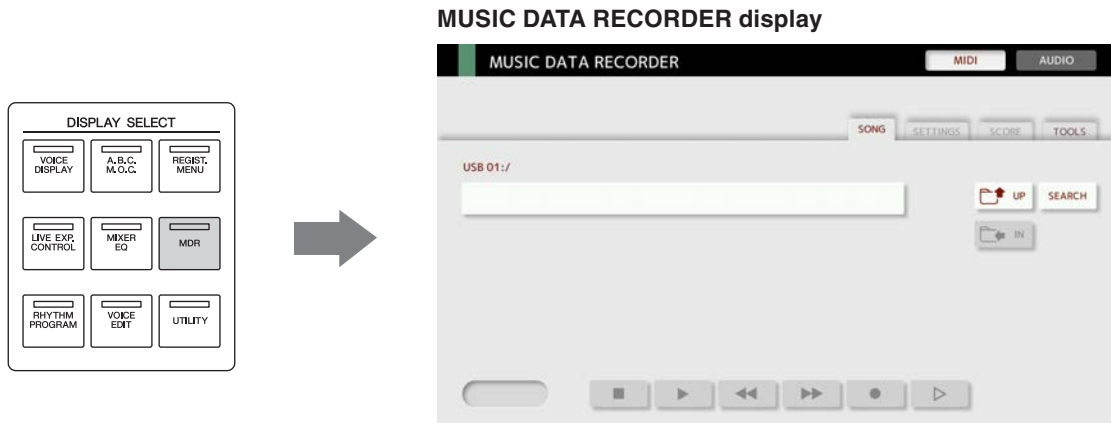
Preparing for using the MDR function

1 Connect a USB flash drive to the USB TO DEVICE terminal.

NOTE

There are three USB TO DEVICE terminals, and any of them may be used. Up to three USB flash drives can be connected at the same time. USB hubs cannot be used.

2 Press the DISPLAY SELECT [MDR] button to call up the MUSIC DATA RECORDER display.



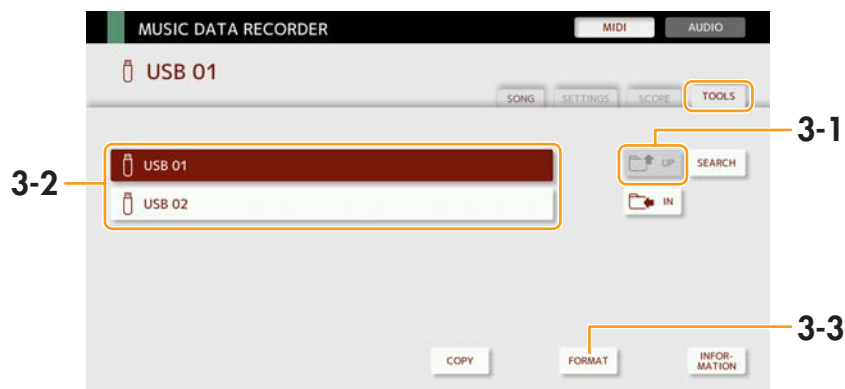
3 Format the USB flash drive as necessary.

New USB flash drives and drives formatted on other devices may not operate properly with this Electone. Make sure to format the drive first to ensure compatibility with the Electone.

NOTICE

The format operation overwrites any previously existing data. Make sure that the USB flash drive you are formatting does not contain important data. Proceed with caution, especially when connecting multiple USB flash drives. To prevent accidental data deletion, it is recommended that you connect only the USB flash drive to be formatted.

- 3-1** In the [TOOLS] tab, press [UP] several times until it turns gray to display the highest level of the USB flash drive.



- 3-2** Select the USB flash drive to be formatted.

The indications USB 01, USB 02, etc. will be displayed depending on the number of connected USB flash drives.

- 3-3** Press [FORMAT].

When the confirmation message appears, press [FORMAT] to format the drive. The message disappears when formatting is complete. If you press [CANCEL], the message disappears without formatting the drive.

NOTICE

Do not disconnect the USB flash drive while formatting.

4 Select [MIDI] or [AUDIO] at the upper right of the display depending on the function that you want to use.

Select [MIDI] for recording and playing Songs, or saving and loading Registrations. Select [AUDIO] for recording and playing audio data. See [page 94](#) for more information about MIDI (Songs) and [page 106](#) for Audio.

Selecting Songs and Audio files

The Songs or Audio in the currently selected USB flash drive and folder are listed on the [SONG] and [TOOLS] tabs for MIDI and the [AUDIO] and [TOOLS] tabs for AUDIO. Press [UP] to call up the next higher level folder, and press [IN] to call up the next lower (or deeper) level folder. The current location is displayed at the top of the list. For example, “USB 01:/FOLDER_001” indicates that the folder named “FOLDER_001” in the “USB 01” is selected.

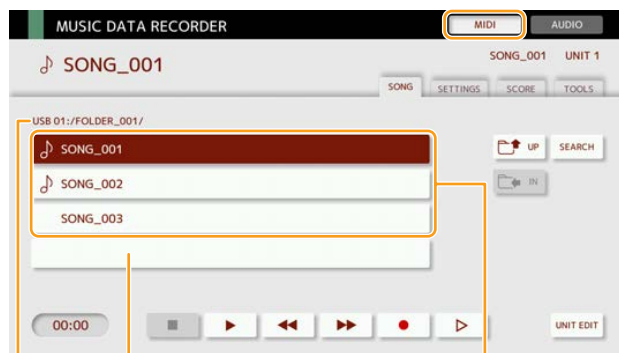
To play existing Songs or Audio or to change the file name, select a file that contains data. When making a new recording or saving Registration data, select a file that does not contain any data.

For information on the Song and audio file formats that can be played on this Electone, see [page 90](#).

NOTICE

Do not disconnect the USB flash drive during data access. If you are using a USB flash drive which has an indicator lamp, the lamp will flash when the instrument is accessing the USB flash drive.

For Songs (MIDI)



Current
location

No data

Data
available

For Audio



Current
location

No data

Data
available

The icons shown at left of the Song or Audio name have the following meanings.

	USB flash drive	
		A write or copy-protected USB flash drive.
	Folder	
	A Song containing performance data.	
		A Protected Original Song. For details, see page 93 .
		A Protected Edit Song. For details, see page 93 .
No icon	A Song not containing performance data. It contains Registration data (page 98).	
	An XG Song.	
	An Audio file.	

In the case of MIDI, pressing [SEARCH] allows you to search the entire contents of the selected USB flash drive regardless of the selected Song or folder. When the SEARCH window appears, enter the Song or folder name that you want to search for. See [page 111](#) for instructions on entering characters. When the search results are displayed, select the desired Song or folder.

NOTE

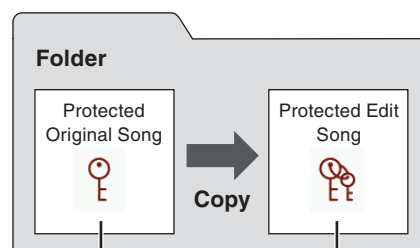
- This function does not distinguish between capital and lowercase letters.
- Searching with multiple keywords (AND, OR, NOT searches) is not supported.

In the [TOOLS] tab, pressing [INFORMATION] at the bottom right of the display shows the information of the selected USB flash drive or the file. When a USB flash drive is selected, the free space is shown, and when a Song or audio file is selected, the file size and other details are displayed.

About Protected Songs

Some commercially available Song data is protected to prevent overwriting or copying to prevent accidental erasure and protect copyrights. These are called “Protected Songs”. Protected Songs can be saved to a USB flash drive confirmed by Yamaha.

Protected Songs can be played in the same way as Songs that you created yourself. However, you cannot edit the Registrations of Protected Songs or overwrite the recordings. To change the Registration of a Protected Song yourself or to use the Registration of a Protected Song to record a performance, copy the Protected Song to the same USB flash drive or folder and edit the copied Song (cannot be copied to another USB flash drive or folder). When a Protected Song is copied in this way, the copied Song (called the “Protected Edit Song”) is available only when the original Song (called the “Protected Original Song”) exists in the same folder. Be careful not to delete the Protected Original Song.



You cannot edit the Registration or overwrite this Song.

You can edit this Song, only when it is in the folder that contains a Protected Original Song.

NOTICE

- When editing a Protected Song, first initialize the Registration ([page 89](#)) before selecting the Song to be edited. If you have not initialized the Registration first, the edited Song may not be saved.
- If a Protected Song is directly copied or moved on a computer, it will become unplayable. When moving a Protected Song on a computer, be sure to use the Musicsoft Downloader. Download the software from the following website by entering “Musicsoft Downloader” to search for the file.
Yamaha Downloads <https://download.yamaha.com/>

Recording your performance (Song)

This section lets you record a performance as a Song. Before recording, make all the preparations necessary for the song that you want to record such as the Registration Memory settings. To record a performance as Audio, see [page 106](#).

NOTICE

Do not turn off the power or disconnect the USB flash drive while recording. Doing so may damage the data.

1 Connect a USB flash drive to the USB TO DEVICE terminal and select a Song as the recording destination.

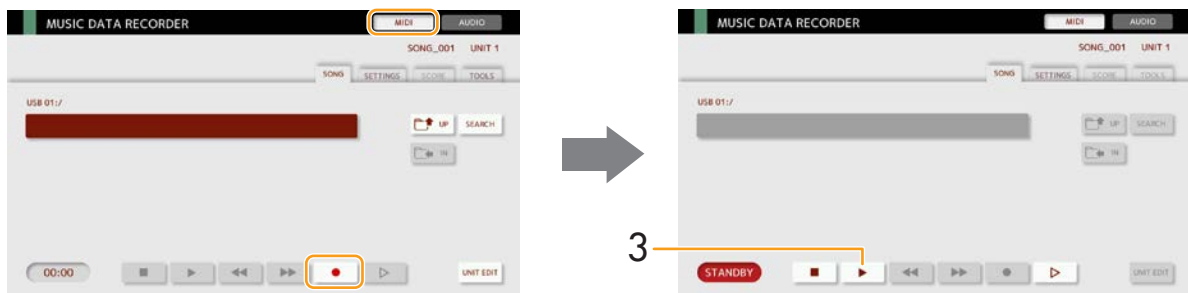
For instructions on selecting a Song, see [page 92](#). When making a new recording, select a blank Song which does not contain any data. To overwrite a Song that contains data, delete any unnecessary data (Registrations or performance data) in advance. For instructions on how to delete data, see [page 110](#).

2 Press [●] (Record) on the [SONG] tab of the MUSIC DATA RECORDER (MIDI) display.

This enables recording standby, and “STANDBY” appears at the bottom left of the display. If you want to cancel recording here, press [■] (Stop).

In addition to the [SONG] tab, this operation can also be carried out on the [SETTINGS] tab or [SCORE] tab.

You can perform the same operation by selecting the [MUSIC DATA RECORDER] tab at the bottom of the Voice display.



NOTE

If a message appears indicating there is not enough free space in the USB flash drive, press [CANCEL] and delete any unnecessary Songs or use a new USB flash drive. To continue recording your performance on the USB flash drive even if it does not have enough space, press [CONTINUE].

3 Press [▶] (Start).

The “STANDBY” indication at the bottom left of the display changes to a rotating circle, indicating that Registration data is now being saved.



NOTE

- Regardless of the currently selected Unit number, the recording operation will save data other than the performance data to the first Unit of the Song ([page 101](#)). This is why pressing [●] (Record) will call up the message to confirm whether it is OK or not to save data to the first Unit when a Registration Unit other than the first Unit is loaded. Pressing [OK] enables recording standby, and pressing [CANCEL] returns to the previous display.
- You can also press [▷] (Custom Play) instead of [▶] (Start) to start recording. In this case, only the performance is recorded without saving the Registration.

4 Confirm that the time indication (00:00) appears at the bottom left of the display, and then start playing the keyboard.

If you want to turn on the RHYTHM CONTROL [SYNCHRO START] button or the RHYTHM SEQUENCE button, be sure to press it after pressing [▶] (Start). If you turn on one of these buttons before pressing [▶] (Start), the Synchro Start function may be canceled or the operation of pressing the RHYTHM SEQUENCE button may not be recorded.

NOTE

If you make a mistake while recording, you can cancel the recording by pressing [●] (Rec). Return to step 3 and start the recording by pressing [▶] (Start) or [▷] (Custom Play) before playing. The data prior to the re-recording will be erased and completely replaced by the new data. If you press [■] (Stop) before starting re-recording, re-recording will be canceled and the previous performance data is retained.

5 After finishing your performance, press [■] (Stop).

The recording ends, and the data is written to the USB flash drive. The recorded Song is named “SONG_xxx” (xxx: numbers) and displayed in the [SONG] tab.

NOTICE

While the rotating circle is shown at the bottom left of the display, data is being written. Do not disconnect the USB flash drive at this time. Doing so may damage the data.

6 Press [▶] (Start) to play back the recorded performance.

NOTE

You can change the Song name, or delete the Song. For details, see [page 110](#).

Recording specified parts

You can separately record performances on the Upper Keyboard, Lower Keyboard, and Pedalboard as well as control data for Registration changes and Expression Pedal operations. Additionally, Lead Voice 1 and Keyboard Percussion 1 can also be recorded independently of the Upper and Lower Keyboard performances. Here, we'll explain the procedure by first recording the Lower Keyboard and Pedalboard performances followed by the Upper Keyboard performance.

NOTE

The Lead Voice 2 and the Keyboard Percussion 2 cannot be recorded independently.

1 Connect a USB flash drive to the USB TO DEVICE terminal and select a Song as the recording destination.

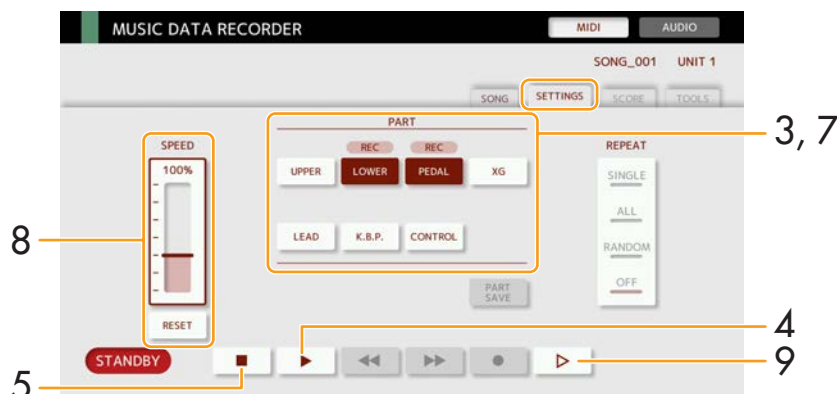
For instructions on selecting a Song, see [page 92](#). When making a new recording, select a blank Song which does not contain any data. To overwrite a Song that contains data, delete any unnecessary data (Registrations or performance data) in advance. For instructions on how to delete data, see [page 110](#).

2 Press [●] (Record) on the [SETTINGS] tab of the MUSIC DATA RECORDER display to set recording standby.

3 Select the parts that you want to record.

Each time you press a part name, it switches among REC, PLAY and off. Set the parts to be recorded to “REC” and the parts you do not want to record to “PLAY” or off. In “PLAY,” previously recorded parts are played back without being recorded, and when set to off, neither recording or playback occurs.

The settings shown in the display below let you record only the Lower Keyboard and Pedalboard parts. If you want to record Registration changes and Expression Pedal operations during the performance, set “CONTROL” to “REC” as well.



If you set UPPER to “REC,” the performance of the Voice section on the Upper Keyboard (including Lead Voice 1) is recorded. However, when LEAD is set to “REC,” only the Lead Voice 1 performance is recorded. UPPER and LEAD cannot be set to “REC” at the same time. The same applies to the LOWER and K.B.P. (Keyboard Percussion 1).

NOTE

- It is recommended that you also set CONTROL to “REC” to record Registration changes and Expression Pedal operation during the performance.
- When recording K.B.P. (Keyboard Percussion 1), make sure that the KEYBOARD PERCUSSION [1] button on the panel is set to on. When recording K.B.P., note that the Keyboard Percussion 2 does not sound even if the KEYBOARD PERCUSSION [2] button is turned on.

4 Press [▶] (Play) and confirm that the time indication (00:00) appears at the bottom left of the display, and then start playing the keyboard.

5 When the performance (on the Lower Keyboard and Pedalboard) finishes, press [■] (Stop).
This completes the recording of performance on the Lower Keyboard and Pedalboard. Next, record the (Upper Keyboard) part that has not yet been recorded.

6 Press [●] (Record).
A message asking if you want to overwrite appears. Selecting [OVERWRITE] closes the message window and puts recording in standby.

7 Select the part to be newly recorded.
Set the part that you want to record (in this case, UPPER) to “REC.” When the parts recorded in steps 2 – 5 (in this case, LOWER and PEDAL) and CONTROL are set to “PLAY,” the recorded data is played back, allowing you to listen to the previously recorded parts as you record new ones.

8 As necessary, set the SPEED of the playback parts.
The original playback speed is displayed as 100%. Setting it to a greater value speeds up playback, and a lower value slows it down. The speed can be set within a range of 50% – 200%.

NOTE

To restore the original playback speed (100%), press the [RESET] located below SPEED in the display.

9 Press [▷] (Custom Play) to record the part selected in step 7.
When the playback of the previously recorded parts (Lower Keyboard and Pedalboard) begins, start playing on the part (Upper Keyboard) selected in step 7 along with those parts.
[▷] (Custom Play) is used when recording or playing data other than Registration data. Since the Registration data was recorded in step 4, it is ready to record immediately.
The recording automatically stops when the end of the previously recorded Song is reached. The length of a subsequently recorded part cannot exceed the length of the previously recorded parts.

Re-recording a specific part of a Song (punch-in recording)

You can re-record a specific phrase or section of a previously recorded Song. This is called punch-in recording. By selecting a part (or parts), you can also perform punch-in recording only for a specific part (or parts).

NOTE

Punch-in recording is best used for recording each phrase between rests.

1 Select the Song that you want to re-record.

2 Press [▶] (Start) to play back the Song.

3 Press [⏏] (Pause) at the position where you want to re-record.
Song playback will pause.

- 4 Press [●] (Record).**
This puts recording in standby, and “STANDBY” appears at the bottom left of the display.
- 5 In the [SETTINGS] tab, set the parts that you want to re-record to “REC” status and other parts to “PLAY.”**
- 6 Press [▶] (Start) to start recording and play the keyboard only for the section that you want to change.**
- 7 When you finish playing the section that you want to re-record, promptly press [■] (Stop) to end the recording.**

Saving Registrations and other data as a Unit to a USB flash drive

You can also save only Registration Memory and other data shown below as a Unit ([page 77](#)) to a USB flash drive without recording any performance data.

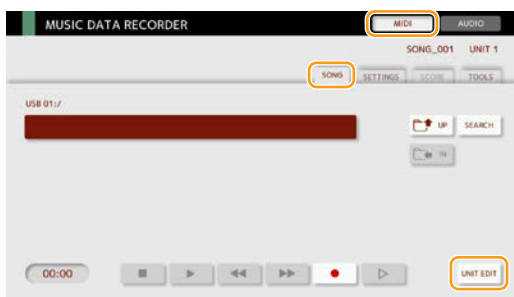
- Registration Memory-related data (including the Voice Link and Registration Shift settings)
- User Voices, VA Custom Voices
- Keyboard Percussion
- User Rhythms
- Rhythm Sequences

1 Select a blank Song to save the Registration Memory data and other created data.

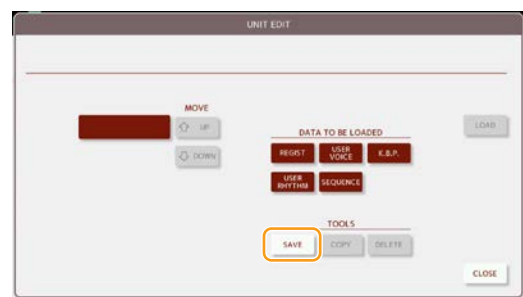
For instructions on selecting a Song, see [page 92](#).

2 Press [UNIT EDIT] in the [SONG] tab of the MUSIC DATA RECORDER (MIDI) display to call up the UNIT EDIT window.

MUSIC DATA RECORDER display



UNIT EDIT window



3 Press [SAVE].

A message indicating that the data is being saved appears on the display. After the message disappears, press [CLOSE] to return to the [SONG] tab. You can confirm that "SONG_xxx" (xxx: numbers) is shown.

Adding Units in a Song

When you want to use more than five Registration Banks (one Unit) in one Song, you can create and save multiple Units in one Song.

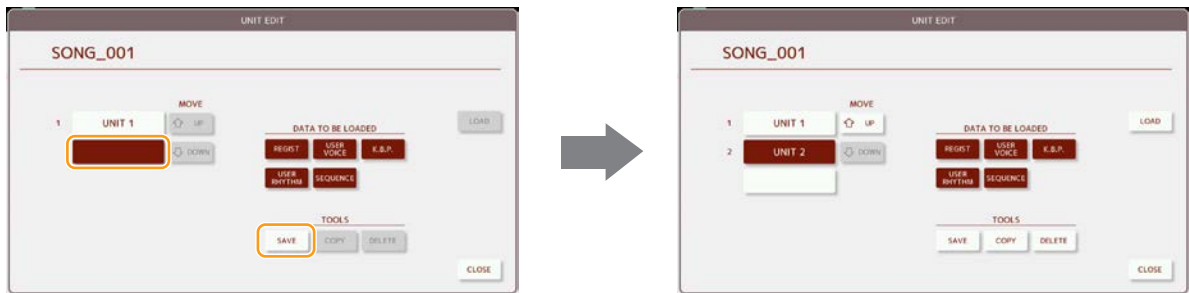
1 Select a destination Song to save the created Registration data.

Select a Song that already contains Registration data. For instructions on selecting a Song, see [page 92](#).

2 Press [UNIT EDIT] in the [SONG] tab of the MUSIC DATA RECORDER display to call up UNIT EDIT window.

The Registrations saved in the Song are shown as a Unit on the display.

- 3 **Select the blank button located below the already saved Unit number, and then press [SAVE].**
A new Unit number is added, and the data is saved.



NOTE

This operation alone will not call up a newly created Unit via Song playback, etc. To call up multiple Units, set the order of the Registration Units in the UNIT EDIT window (see below), and then make the NEXT UNIT settings in Registration Shift ([page 82](#)) or Registration Sequence ([page 139](#)). Note that changing the Unit via the NEXT UNIT may result in no sound from the Electone for a few seconds when the User Voice data and VA Custom Voice data differ between the current Unit and the next Unit.

Overwriting Registration data to a Unit

This operation lets you replace just the Registration Unit without changing the performance data in previously recorded Song data.

- 1 **Select a Song containing performance data.**
For instructions on selecting a Song, see [page 92](#).
- 2 **Press [UNIT EDIT] in the [SONG] tab of the MUSIC DATA RECORDER display to call up the UNIT EDIT window.**
The Registrations saved in the Song are shown as a Unit on the display.
- 3 **Select the Unit number that you wish to overwrite.**
- 4 **Press [SAVE].**
A message asking if you want to overwrite appears. Selecting [OVERWRITE] overwrites the Unit.

Setting the order of the Registration Units

When multiple Units are saved in a single Song, set the order of the Registration Units on the UNIT EDIT display to call up these Units by using the “Next Unit” function of Registration Shift ([page 84](#)) or Registration Sequence ([page 141](#)).

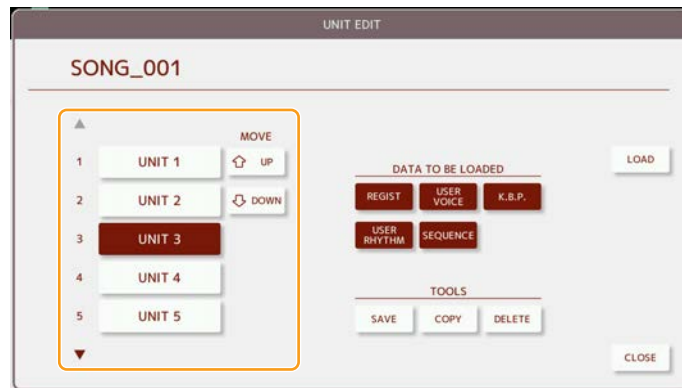
NOTE

The first Registration Unit (located at the top) set here will be called up first when Song playback starts.

- 1 **Select a Song that contains multiple Registration Units.**
For instructions on selecting a Song, see [page 92](#).
- 2 **Press [UNIT EDIT] in the [SONG] tab of the MUSIC DATA RECORDER display to call up the UNIT EDIT window.**

3 Change the order of the Registration Units as desired.

Select the Unit that you wish to move from the Unit list on the left side of the display, and then press [UP] or [DOWN] to change the order.



Use the TOOLS at the bottom right of the display to edit the Unit as necessary.

- **SAVE:** Overwrites and saves the Registration Memory data saved on the main unit to the selected Unit.
- **COPY:** Duplicates the selected Unit and adds it to the bottom of the Unit list.
- **DELETE:** Deletes the selected Unit.

4 After making settings, press [CLOSE] to close the UNIT EDIT window.

Loading Registrations and other data saved on a USB flash drive

Registrations recorded to a Song and other data shown below can be loaded into the Electone to recall the settings. This data can also be loaded independently.

- **REGIST:** Registration Memory-related data (including the Registration Shift settings)
- **USER VOICE:** User Voices, VA Custom Voices
- **K.B.P.:** Keyboard Percussion
- **USER RHYTHM:** User Rhythms
- **SEQUENCE:** Rhythm Sequences

NOTE

If you are loading a Registration during Rhythm playback, the Sequence data and User Rhythm cannot be loaded. Load Registrations only after stopping the Rhythm.

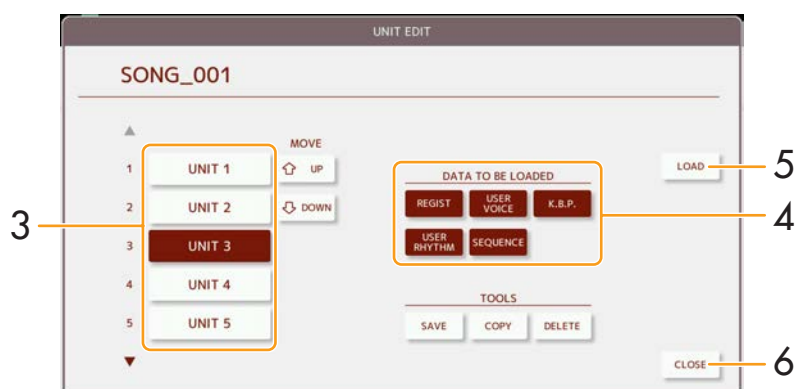
1 Select a Song containing data that you want to load.

For instructions on selecting a Song, see [page 92](#).

If there is only one Unit in the Song and you are loading all of the data, step 2 and subsequent steps are not required. After selecting the Song, simply press **[▶]** (Start) to load the data.

2 Press **[UNIT EDIT]** in the **[SONG]** tab of the **MUSIC DATA RECORDER (MIDI)** display to call up the **UNIT EDIT** window.

3 Select the Unit number that you want to load.



NOTE

When you select the Protected Song, the buttons (DATA TO BE LOADED) may be unavailable (grayed out). This is designed to protect the copyright of Protected Songs. For example, combining a part of one Protected Song with another Protected Song is not allowed.

4 Set the data to be loaded to on, and the data you do not want to load to off.

Ordinarily, all data items should be set to on.

NOTE

When you load the Registration data using the Next Unit function ([pages 84, 141](#)), all data will be loaded no matter which data you select here.

5 Press **[LOAD]**.

When the confirmation message appears, press **[LOAD]** to load the data. If **[CANCEL]** is pressed, the data will not be loaded.

6 Press **[CLOSE]** to close the **UNIT EDIT** window.

Playing back a Song

This section explains how to play back Songs recorded with MDR or commercially available Song data.

1 Connect the USB flash drive containing the Songs to the USB TO DEVICE terminal, and then select the Song to be played back.

For instructions on selecting a Song, see [page 92](#).

NOTE

Even if the USB flash drive contains audio files, they will not appear under [MIDI] in the MUSIC DATA RECORDER display. For instructions on how to play audio files, see [page 108](#).

2 Control playback by using the buttons at the bottom of the MUSIC DATA RECORDER (MIDI) display.

In addition to the [SONG] tab, this operation can also be carried out on the [SETTINGS] tab or [SCORE] tab. You can perform the same operation by selecting the [MUSIC DATA RECORDER] tab at the bottom of the Voice display. The playback position (time) appears at the bottom left of the display.

NOTICE

Do not attempt to connect or disconnect the USB flash drive or turn the power off during playback. Doing so may damage the data.



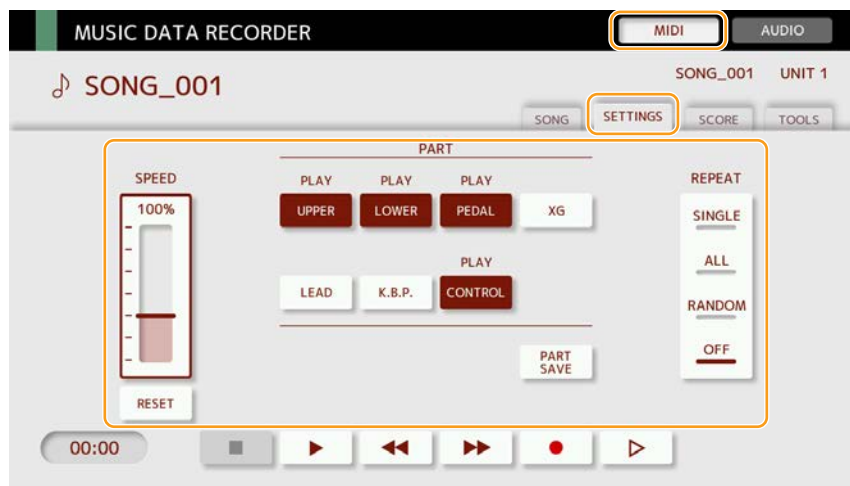
■ (Stop)	Stops playback. When playback reaches the end of the Song, it automatically stops without pressing [■] (Stop).
▶ (Start)	Starts playback. This button changes to [⏸] (Pause) during playback. Pressing [⏸] (Pause) pauses playback while pressing [▶] (Start) resumes playback from where it was paused. • If the Song contains both Registration and performance data: A rotating circle icon appears at the bottom left of the display to indicate Registration data is being loaded, and then Song playback starts. • If the Song contains only Registration data: A rotating circle icon appears at the bottom left of the display to indicate Registration data is being loaded. • If the Song contains only performance data: Song playback starts immediately.
◀◀ (Rewind)	Quickly rewinds the playback position. The playback position moves backward while the button is pressed. Playback stops at the position where you release your finger. To start playback from that position, press [▶] (Start) or [▷] (Custom Play).
▶▶ (Fast Forward)	Quickly advances the playback position. The playback position advances while the button is pressed. Playback stops at the position where you release your finger. To start playback from that position, press [▶] (Start) or [▷] (Custom Play).
▷ (Custom Play)	Plays back only the performance data without loading the Registrations or other data. [▶] (Start) changes to [⏸] (Pause) during playback. Pressing [⏸] (Pause) pauses the playback while pressing [▷] (Custom Play) resumes the playback from where it was paused. For Songs using the Next Unit function, press [▶] (Start) to start the Song instead of [▷] (Custom Play).

NOTE

- When two or more Registration Units are included in the current Song, starting playback will load the Registration Unit shown at the top in the UNIT EDIT window.
- Registration data is generally not included in most Song data, such as commercially available XG Songs created on instruments other than the Electone.

Making Song playback-related settings

In the [SETTINGS] tab, you can make settings for playback speed, playback parts and repeat playback.



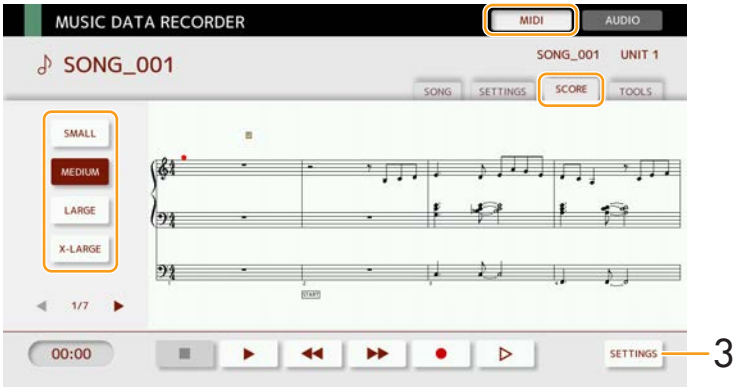
SPEED	Changes the playback speed of the Song. The original speed is 100%, and values greater than 100% make playback faster, while values less than 100% make playback slower. Pressing [RESET] or selecting another Song returns the value to the default setting (100%). Range: 50% – 200% NOTE The speed cannot be set for a Song containing no performance data.
PART	You can select specific parts in the Song data for playback. This is useful when you want to practice specific parts, etc. Set the parts intended for playback to “PLAY” and set the parts that you do not want to be played to off. Each time you press a part name it switches between PLAY and off. Pressing [PART SAVE] saves the playback status of each part. In addition to the Upper Keyboard, Lower Keyboard, Pedalboard, Lead Voice, and K.B.P. (Keyboard Percussion), you can also set control data, such as Registration changes and Expression Pedal operations, to PLAY or off. For XG Songs, press [XG] to set the playback parts. In the XG PART SETTINGS window, you can set PLAY or off and adjust the volume for each channel. Press [ALL] to set PLA or off and adjust the volume for all channels.
REPEAT	Determines the repeat playback type. With the exception of “OFF,” playback will continue until [■] (Stop) is pressed. If ALL or RANDOM is selected, select the Song to play first before starting playback. • SINGLE: Repeats only the currently selected Song indefinitely. • ALL: Repeats all Songs in the same folder of the currently selected Song in order. • RANDOM: Repeats all Songs in the folder of the currently selected Song in a random order. • OFF: Does not repeat playback. When the first Song finishes playing, playback stops.

Displaying the Song score

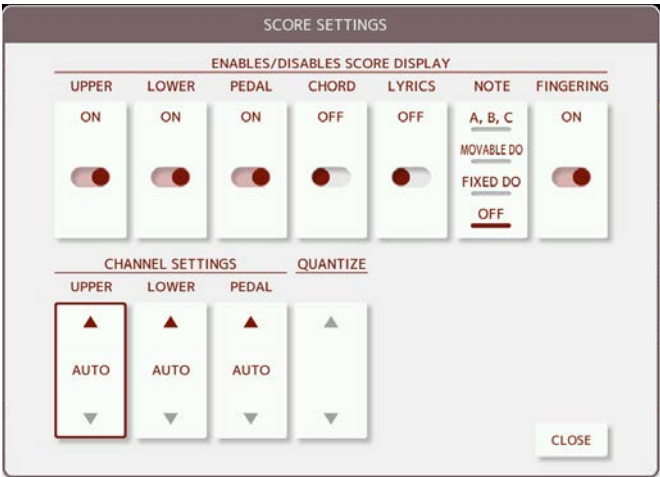
You can display the score for Songs (performance data) saved to a USB flash drive. Scores cannot be displayed for audio files.

- 1
- Select a Song containing performance data.
For instructions on selecting a Song, see [page 92](#).

- 2
- Select the [SCORE] tab in the MUSIC DATA RECORDER display.
The currently selected Song score will be displayed. You can change the size of the score on the left side of the display (except during recording).
NOTE
Scores for Protected Songs cannot be displayed, except those Songs that specifically allow score display.



- 3
- As necessary, press [SETTINGS] to call up the SCORE SETTINGS window to set the display content, etc.
After making the settings, press [CLOSE] to close the SCORE SETTINGS window.
NOTE
The score settings cannot be changed during recording. [SETTINGS] cannot be pressed at that time.



ENABLES/ DISABLES SCORE DISPLAY	UPPER	Turns on or off the indication of the notation for the Upper Keyboard, Lower Keyboard, or Pedalboard. You cannot set all parts to off.
	LOWER	
	PEDAL	
	CHORD	Turns indication of the chords on or off. If a Song does not contain chord information, chords are not displayed even if this is set to on.
	LYRICS	Turns indication of the lyrics on or off. If a Song does not contain lyrics information, lyrics are not displayed even if this is set to on.

ENABLES/ DISABLES SCORE DISPLAY	NOTE	Determines the type of the note name indication. • A, B, C: Indicates as C, D, E, F, G, A, B. • MOVABLE DO: Sets each key note as “Do” (relative solfeggio). For example, in G Major (key note is G), G is displayed as “Do.” • FIXED DO: Indicates as Do, Re, Mi, Fa, So, La, Ti, Do starting from the note C (solfeggio). • OFF: Note names are not displayed.
	FINGERING	Turns indication of the fingering on or off. This can only be set for Songs that include fingering data.
CHANNEL SETTINGS	Selects the channels in the Song data to be indicated as the score for the Upper Keyboard, Lower Keyboard, or Pedalboard. Selecting AUTO automatically sets the channels according to the Song. When another Song is selected, the channel settings return to AUTO.	
QUANTIZE	Since the score is produced based on the Song data (performance data), the notation may not be accurate. In such cases, you can change the score to make it easy to read by selecting the shortest note in the selected Song in QUANTIZE.	

4 When playing back the Song, a ball moves along with the playback position, and the pages are automatically turned.

While the Song is stopped, you can turn the pages by using [◀]/[▶] at the left side of the display.

NOTE

- You can assign the page-turning function to a Footswitch or an assignable foot pedal ([page 169](#)) with the Live Expression Control function ([page 53](#)).
- Score settings cannot be stored in the Registration Memory.

Recording your performance (Audio)

With this method, performances are recorded to a USB flash drive as an audio file. Similar to recording with a voice recorder, this records the sound of the performance itself. Since it is saved in stereo WAV format of normal CD quality resolution (44.1 kHz, 16-bit), it can be transmitted to and played on portable music players by using a computer. Additionally, you can record the monaural input from the MIC jack to record your singing along with your performance. Depending on the available space on the USB flash drive, you can record up to 60 minutes in one recording.

NOTE

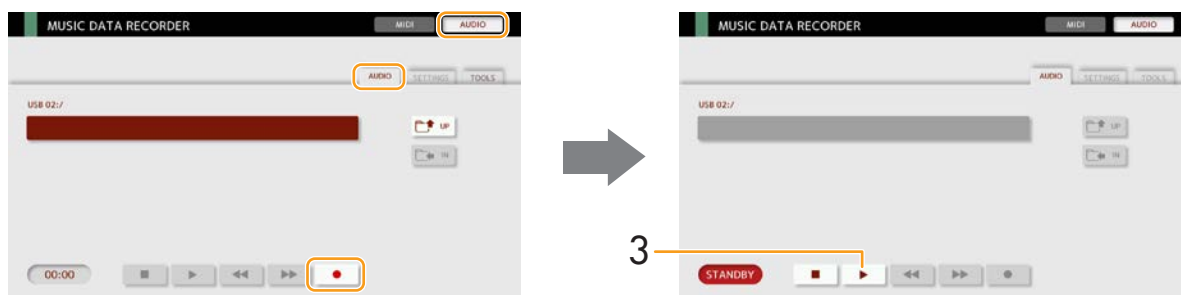
Sound input from the AUX IN jack, USB TO HOST terminal, and MIC jack can also be recorded.

1 Connect a USB flash drive to the USB TO DEVICE terminal and select the destination to record audio data.

On the MUSIC DATA RECORD (AUDIO) display, press the blank which means “No data” in the list. For details, see [page 92](#). Since audio cannot be overwritten with previously recorded data, unlike with Songs, you need to select blank audio as a recording destination.

2 Press [●] (Record) on the [AUDIO] tab of the MUSIC DATA RECORDER (AUDIO) display.

This puts recording in standby, and “STANDBY” appears at the bottom left of the display. To cancel recording, press [■] (Stop). This operation can also be performed in the [SETTINGS] tab.



3 Pressing [▶] (Start) starts recording. Start playing the keyboards.

While recording, the elapsed recording time is shown at the bottom left of the display. Once the elapsed recording time appears, you can play back the Registration or Song in the MUSIC DATA RECORDER (MIDI) display to use them for your performance.

NOTICE

Never attempt to connect or disconnect the USB flash drive or turn off the power during recording. Doing so may damage the data.

4 After finishing your performance, press [■] (Stop).

The recording ends, and the data is written to the USB flash drive. The recorded audio is named “AUDIO_xxx” (xxx: numbers) and displayed in the [AUDIO] tab.

5 Press [▶] (Start) to play back the recorded performance.

NOTE

You can change the file name or delete the file. For details, see [page 110](#).

Saving the Song as Audio

By playing back the previously recorded Song during audio recording, you can save it as an audio file.

- 1** **Connect two USB flash drives, one containing the Song and another for recording the audio files, to the USB TO DEVICE terminals.**
- 2** **Start audio recording in the MUSIC DATA RECORDER (AUDIO) display.**
- 3** **Select the Song in the MUSIC DATA RECORDER (MIDI) display and play it back to the end.**
- 4** **Return to the MUSIC DATA RECORDER (AUDIO) display and end the audio recording.**

Playing back Audio files

This section explains how to play back audio files in a USB flash drive on the Electone.

File format that can be played back: WAV format (44.1 kHz, 16-bit, stereo)

NOTE

This instrument cannot play back DRM protected files.

- 1
- Connect the USB flash drive containing audio files to the USB TO DEVICE terminal and select the file to be played back.**

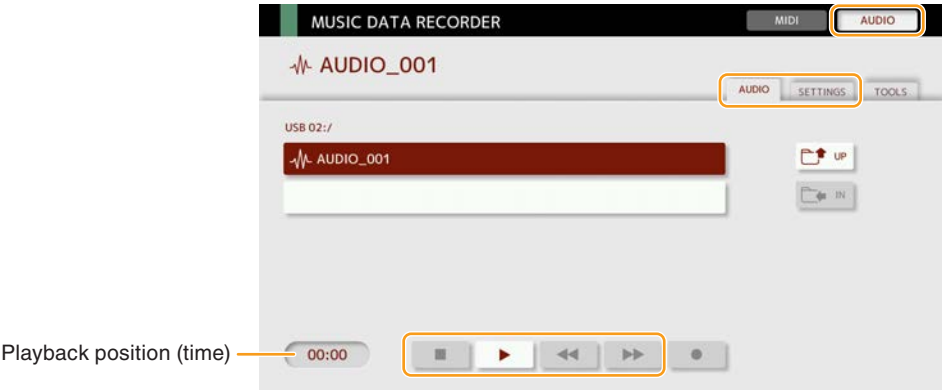
For instructions on selecting a file, see [page 92](#).

- 2
- Control playback by using the buttons at the bottom of the MUSIC DATA RECORDER (AUDIO) display.**

In addition to the [AUDIO] tab, this operation can also be performed in the [SETTINGS] tab. The playback position (time) appears at the bottom left of the display.

NOTICE

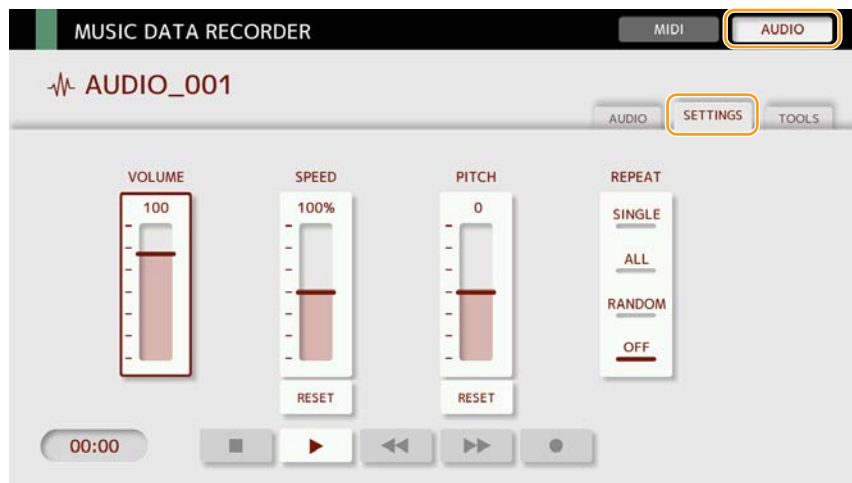
Do not attempt to connect or disconnect the USB flash drive or turn the power off during playback. Doing so may damage the data.



■ (Stop)	Stops playback. When playback reaches the end of the file, it automatically stops without pressing [■] (Stop).
▶ (Start)	Starts playback. This button changes to [▢] (Pause) during playback. Pressing [▢] (Pause) pauses playback while pressing [▶] (Start) resumes playback from where it was paused.
◀◀ (Rewind)	Quickly rewinds the playback position. The playback position moves backward while the button is pressed. Playback stops at the position where you release your finger. To start playback from that position, press [▶] (Start).
▶▶ (Fast Forward)	Quickly advances the playback position. The playback position advances while the button is pressed. Playback stops at the position where you release your finger. To start playback from that position, press [▶] (Start).

Making audio file-related settings

In the [SETTINGS] tab, you can make settings for audio playback.



VOLUME	Adjusts the volume of audio playback. Range: 0 – 127
SPEED	Changes the speed of audio playback. The original speed is 100%, and values greater than 100% make playback faster, while values less than 100% make playback slower. Pressing [RESET] or selecting another Song returns the value to the default setting (100%) Range: 75% – 125%
PITCH	Changes the pitch of the audio playback in semitones. Pressing [RESET] or selecting another audio file returns the value to the default setting (0). Range: –12 – +12
REPEAT	Determines the repeat playback type. With the exception of “OFF,” playback will continue until [■] (Stop) is pressed. To repeat all Songs in a folder, select the file to play first before starting playback. • SINGLE: Repeats only the currently selected file indefinitely. • ALL: Repeats all Songs in the same folder of the currently selected file in order. • RANDOM: Repeats all Songs in the folder of the currently selected file in a random order. • OFF: Does not repeat playback. When the first file finishes playing, playback stops.

NOTE

- These settings return to their default values when the Electone is turned off and on again.
- Depending on the audio file, changing the speed or pitch may change its tonal characteristics.

Organizing Songs and Audio files

As the number of Songs and audio files increases, they can become more difficult to find. Organize your USB flash drive by creating folders and changing the names to make them easier to find.

NOTICE

Firmly insert the USB flash drive into the USB TO DEVICE terminal. Do not disconnect the USB flash drive or turn off the power to the Electone during copying or renaming operations, etc. Data may be damaged.

- 1 Connect the USB flash drive which contains the data to the USB TO DEVICE terminal.
- 2 Select the [TOOLS] tab in the MUSIC DATA RECORDER display.
- 3 Select the target folder, Song, or audio file before performing the operation as necessary.

For Songs (MIDI)



For Audio



CREATE FOLDER	Creates a new folder in the currently displayed list. Press [UP] or [IN] to call up the list in the desired level where to create a folder, and then press this button. When the character entry window appears, enter the preferred folder name. See page 111 for instructions on entering characters.
RENAME	Changes the name of the selected Song, audio file, or folder. When the character entry window appears, enter the preferred folder name. See page 111 for instructions on entering characters.
COPY	Copies a Song or audio file. Songs can also be copied by folder. For details, see page 112 .
DELETE	Deletes the selected Song, audio file, or folder. When the confirmation message appears, press [DELETE] to delete the item. Press [CANCEL] to cancel the data deletion. If a Song containing performance data is selected, choose which of the following deletion options to apply in the confirmation message. • DELETE PERFORMANCE: Deletes only the performance data in the Song. • DELETE REGIST: Deletes only the Registration data in the Song. • DELETE ALL: Deletes the selected Song or folder.
FORMAT	Formats the USB flash drive. This appears only when a USB flash drive is selected. For details, see page 91 .
INFORMATION	When a Song is selected, Song capacity, number of banks, Song title, and composer, etc. are shown. The contents differ depending on the selected Song. When an audio file is selected, the audio file capacity and playback time are shown. When a USB flash drive is selected, the available space (remaining) is displayed.

Entering characters

The following explains how to enter characters when pressing [RENAME] or [SEARCH] in the MUSIC DATA RECORDER display.

- 1 Use the [◀]/[▶] buttons on the display or the [DATA CONTROL] dial on the panel to move the cursor to the position where you want to enter the characters.



- 2 Select the character type to be entered at the right side of the display.

■ When Language (page 13) is set to English

Pressing [SYMBOL] (or [abc]) at the bottom left of the display switches between symbols and alphabetic/numeric characters. To switch between capital letters or small letters, press ⬆ (SHIFT) at the lower left of the display.

■ When Language (page 13) is set to Japanese

The buttons to select the character type are shown at the right side of the display. To switch between full size or half size, press [全角] or [半角] at the lower left of the display. To switch alphabetic characters between capital and small, press ⬆ (SHIFT) at the lower left of the display.

- abc: Alphabet, numbers (in full size/half size)
- かな漢: Hiragana, Kanji conversion (in full size)
- カナ: Katakana (in full size/half size)
- 記号: Symbols (in full size/half size)

- 3 Select the desired character for entry.

You can enter up to 50 characters (25 characters in full size) for a Song, and 46 characters (23 characters in full size) for audio.

When the character type is set to “かな漢,” you can also convert Hiragana to Kanji.

NOTE

XG Song names can contain up to 46 characters (23 characters in full size).

■ Deleting entered characters

Move the cursor to the character to be deleted and press [DELETE]. Only the single character at the cursor position is deleted.

■ Converting into Kanji

When the entered character string is highlighted, press [変換]. Pressing [変換] repeatedly calls up the conversion options. Pressing [戻す] reverts the converted Kanji to Hiragana. Pressing [確定] or entering the next character inputs the Kanji.

To change the highlighted area, use the [◀]/[▶] buttons on the display or the [DATA CONTROL] dial on the panel. To clear all of the highlighted characters at once, press [キャンセル].

4 Once the name is decided, press [RENAME] (or [SEARCH] for searching) to finalize the characters you have input.

A message indicating that the entered name cannot be used may appear. In that case, enter a different name. To cancel renaming, press [CANCEL].

NOTE

Songs and audio files are listed on the display in the following priority: Symbols > Numbers > Alphabet > Katakana/Hiragana > Kanji/Other symbols. Names with an asterisk (*) at the top are exceptions to this rule.

Do not use the following file or folder names when editing file or folder names on a computer. Such names may cause the Electone operation to become unstable or the files and folders may be automatically deleted ("xx" represents a number).

SONG.NAM	ELS_SONG.NAM	TMP	XGSONGxxx.MID
MDR_xx.EVT	MDR_xx.MID	ELS_SONG.TMP	AUDIO_xxx.WAV
MDR_xx.Bxx	MDR_xxx.MID	MDR_xxx.TMP	
MDR_xx.Vxx	REG_xxx.B00	REG_xxx.TMP	
SONG_xxx	SONG_xxx.C02	TMP.E02	

Copying Songs and Audio files

You can copy Songs and audio files within the same USB flash drive and between two different USB flash drives. Additionally, Songs can also be copied by folder but audio files cannot.

Connect the USB flash drive containing the Songs or audio files that you want to copy and the copy destination USB flash drive in advance to the USB TO DEVICE terminals.

NOTICE

Firmly insert the USB flash drives into the USB TO DEVICE terminal. Do not disconnect the USB flash drives or turn off the power to the Electone during the operation. Data may be damaged.

NOTE

- XG Songs cannot be copied if the copy destination contains 120 XG Songs. Folders cannot be copied if the copy destination contains 120 folders. Furthermore, a Song with a name/path that is too long may not be copied to the root directory, even if the number of XG Songs or folders is still within the maximum capacity.
- If the folder to be copied contains files in a format that the Electone does not support, those files will not be copied.

1 Select the Song, folder, or audio file that you want to copy.

For instructions on selecting a file, see [page 92](#).

2 Press [COPY] in the [TOOLS] tab of the MUSIC DATA RECORDER display.

The COPY TO window appears.

For Songs (MIDI)



3 Select the folder or USB flash drive where the copied data is to be saved, and then press [COPY].

If [CANCEL] is pressed instead of [COPY], it returns to the previous display without copying the data.

The names of the Songs, folders, and audio files in the copy destination will be the same as the originals. If a file with the same name exists in the copy destination, it will be saved under a different name such as "SONG_xxx" becoming "SONG_yyy" (xxx/yyy: numbers). If you copy an XG Song to another folder or USB flash drive that contains an XG Song with the same name, a message appears prompting confirmation to overwrite the Song. Selecting [OVERWRITE] overwrites the XG Song in the copy destination.

NOTICE

Do not disconnect the USB flash drive or turn off the power to the Electone while copying. Data may be damaged.

NOTE

- When copying a folder, the estimated copying time is shown. Note that the actual copying time may be longer. If you need to cancel copying, press [INTERRUPT]. The copy operation is actually canceled after the current folder has been copied. If you cancel the operation, be sure to check which files were successfully copied, and delete them if desired.
- When copying an entire USB flash drive, the folder name "#MEDIA" will be created in the destination folder.
- If the message "The source folder hierarchy is too deep" or "Path name is too long" is displayed, change the hierarchy or rename the folders/files to make the path shorter.
- The copy operation will automatically stop if an unrecognizable file is detected in the folder.

Copying (Moving) a Protected Song

A Protected Song (page 93) can be copied within the same folder, but it cannot be copied to another folder or USB flash drive. When another folder or USB flash drive is specified as the copy destination, a message will appear to indicate the Song is will be moved. Press [MOVE] to move the Protected Original Song (🔒) and Protected Edit Song (🔒) together (removed from the original folder). In this case, it is a move rather than a copy operation.

If you copy a folder which contains both Non-protected Songs and Protected Songs, the copy operation will be automatically executed for only non-protected Songs, and Protected Song will be moved (not copied).

NOTE

If you copy a Protected Song to the same folder as the source Song, the copied Song will become a Protected Edit Song.

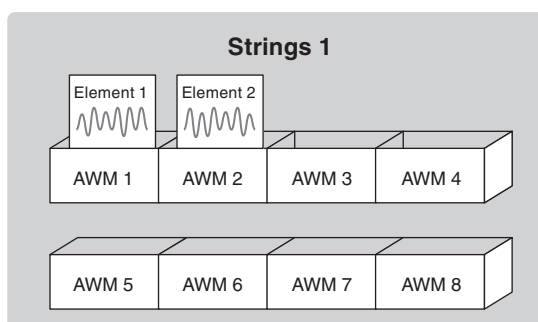
You can change the timbre and volume of the preset Voices on the Electone to create original Voices. This is called the Voice Edit function. We suggest that you first read through the “Voice Structure” below to get a firm understanding of what comprises a Voice. Once you understand the Voice structure, try actually editing a Voice yourself.

Voice Structure

Before we start editing a Voice, let's take a detailed look at how each Voice is created. In addition, see the section titled, “About the Tone Generators” ([page 39](#)).

AWM Voice Structure

AWM Voices are created using materials (AWM Tone Generators) made by sampling the sounds of acoustic instruments. However, it is not the case that a single Voice is composed of just one sampled sound. Instead, each Voice is created by layering up to eight sampled sound. Layering multiple samples to create a single Voice produces breadth and depth in the Voice. Each individual sample that makes up a Voice is called an “Element.” The Elements are contained in eight boxes labeled AWM 1 – AWM 8. For example, Strings 1 is composed of two Elements as shown in the illustration below.



Elements for other Voices may be placed in the empty boxes (AWM 3 – 8). For example, you can create sounds by combining Elements from multiple Voices such as putting a brass Element into AWM 3 to create a tutti sound for your preferences.

VA Voice Structure (ELS-03X/ELS-03XR/ELS-03XF only)

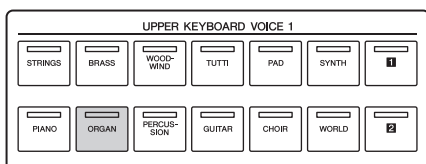
VA Voices are made by simulating the characteristic behavior of acoustic instruments (VA Tone Generator). In Voice Edit, you can edit the VA Voice's volume and timbre. Moreover, you can also add AWM Elements to a VA Voice to create your own original Voice. VA Voices can be selected from the User button for Lead Voice 2 ([page 27](#)).

Basic operations for Voice Edit

1 Press a Voice button to call up the Voice to be edited to the keyboard.

For example, if you want to edit the “Pipe Organ 1” Voice, select “Pipe Organ 1” with the [ORGAN] button in any Voice section.

Use the Sliders on the left side of the Upper Keyboard to lower the volume of the Voice sections other than the one to be edited ([page 48](#)).

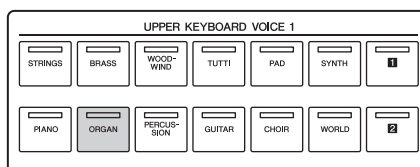
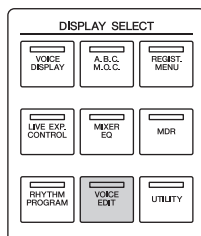


NOTE

- Super Articulation Voices, which have Voice names that start with “S-,” cannot be edited.
- (ELS-03X, ELS-03XR, ELS-03XF only) VA Voices can be selected from the User button for Lead Voice 2 ([page 27](#)).

2 While holding down the DISPLAY SELECT [VOICE EDIT] button, press the Voice button of the Voice you want to edit.

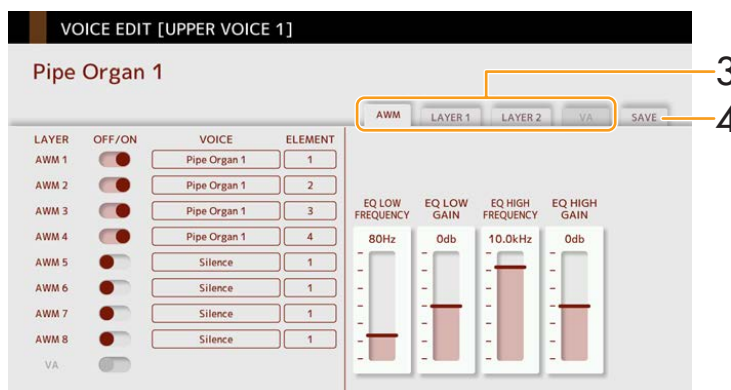
While pressing the [VOICE EDIT] button, the message “SELECT EDIT VOICE” is shown. Press the Voice button while the message is shown.



3 When the VOICE EDIT display is called up, edit the Voice on the [AWM] tab, [LAYER 1] tab, [LAYER 2] tab, or the [VA] tab.

For details about the editing, see [page 117](#) for AWM Voices and [page 121](#) for VA Voices.

VOICE EDIT display



NOTE

- To cancel editing, press the DISPLAY SELECT [VOICE EDIT] button.
- (ELS-03X/ELS-03XR/ELS-03XF only) You can select the [VA] tab only when a VA Voice is selected.

- 4 Select the [SAVE] tab.**
- 5 Press the User Voice number (User 1 – 80) or the VA Custom Voice number (V-Custom 1 – 6) that you want to use as the save destination.**

You can save up to 80 AWM Voices as User Voices and 6 VA Voices as VA Custom Voices. Pressing the Voice number displays a confirmation message.

AWM Voices



VA Voices



- 6 Press [SAVE] or [RENAME] to save the edited Voice.**

If [RENAME] is selected, rename the Voice and save it. The character entry method is the same as the one in the MDR ([page 111](#)). However, a maximum of 16 characters can be entered. When saving is complete, a message indicating the completion appears briefly. The new Voice name can be confirmed on the Voice display or the Voice Menu display.

NOTICE

When an edited Voice is saved, the Voice that was stored in the User Voice number or VA Custom Voice number is overwritten and erased. Be careful not to lose any important data.

- 7 Press the [VOICE EDIT] button on the panel to exit Voice editing.**

If there is an unsaved, edited Voice, a confirmation message for the operation without saving appears. Press [EXIT] if you do not wish to save the edited Voice and [CANCEL] to continue editing.

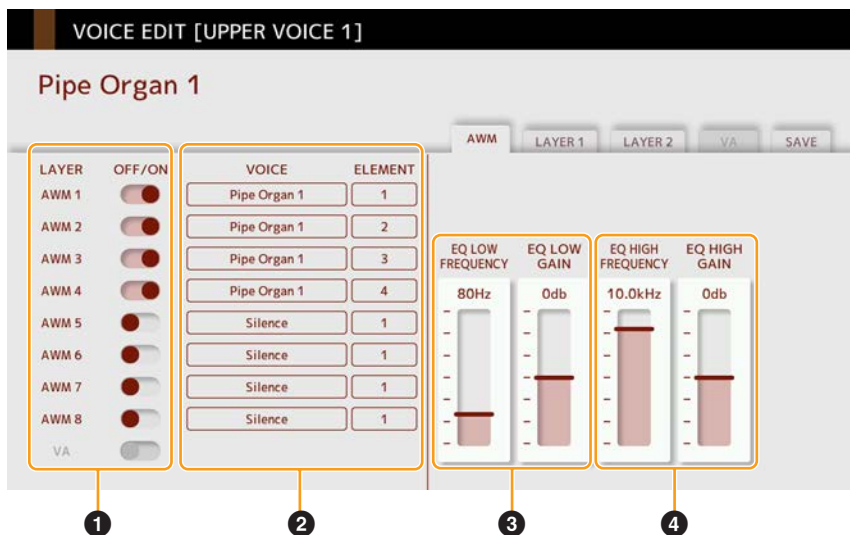
- 8 The edited Voice can be called up from the User button.**

For details, see [page 27](#).

Editing an AWM Voice

You can edit an AWM Voice in the [AWM] tab, [LAYER 1] tab, and [LAYER 2] tab of the VOICE EDIT display. The [AWM] tab is a page for adjusting the overall tonal balance of the Voice, while the [LAYER 1] and [LAYER 2] tabs are for detailed editing of each Element that makes up the Voice.

[AWM] tab

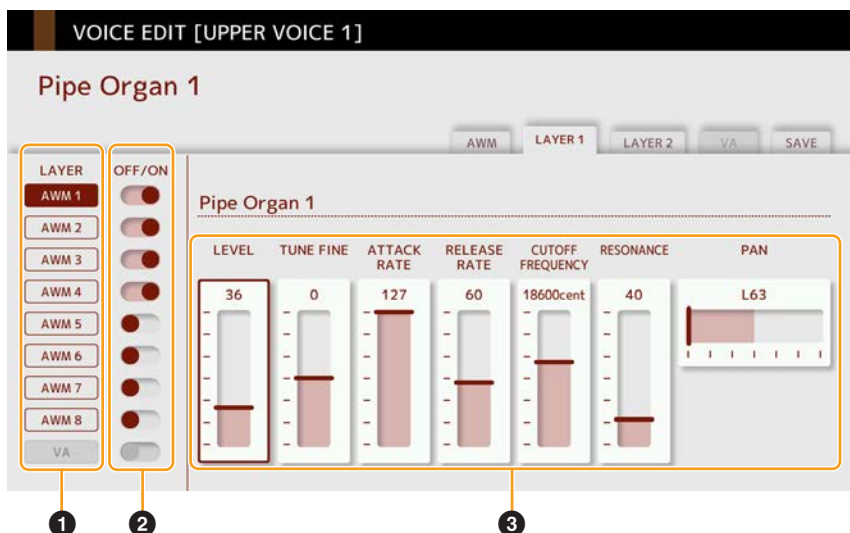


①	Element ON/OFF	Indicates the eight Elements of the AWM Tone Generator and the VA Tone Generator. Switches each of the AWM 1 – 8 layers on (unmuted) or off (muted). VA cannot be turned on when an AWM Voice is selected.
②	VOICE	Indicates the Element currently being edited. In the example display above, Elements 1 – 4 of “Pipe Organ 1” are assigned to AWM 1 – 4, and no Voices are assigned to AWM 5 and the subsequent layers. You can also call up another Element from another Voice and replace the currently selected Element with it. When you press each VOICE or ELEMENT button, the VOICE SELECT or ELEMENT SELECT window appears. Select the desired Voice or Element and press [CLOSE]. If you change the Voice, the Element will automatically change to the first Element of the Voice (usually Element 1).
	ELEMENT	
③	EQ LOW FREQUENCY	Sets the frequency and gain (level) of the low frequency band. With the FREQUENCY slider, set the frequency at which you want to change the gain within a range of 32 Hz to 2.0 kHz. With the GAIN slider, adjust the signal level around the frequency set with the FREQUENCY slider within a range of –12 dB to +12 dB (+6 dB doubles the original gain, –6 dB halves the original gain).
	EQ LOW GAIN	
④	EQ HIGH FREQUENCY	Sets the frequency and gain (level) of the high frequency band. With the FREQUENCY slider, set the frequency at which you want to change the gain within a range of 500 Hz to 16.0 kHz. With the GAIN slider, adjust the signal level around the frequency set with the FREQUENCY slider within a range of –12 dB to +12 dB (+6 dB doubles the original gain, –6 dB halves the original gain).
	EQ HIGH GAIN	

EQ (Equalizer)

The equalizer (EQ) divides the sound into several frequency bands and raises or lowers the level (gain) of each band to correct the tonal balance. It was originally designed to correct the sound field environment to match the characteristics of amplifiers, speakers, or the room (for example, reducing low-frequency sounds in a room where the bass resonates too much), but the equalizer can also be used for active sound creation. It is an essential effect for bringing out the unique characteristics of a song, such as making classical music more refined, pop music more crisp, or rock music more dynamic.

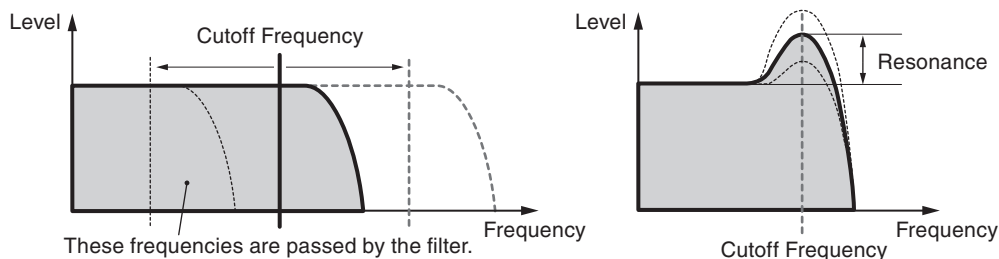
[LAYER 1] tab



❶	Element selection	Selects the Element to be edited.
❷	Element ON/OFF	Indicates the eight Elements of the AWM Tone Generator and the VA Tone Generator. Switches each of the AWM 1 – 8 layers on (unmuted) or off (muted). VA cannot be turned on when an AWM Voice is selected. Muting all other Elements except for the one you are editing lets you clearly hear that single Element for ease in editing. Note that when some Elements are muted, playing the keyboard in certain key areas or with certain velocities may result in no sound.
❸	LEVEL	Determines the output level of the currently selected Element. Range: 0 – 127
	TUNE FINE	Fine tunes the pitch of the currently selected Element. Range: –64 – +63
	ATTACK RATE	Determines how quickly the sound will reach its maximum output level after the key is pressed. Higher values produce a faster attack. Some Elements are not affected by the ATTACK RATE setting. Range: 0 – 127
	RELEASE RATE	Determines how much time it takes for the output level to reach 0 after the key is released. Higher values make the time shorter. Range: 1 – 127
	CUTOFF FREQUENCY	Determines the cutoff frequency of the filter (page 119). Range: 9600 – 24000 cents
	RESONANCE	Determines the amount of resonance (harmonic emphasis). Emphasize the harmonics near the cutoff frequency to produce a distinctive tone. Higher values emphasize the harmonics to greater degree. Some Elements may not be affected much by this parameter. Range: 16 – 140
	PAN	Determines the position of the Element in the stereo image. Range: L64 – R63

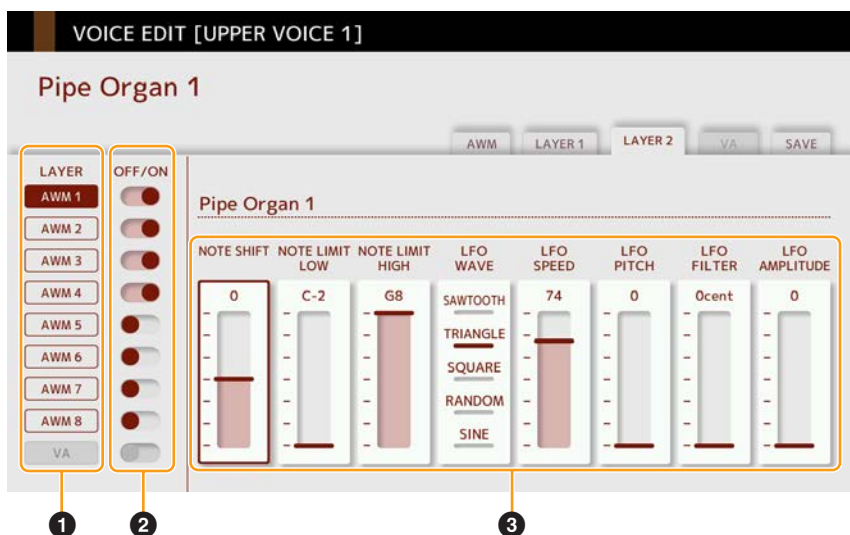
Filter — Cutoff Frequency and Resonance

The filter is a mechanism that allows specific frequency bands to pass while blocking the output of signals at other frequencies. This Electone is equipped with a low pass filter, which passes only those signals below the cutoff frequency and cuts signals above it.



The cutoff frequency determines which range of frequencies are allowed to pass. Signals below the cutoff frequency are allowed to pass while other high frequencies are cut. Generally, when more high frequency sound is cut, the tone becomes darker as the cutoff frequency is lowered. The parameter called “resonance” serves to strengthen the signal level around the cutoff frequency, which has the effect of producing a distinctive sound.

[LAYER 2] tab



①	Element selection	Selects the Element to be edited.
②	Element ON/OFF	Indicates the eight Elements of the AWM Tone Generator and the VA Tone Generator. Switches each of the AWM 1 – 8 layers on (unmuted) or off (muted). VA cannot be turned on when an AWM Voice is selected. Muting all other Elements except for the one you are editing lets you clearly hear that single Element for ease in editing. Note that when some Elements are muted, playing the Keyboard in certain key areas or with certain velocities may result in no sound.
③	NOTE SHIFT	Determines the pitch settings in semitones. Range: -64 – +63
	NOTE LIMIT LOW	Determines the lowest and highest notes in the range for which the Element sounds. Sound is only produced between the lowest note (Low) and the highest note (High) set here. The setting of the HIGH slider cannot be set lower than that of the LOW slider. Some Elements are not affected by this parameter. Range: C-2 – G8
	NOTE LIMIT HIGH	
	LFO WAVE	Selects the output waveform oscillated from the LFO. See page 120 for information about LFO.
	LFO SPEED	Determines the speed of the LFO waveform. Higher values make the speed faster. Range: 2 – 93

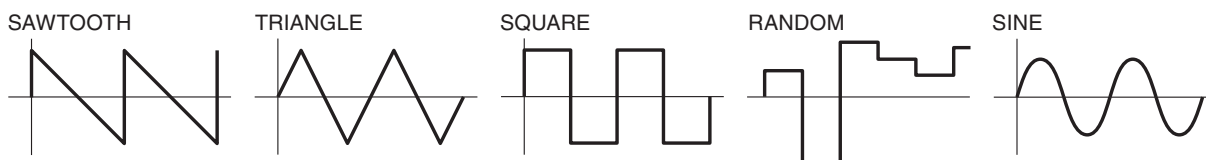
③	LFO PITCH	Determines the amount by which the LFO waveform varies the pitch of the sound. Higher values result in a greater amount of pitch change. When set to 0, the pitch does not change. Range: 0 – 400
	LFO FILTER	Periodically varies the cutoff frequency of the filter with the LFO. Higher values result in a greater amount of frequency change. When set to 0, the frequency does not change. Range: 0 – 4800 cents
	LFO AMPLITUDE	Periodically changes the volume with the LFO. Higher values result in a greater amount of amplitude change. When set to 0, the volume does not change. Range: 0 – 128

NOTE

For User Voices created by editing the LFO-related parameters, it is recommended that you set VIBRATO to “PRESET” on the [CONDITION 3] tab of the Voice Condition display (page 34). If VIBRATO is set to “USER,” it may become difficult to hear the LFO effect due to the impact of the depth and speed.

LFO (Low Frequency Oscillator)

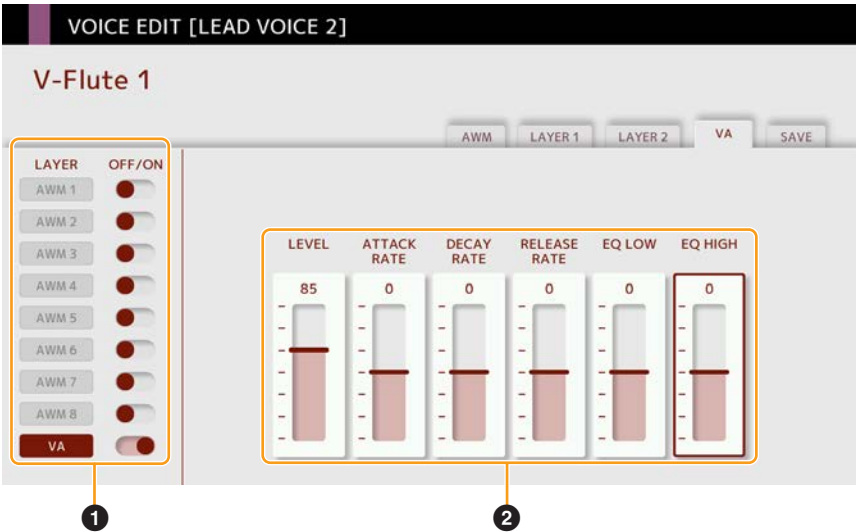
The LFO creates waveforms of a low frequency. These waveforms can be used to vary the pitch, filter or amplitude to create effects such as vibrato, wah and tremolo. The following five waveforms are available. Try out various waveforms to see what kinds of effects you can achieve.



Editing a VA Voice (ELS-03X/ELS-03XR/ELS-03XF only)

You can edit a VA Voice in the [VA] tab of the VOICE EDIT display.

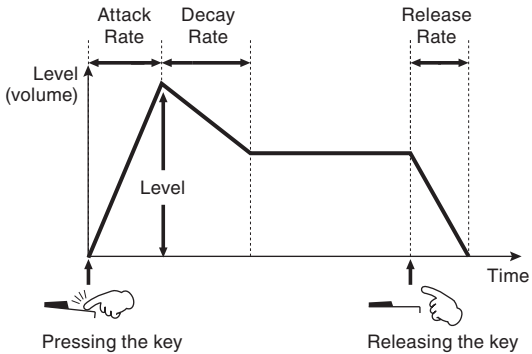
[VA] tab



1	Element ON/OFF	Indicates the eight Elements of the AWM Tone Generator and the VA Tone Generator. Switches each Element on (unmuted) or off (muted). When a VA Voice selected for editing, there are no elements in AWM 1 – 8. If you want to create a Voice that adds AWM Elements to a VA Voice, set the Elements to be layered on the [AWM] tab and the [LAYER 1] and [LAYER 2] tabs. For details, see AWM Voice editing (page 117).
2	LEVEL	Determines the output level. Range: 0 – 127
	ATTACK RATE	Determines how quickly the sound will reach its maximum level after the key is pressed. Positive values (plus) increase the attack speed of the sound, and negative values (minus) decrease the attack speed. Range: –64 – +63
	DECAY RATE	Determines how much time it takes to reach its second level from the first (maximum) level; in other words, how long the sound continues while the key is pressed. Range: –64 – +63
	RELEASE RATE	Determines how much time it takes for the level to reach 0 after the key is released. Positive values (plus) make the time shorter and negative values (minus) make it longer. Range: –64 – +63
	EQ LOW	Determines the level (volume) of the low range frequencies. Positive values (plus) boost or increase the level, while negative values (minus) decrease or cut it. Range: –64 – +63
	EQ HIGH	Determines the level (volume) of the high range frequencies. Positive values (plus) boost or increase the level, while negative values (minus) decrease or cut it. Range: –64 – +63

Envelope parameters

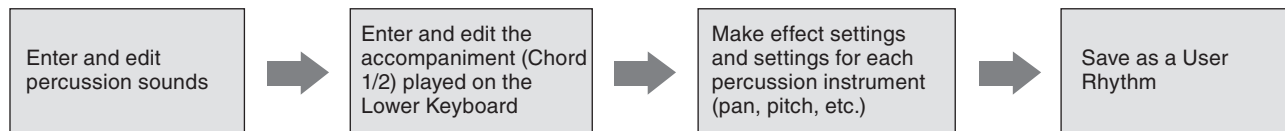
The way the sound responds when a key is pressed, how the volume and timbre change while the key is held, and how the sound decays after a key is released, etc. differ for each individual instrument. That set of waveform characteristics is called an “envelope.” The parameters in 2 above change this envelope.



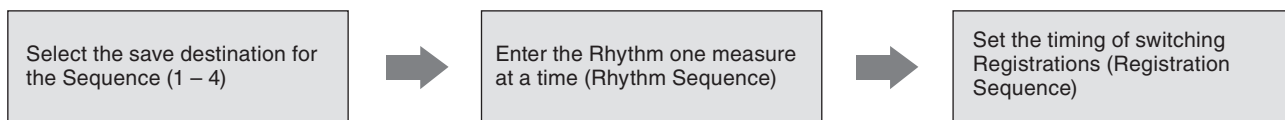
Rhythm Program includes two functions: Rhythm Pattern Program and Rhythm Sequence Program.

Rhythm Pattern Program allows you to create original Rhythm Patterns by editing Preset Rhythms or by entering percussion sounds yourself. Rhythm Sequence Program lets you program the data for one Song by assembling Preset Rhythms and User Rhythms measure by measure to play the Rhythms in the desired order. Moreover, you can set the Registrations to automatically switch in sync with the programmed Rhythm Sequence.

- **Rhythm Pattern Program (pages from 123 to 135)**



- **Rhythm Sequence Program (pages from 136 to 145)**



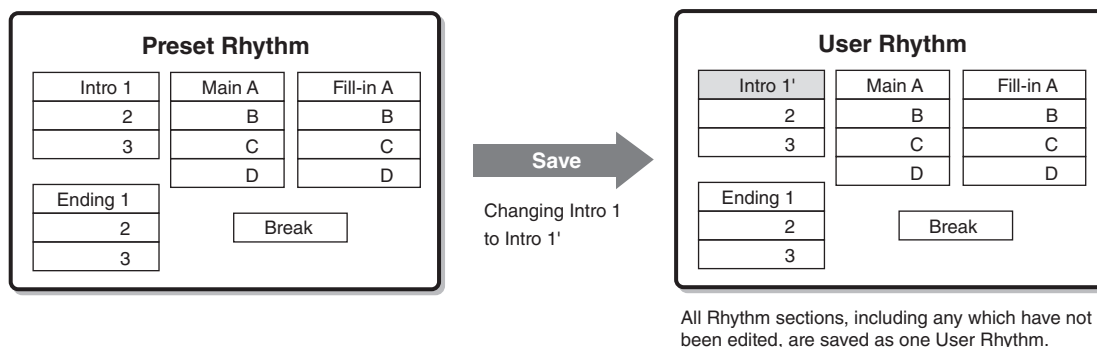
You can save the created Rhythm Pattern or Rhythm Sequence as a Unit to a USB flash drive similar to Registrations. For details, see [page 98](#). For instructions on how to load the data saved on a USB flash drive to the Electone, see [page 101](#).

Creating an Original Rhythm (Rhythm Pattern Program)

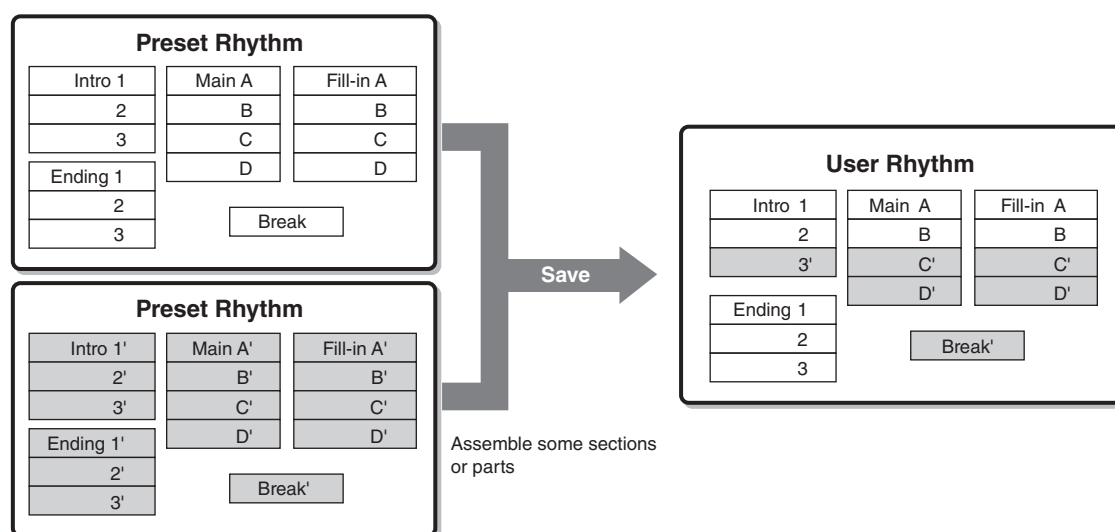
Rhythm Pattern Program lets you use any of the percussion instrument sounds or sound effects assigned to each key on the Upper and Lower Keyboards in creating your own Rhythms. You can change part of an existing Rhythm to create a new Rhythm or create your own original Rhythm by entering the percussion sounds one by one from scratch. Up to 48 original patterns can be saved as User Rhythms.

A single Rhythm consists of 15 sections: Intro 1 – 3, Main A – D, Fill-in A – D, Break, and Ending 1 – 3. You can enter or edit percussion instrument sounds for each section or assemble sections by copying from the other Rhythms to create your own original Rhythm. You can also create new sections from scratch.

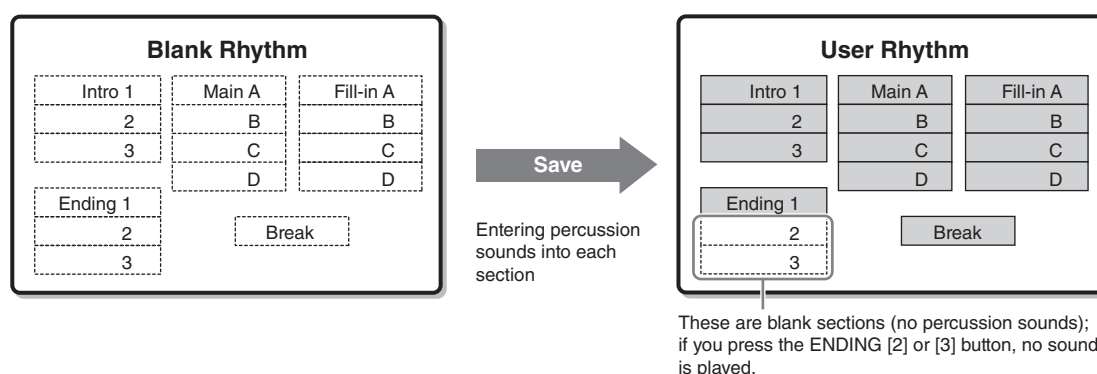
Case 1: Creating your own Rhythm by changing a Preset Rhythm



Case 2: Creating your own Rhythm by assembling sections from other Rhythms



Case 3: Creating your own Rhythm from scratch



Basic operations for Rhythm Pattern Program

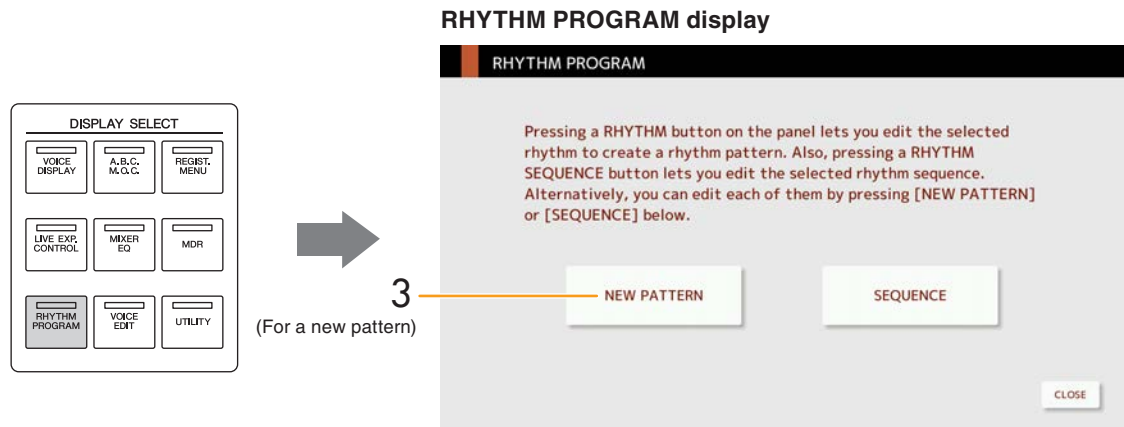
If there is a Preset Rhythm or an existing Rhythm similar to your ideal Rhythm pattern, you can save time and conveniently that Rhythm as a basis to program a new Rhythm.

1 When using an existing Rhythm, select the Rhythm to be used as the basis for a new Rhythm.

NOTE

- Rhythms with a “+” at the end of their Rhythm name cannot be used as a basis for creating a Rhythm. They also cannot be used for “COPY FROM” when assembling (page 125).
- When you create a Rhythm Pattern using an existing Rhythm, all of the unedited sections are also saved. Therefore, the remaining memory capacity (page 126) may inadvertently decrease. To save on memory capacity, it is recommended that you delete unnecessary sections that you do not intend to use by pressing [CLEAR PART] on the display in step 4.

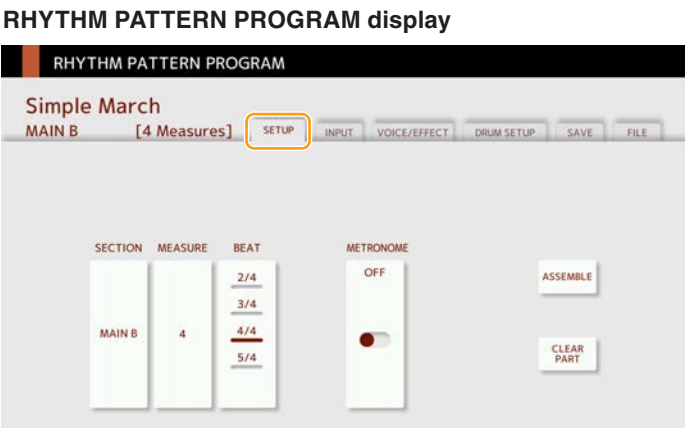
2 Press the DISPLAY SELECT [RHYTHM PROGRAM] button to call up the RHYTHM PROGRAM display.



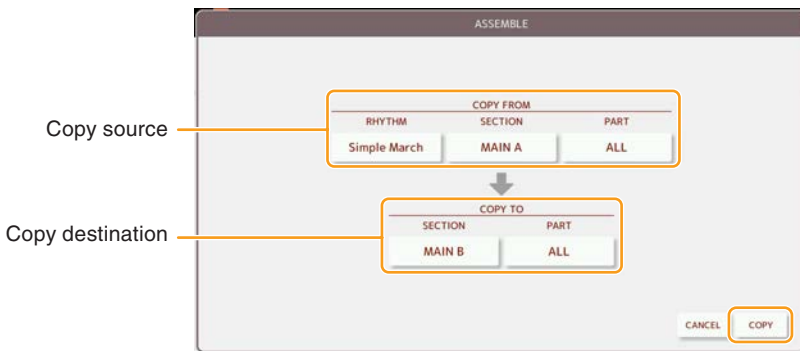
3 When using an existing Rhythm, press the Rhythm button on the panel for the Rhythm to be used as the basis for the new pattern. When creating a new pattern, press [NEW PATTERN] on the display.

The RHYTHM PATTERN PROGRAM display appears.

4 In the [SETUP] tab, make the basic settings for the Rhythm.



SECTION	Determines a section to which you want to enter or edit the Rhythm pattern. After selecting the section, you can check the selected Rhythm by pressing the RHYTHM CONTROL [START] button on the panel to start Rhythm playback. You can also change the section while the Rhythm is playing.
MEASURE	Determines the length of the Rhythm pattern (number of measures). If you select Break or Fill-in as the section, the measure value cannot be changed.

BEAT	Determines the time signature used for the Rhythm. When programming based on an existing Rhythm, a confirmation message will appear if you select a beat which differs from that Rhythm. Select [CLEAR] if it is fine to erase the data for all sections. If [CANCEL] is pressed, the beat remains unchanged.
METRONOME	Turns the metronome click on or off. When the metronome is turned on and the Rhythm is played, the metronome will sound in sync with the beat. It is helpful to turn the metronome on during Real Time Write (page 129).
ASSEMBLE	Copies parts from another Rhythm to the currently selected Rhythm. You can assemble various sections from multiple Rhythms to create your original Rhythm. In the ASSEMBLE window, select the copy source (Rhythm, section, and part), and then select the copy destination (section and part). You can copy just one percussion or accompaniment part or all parts at once. Press [COPY] to execute the operation.  You can also select a Rhythm pattern currently being created as the copy source. For example, to create a MAIN B section based on MAIN A, create the MAIN A Rhythm pattern first, then copy it to MAIN B, and then edit the MAIN B as desired. To select the Rhythm currently being created as the copy source, select [Current Rhythm] on the 5th page of the “USER RHYTHM” category.
CLEAR PART	Clears unnecessary parts in the current Rhythm section. Select the part you want to clear in the CLEAR PART window. You can only select a part that contains data. Selecting [ALL] clears all data for the selected section. To conserve the remaining memory capacity (page 126), delete unnecessary sections which may not be used for your performance. When the confirmation message appears, press [CLEAR] to delete the data. Pressing [CANCEL] aborts the operation without erasing anything. NOTE If you select BASS here, the bass part will not sound when using the A.B.C. function (page 64).

5

In the [INPUT] tab, enter the percussion parts (Main Drum and Add Drum).

There are two methods you can use: Step Write and Real Time Write. Select the method based on the type of Rhythm you want to create and your own preference. You can switch between the two methods to create a single Rhythm by using one for each part. This would be convenient, for example, in programming the basic beats of a Rhythm with Step Write, and then using Real Time Write to add percussion accents and embellishments.

- **Step Write:** A method for creating a rhythm pattern by entering percussion sounds one by one, specifying information such as “which beat of which measure,” “which percussion instrument,” and “at what volume it should sound.” Step Write is good for precision and for entering percussion sounds whose note placement and rhythmic value has been determined, such as a bass drum that plays on every beat in a measure. See page 127 for instructions on Step Write.
- **Real Time Write:** A method for creating a rhythm pattern where the percussion sounds played on the keyboard are directly recorded as data and you layer new parts one after another while listening to the previously recorded sounds. Real Time Write is best for capturing the “feel” of a rhythm, because it allows you to actually play the pattern as you are creating it. See page 129 for instructions on Real Time Write.

6 In the [INPUT] tab, enter the Rhythmic patterns (Chord 1, Chord 2).

Chord 1 and Chord 2 in the accompaniment part can be entered manually, just like the percussion parts, allowing you to create your original backing patterns. The entry method is the same as for the percussion parts. See [page 127](#) for instructions on Step Write, and [page 129](#) for Real Time Write. However, make sure to select [CHORD 1] or [CHORD 2] in step 1. Remember that a C major triad chord (C, E, and G) will sound regardless of which keys are pressed on the keyboard when entering the rhythmic parts.

NOTE

Other accompaniment parts cannot be entered (Pad, Phrase 1, Phrase 2), but the Voices can be changed for each part. Voices can be changed in the [VOICE/EFFECT] tab. See [page 133](#).

7 In the [VOICE/EFFECT] tab, set the volume and effects, etc. for each part.

For details, see [page 133](#).

8 In the [DRUM SETUP] tab, set the volume and pitch, etc. for each percussion instrument.

For details, see [page 134](#).

9 Confirm the rhythm pattern details before saving the data.

The rhythm pattern you have created will be saved with 15 sections collectively combined into one rhythm. Before saving, it is recommended that you confirm that all of the sections you want to save contain the desired contents.

Example: When saving the Main A and Main B rhythm patterns you have created into one User Rhythm In the [SETUP] tab ([page 124](#)), select Main A as the section and press the RHYTHM CONTROL [START] button. This plays back the Main A pattern you have created. Confirm that the rhythm pattern is what you want to save as Main A. Next, play Main B to confirm that rhythm pattern as well. If the data that you want to save is not present, call it up with [ASSEMBLE].

After confirming the desired section (Main A and Main B here), we recommend that you confirm that all other sections do not contain any data. If unnecessary data is contained in some sections which you do not want to save, delete that unnecessary data. In the [SETUP] tab, you can erase unnecessary sections with [CLEAR PART].

10 In the [SAVE] tab, save the data.

You can save your newly created rhythm pattern as a User Rhythm up to a maximum of 48 patterns. Select the User Rhythm number where you want to save the pattern, and then press [SAVE] when the confirmation message appears. If [CANCEL] is pressed, the data will not be saved.



NOTE

If the remaining memory capacity is insufficient, a message appears to indicate that, and you will not be able to save the data. Check through all fifteen sections to erase any unnecessary or low-priority percussion data and try to save the pattern again. Erase section data using [CLEAR PART] in the [SETUP] tab ([page 125](#)). To prevent insufficient memory capacity, it is recommended that you frequently check the remaining memory on this [SAVE] tab when entering data.

NOTICE

After saving the rhythm pattern, be sure to exit the Rhythm Pattern Program using the method in step 11. Otherwise, the edited content will be lost.

11 Press the DISPLAY SELECT [RHYTHM PROGRAM] button to exit from the RHYTHM PATTERN PROGRAM display.

If there is unsaved data, a message will appear prompting confirmation if it is fine to exit without saving. To exit without saving, press [EXIT]. When saving, press [CANCEL] and perform the operation in step 10.

12 The User Rhythms created in the Rhythm Pattern Program can be called up from the User buttons.

For details, see [page 59](#).

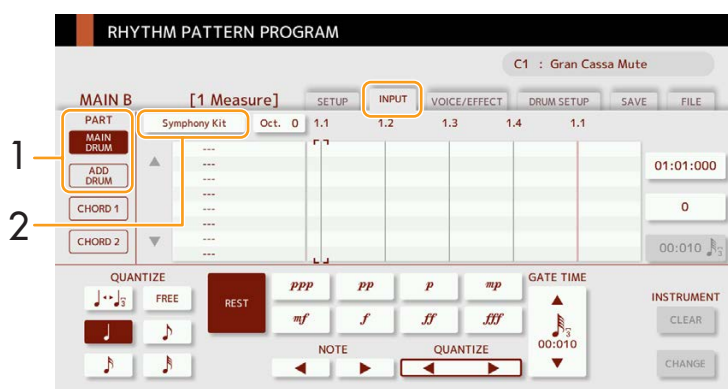
Inputting sounds one by one for the percussion parts (Step Write)

This explanation corresponds to step 5 on [page 125](#). In Step Write, you create a rhythm pattern by entering percussion sounds one by one, specifying information such as “which beat of which measure,” “which percussion instrument,” and “at what volume it should sound.” Before starting, use the Sliders to lower the volume of all parts except RHYTHM ([page 48](#)). Ensuring that only the Rhythm sounds when a key is pressed makes it easier to confirm the sounds you are entering.

Step Write is performed in the [INPUT] tab of the RHYTHM PATTERN PROGRAM display.

1 Select the percussion part (MAIN DRUM or ADD DRUM) to input at the left side of the display.

Input percussion instruments in the Main Drum or Add Drum parts. Ordinarily, the main percussion instruments are entered into Main Drum while tambourines and other embellishments are entered into Add Drum.



2 Press the kit name at the top left of the display to call up the KIT SELECT window, and then select the percussion kit that you want to enter.

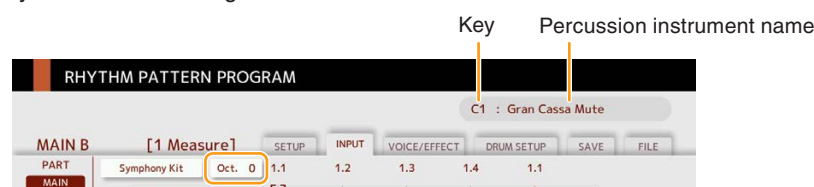
You can select from the two categories of [DRUMS] and [SFX]. When you have selected the kit that you want to use, press [CLOSE]. The selected kit is called up to the Upper and Lower Keyboards. For details about each kit, refer to the “Rhythm Pattern Program Kit List” in the Data List (<https://manual.yamaha.com/mi/rt/els03/>).

NOTE

You can select only one kit each for Main Drum and Add Drum. When you want to create a rhythm pattern including two different kits, select one kit for Main Drum and another for Add Drum.

3 Press the key on the Upper or Lower Keyboard to which the percussion instrument you want to enter is assigned.

When the key is pressed, the percussion instrument’s name appears at the upper right of the display, and you will be able to enter it. Some kits contain so many percussion instruments that there are not enough keys on the standard Upper and Lower Keyboards to accommodate them. In that case, press [Oct.0] to the right of the kit name and shift the keyboard within a range of –1 to +3 octaves.

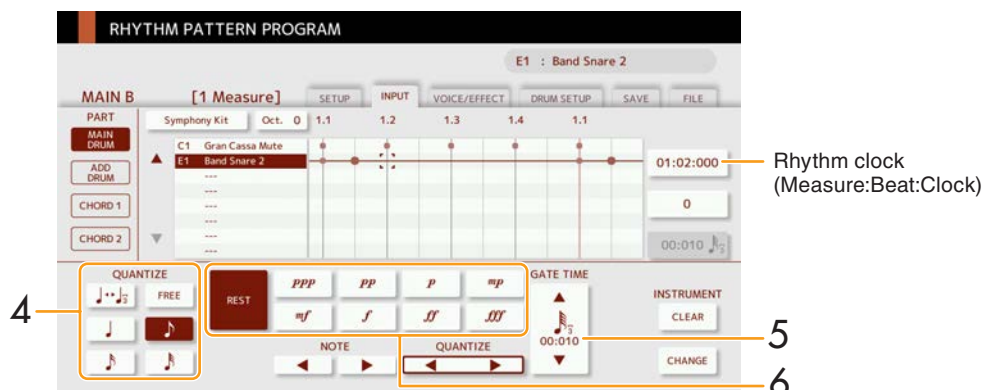


NOTE

Some of the percussion instrument sounds you can select here are created by using the tone generation technology called “Revo Drums.” When you play the same instrument sound repeatedly, the different types of waveforms are output to reproduce more natural sound like a real drum. For information on which percussion instrument is using the Revo Drums technology, refer to the “Rhythm Pattern Program Kit List” in the Data List (<https://manual.yamaha.com/mi/rt/els03/>).

4 Set the appropriate Quantize value.

For details on Quantize, see [page 131](#).



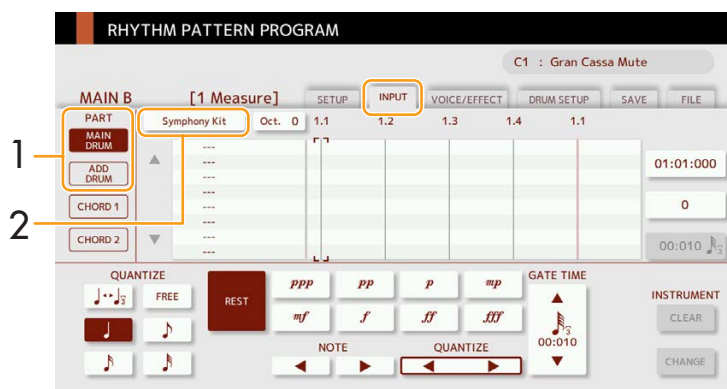
Inputting percussion parts by pressing keys on the keyboard (Real Time Write)

This explanation corresponds to step 5 on [page 125](#). In Real Time Write, you enter percussion sounds with the keys while listening to the metronome or rhythms that have already been entered. The played sounds are directly entered as the rhythm.

Real Time Write is performed on the [INPUT] tab of the RHYTHM PATTERN PROGRAM display.

1 Select the percussion part (MAIN DRUM or ADD DRUM) to input at the left side of the display.

Input percussion instruments in the Main Drum or Add Drum parts. Ordinarily, the main percussion instruments are entered into Main Drum while tambourines and other embellishments are entered into Add Drum.



2 Press the kit name at the top left of the display to call up the KIT SELECT window, and then select the percussion kit that you want to enter.

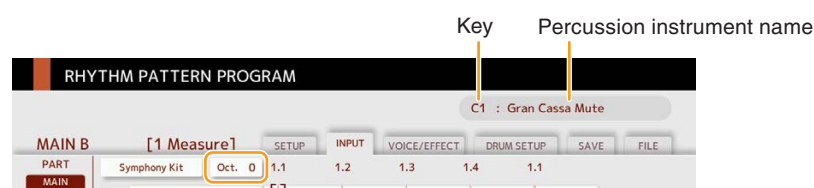
You can select from the two categories of [DRUMS] and [SFX]. When you have selected the kit that you want to use, press [CLOSE]. The selected kit is called up to the Upper and Lower Keyboards. For details about each kit, refer to the “Rhythm Pattern Program Kit List” in the Data List (<https://manual.yamaha.com/mi/rt/els03/>).

NOTE

You can select only one kit each for Main Drum and Add Drum. When you want to create a rhythm pattern including two different kits, select one kit for Main Drum and another for Add Drum.

3 Press the key on the Upper or Lower Keyboard to which the percussion instrument you want to enter is assigned.

When the key is pressed, the percussion instrument’s name appears at the upper right of the display, and you will be able to enter it. Some kits contain so many percussion instruments that there are not enough keys on the standard Upper and Lower Keyboards to accommodate them. In that case, press [Oct.0] to the right of the kit name and shift the keyboard within a range of -1 to +3 octaves.

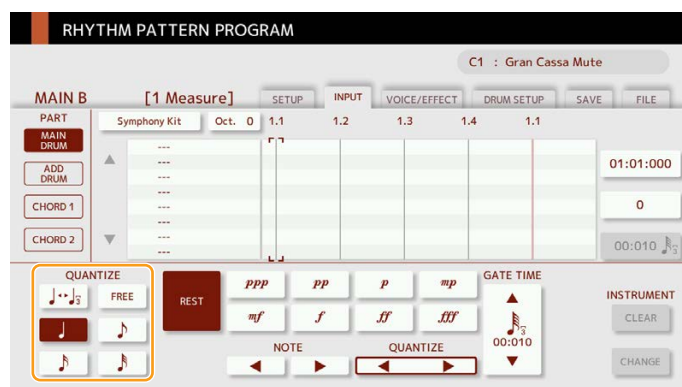


NOTE

Some of the percussion instrument sounds you can select here are created by using the tone generation technology called “Revo Drums.” When you play the same instrument sound repeatedly, the different types of waveforms are output to reproduce more natural sound like a real drum. For information on which percussion instrument is using the Revo Drums technology, refer to the “Rhythm Pattern Program Kit List” in the Data List (<https://manual.yamaha.com/mi/rt/els03/>).

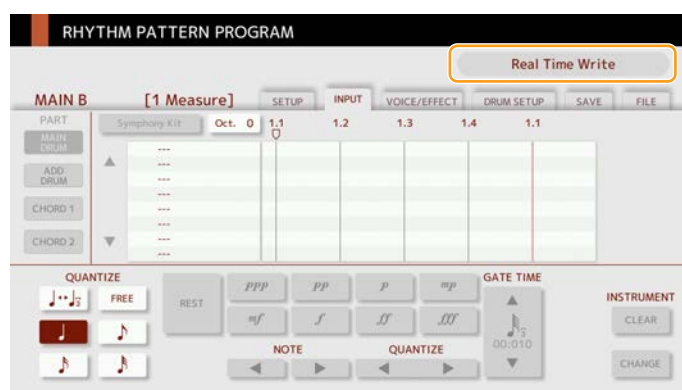
4 Set the appropriate Quantize value.

The positions at which the sounds are entered will be corrected according to the predetermined Quantize value in the Real Time Write operation. For details on Quantize, see [page 131](#).



5 Press the RHYTHM CONTROL [START] button.

If you are using an existing Rhythm, the Rhythm playback starts. If you are creating from scratch, the metronome starts. “Real Time Write” appears at the upper right of the display to indicate that it is ready to enter the Rhythm by pressing the keys. The tempo can be adjusted with the TEMPO [△]/[▽] buttons.



6 Along with the Rhythm (or metronome), play the percussion instruments by pressing the keys where the desired percussion sounds are assigned.

The pattern will automatically repeat (or “loop”) for a certain number of measures as set in the [SETUP] tab.

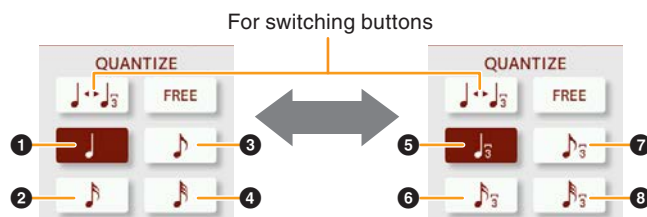
7 Repeat steps 3 through 6 above to layer each percussion instrument and complete your own rhythm.

The data can be edited or erased if you make an entry error, etc. See [page 132](#).

When completed, go on to step 6 on [page 126](#).

About Quantize

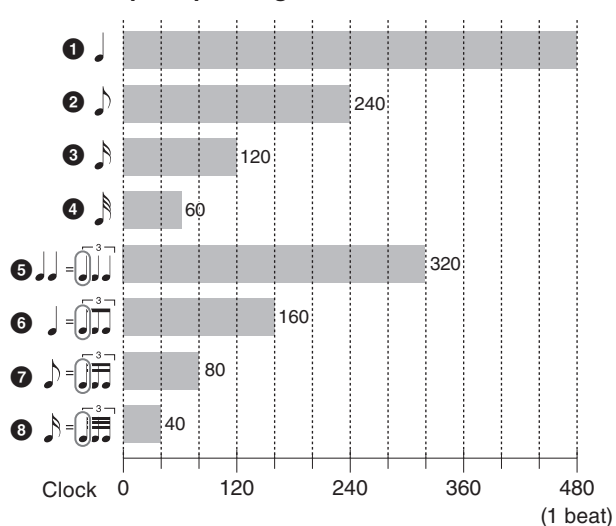
The Quantize function lets you set the input timing for percussion instrument sounds during Step Write or the precision for correcting the timing during Real Time Write. You can select from nine different Quantize values or note lengths. Switch the QUANTIZE buttons with the button at the top left.



• Step Write

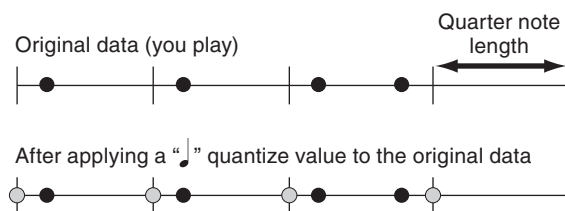
You can input percussion sounds with the selected quantization. The clock corresponding to the quantization is shown in the [INPUT] tab. When Quantize is set to “FREE” the timing can be moved in increments of 1 clock (1/480 beat).

Steps depending on the Quantize values



• Real Time Write

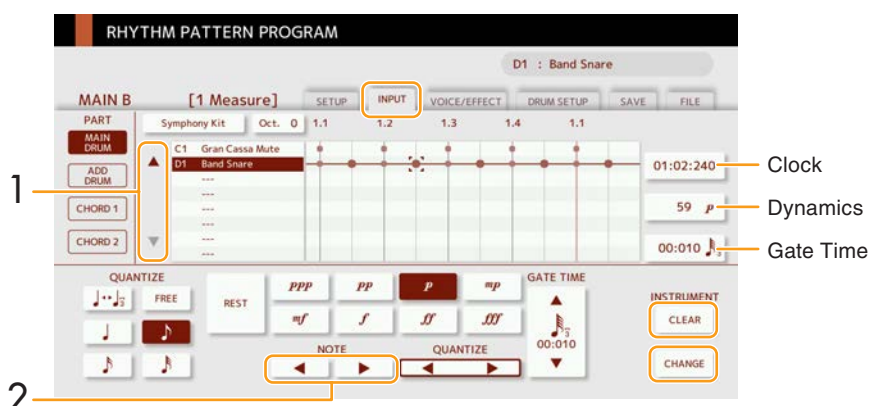
When selecting Quantize, the timing will be corrected to the proper position even if the timing of your key presses is slightly off during input. No correction occurs when you select “FREE.” Generally, you should set Quantize to be the same as the shortest note you intend to play.



Editing/clearing entered notes

Editing of previously entered Rhythms is performed in the [INPUT] tab of the RHYTHM PATTERN PROGRAM display.

- 1 Use [▲]/[▼] to select the percussion instrument that you want to edit.



- 2 Use NOTE [◀]/[▶] at the bottom of the display to select the note to be edited.

- 3 Edit the selected note as indicated below.

■ To change the accent level of the note

Press the Dynamics box at the right side of the display and then turn the [DATA CONTROL] dial to adjust the volume across a dynamic range of 0 to 127. The minimum setting (0) results in no sound.

You can also change the volume in eight different levels using the dynamic mark (*ppp* – *fff*) located at the bottom of the display. When a dynamic mark is pressed, the volume of the currently selected note changes.

■ To move the position of the selected note

Press the Clock box at the right side of the display and then turn the [DATA CONTROL] dial to change the note position in clock units.

■ To change the length (Gate Time) of the selected note

Press the Gate Time box at the right side of the display and then turn the [DATA CONTROL] dial to change the Gate Time (page 128).

■ To clear the selected note

Press [REST] to enter a rest.

To clear or change the percussion instrument

You can clear all entered percussion notes at once or replace the percussion instrument with another instrument. For these operations, use the INSTRUMENT [CLEAR]/[CHANGE] buttons at the lower right of the display.

To clear all notes for a specific percussion instrument, select the percussion instrument in the same way as step 1, and then press [CLEAR]. When a confirmation message appears, select [CLEAR] to clear the selected percussion instruments.

To clear all percussion instruments at once, press [CLEAR]. When a confirmation message appears, select [CLEAR ALL].

NOTE

You can also clear all notes of the selected percussion instrument by holding down [CLEAR] and pressing the key to which the percussion instrument you want to clear is assigned.

To replace the percussion instrument with another instrument, hold down [CHANGE] and press the key which corresponds to the percussion instrument you want to replace. Check the selected key and percussion instrument name on the display during the operation. The percussion instrument will be replaced when you release your finger from the display.

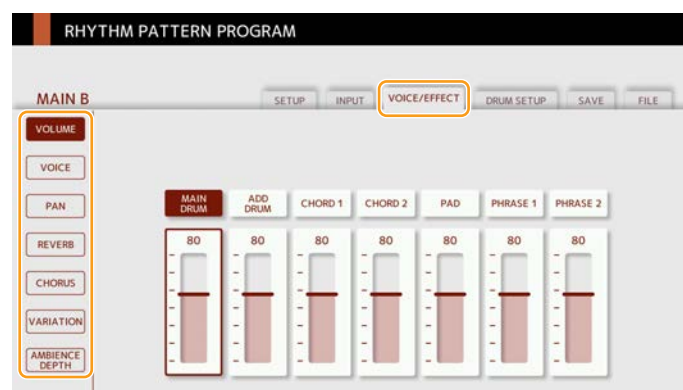
NOTE

It is necessary to stop Rhythm playback for this operation.

Setting the volume and effects, etc.

This explanation corresponds to step 7 on [page 126](#). In the [VOICE/EFFECT] tab of the RHYTHM PATTERN PROGRAM display, you can change the Voices or adjust the volume of each part in the Rhythm pattern. Additionally, you can apply Reverb, Chorus and Variation effects. Reverb creates an echoing effect with a sense of spaciousness and depth while Chorus adds thickness to the sound with an effect that plays multiple sounds simultaneously. Variation allows you to select the desired effect from various effects to use. Kits whose names begin with “Ambi” are called Ambient Drums and recreate the acoustic ambience of a room or hall, adding a realistic sense of presence.

1 Select the item to set at the left side of the display.



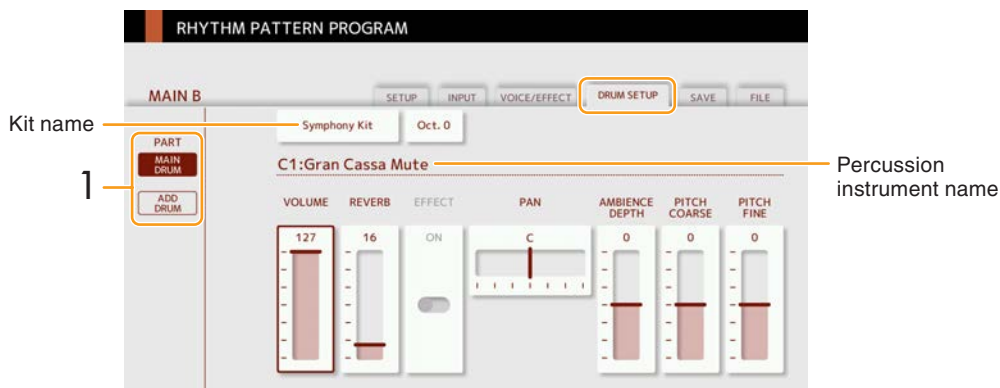
VOLUME	Turns each part on/off. Also adjusts the volume of each part. Range: 0 – 127
VOICE	Changes the Voice for each part. In the [INPUT] tab, you can create percussion parts (Main Drum and Add Drum) and Rhythmic patterns (Chord 1 and Chord 2), but other parts (Pad, Phrase 1, and Phrase 2) cannot be created. Here, you can change the Voices of Pad, Phrase 1 and Phrase 2 as well as the percussion and rhythmic parts. NOTE The Voices you can select here are not the same as those for the Voice Sections.
PAN	Determines the position of each part in the stereo image. Range: L64 – R63
REVERB	Determines the amount of reverb applied to each part. Range: 0 – 127
CHORUS	Selects the Chorus type. Also sets the amount of the Chorus effect applied to each part. For the chorus types available here, refer to the “Chorus Type List” in the Data List (https://manual.yamaha.com/mi/rt/els03/). Range: 0 – 127
VARIATION	Determines the type of the variation effect. Also sets the amount of the Variation effect applied to each part. For the variation effect types available here, refer to the “Variation Effect Type List” in the Data List (https://manual.yamaha.com/mi/rt/els03/). Range: 0 – 127
AMBIENCE DEPTH	Adjusts the balance between the reverberation and original sound for each part. This affects only kits whose names begin with “Ambi.” The default setting is 64 which is the standard balance. The lower the value, the clearer the attack becomes, creating the sense that the instrument is nearer to you. The higher the value, the richer the reverberation becomes, creating the sense that the instrument is more distant. For the relevant kits, refer to the “Rhythm Pattern Program Kit List” in the Data List (https://manual.yamaha.com/mi/rt/els03/). Range: 0 – 127

2 Change the settings as desired for each part.

Making detailed settings for each percussion instrument (Drum Setup)

This explanation corresponds to step 8 on [page 126](#). In the [DRUM SETUP] tab of the RHYTHM PATTERN PROGRAM display, you can change the tuning, panning, and volume of each percussion instrument.

- 1 Select the percussion part (MAIN DRUM or ADD DRUM) at the left side of the display to make settings.



- 2 Press the appropriate key (the key to which the instrument to be changed is assigned) to call up the percussion instrument name on the display.

If necessary, press [Oct.0] to the right of the kit name and shift the keyboard within a range of -1 to +3 octaves. If you want to change the kit, press the kit name at the top of the display to call up the KIT SELECT window, and then select the desired kit. In this case, the percussion sounds that were already entered are replaced with the newly selected kit sounds.

- 3 Change the settings.

VOLUME	Determines the volume of the currently selected instrument. Range: 0 – 127
REVERB	Sets the amount of reverb applied to the currently selected percussion instrument. Range: 0 – 127
EFFECT	Turns on/off the effect applied to the currently selected percussion sound.
PAN	Determines the position of the currently selected instrument in the stereo image. Range: L64 – R63
AMBIENCE DEPTH	Adjust the balance between the reverberation and original sound for the selected percussion instrument. This affects only kits whose names begin with “Ambi.” The default setting is 64 which is the standard balance. The lower the value, the clearer the attack becomes, creating the sense that the instrument is nearer to you. The higher the value, the richer the reverberation becomes, creating the sense that the instrument is more distant. Range: -64 – +63
PITCH COARSE	Determines the pitch of the currently selected instrument, adjustable in 100-cent steps. Range: -64 – +63
PITCH FINE	Determines the pitch of the currently selected instrument, adjustable in 1-cent steps. Range: -64 – +63

Importing and using files created on other instruments as Rhythm Patterns

You can load the Rhythm Patterns saved in a USB flash drive and used as User Rhythms. Data that can be loaded includes not only data for the Electone but also files created on other instruments.

File types that can be loaded to the Electone

This Electone is compatible with Style File Format data. The Style File Format (SFF) is Yamaha's original Style data format, which uses a unique conversion system to provide high-quality automatic accompaniment based on a wide range of chord types. You can load any Styles (Rhythms) which have been created by an SFF-compatible instrument with the following method.

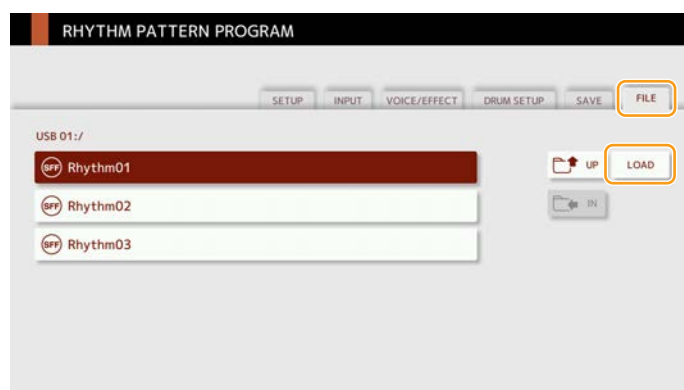
* SFF GE (Guitar Edition) cannot be loaded.



1 Connect the USB flash drive which contains the rhythm pattern file to the USB TO DEVICE terminal.

2 In the [FILE] tab, select the file to be loaded and press [LOAD].

The Rhythm Patterns on the USB flash drive are loaded into the RHYTHM PATTERN PROGRAM display. The method of file selection is the same as when selecting Songs or audio files in the MDR. See [page 92](#).



3 As necessary, edit or change the settings before saving.

Perform the necessary operations from step 4 on [page 124](#), and then save the data. Once it is saved, you can use the data as a User Rhythm.

Automatically switching Rhythms (Rhythm Sequence Program)

The Rhythm Sequence Program lets you program the data for one Song by combining Preset Rhythms and User Rhythms measure by measure to play back the Rhythms in the preferred order (Rhythm Sequence). Additionally, you can set the Registrations to automatically switch in sync with the programmed Rhythm Sequence (Registration Sequence). First, create the Rhythm Sequence before programming the Registration Sequence.

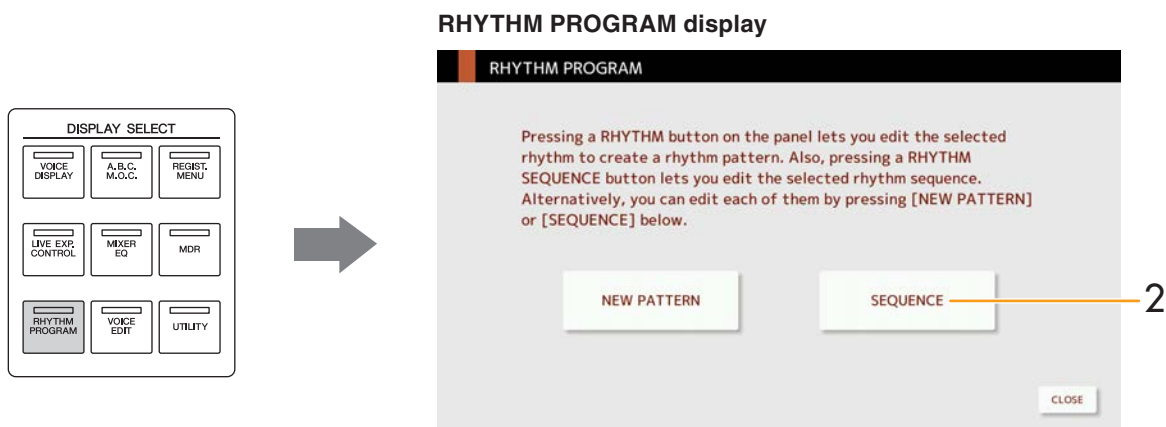
Programming a Rhythm Sequence

With the Rhythm Sequence Program function, you can string together any of the Preset Rhythms and the Rhythms of your own creation together to make complete rhythm compositions. You can save four rhythm compositions (each containing up to 140 bars) to the Sequence buttons on the panel for future recall. Two or more rhythm compositions can be played back in succession, letting you divide a Song into parts and play back the rhythm data as desired. Here are a couple of example applications:

- When you want to play more than two Songs in a medley, save the rhythm composition for each Song to a separate sequence button. You can then recall each desired Song by simply pressing the corresponding sequence button to which the Song is saved.
- When you want to practice a Song in separate sections, divide the Song into several sections and save each section to different sequence buttons. For example, save the Intro to the Sequence [1] button, verse to the [2] button, and main chorus to the [3] button. When you want to practice the chorus, you can press the [3] button to immediately start performing from the desired location.

This section explains how to program a Rhythm Sequence by aligning Rhythm patterns one by one from scratch. For instructions on editing an existing Rhythm Sequence, refer to [page 138](#).

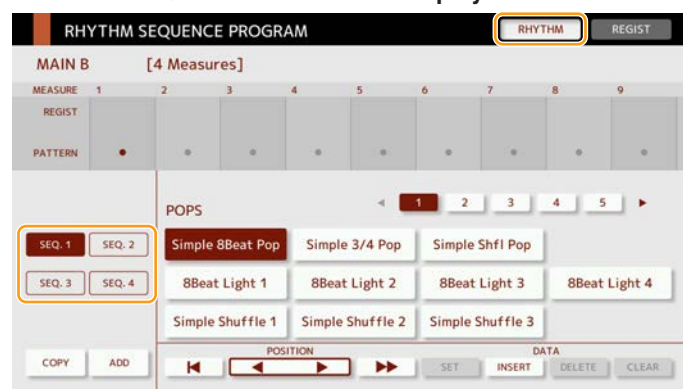
- 1 **Press the DISPLAY SELECT [RHYTHM PROGRAM] button to call up the RHYTHM PROGRAM display.**



- 2 **Press [SEQUENCE] to call up the RHYTHM SEQUENCE PROGRAM display.**
You can also call up the RHYTHM SEQUENCE PROGRAM display by pressing any of the RHYTHM SEQUENCE [1] – [4] buttons on the panel.

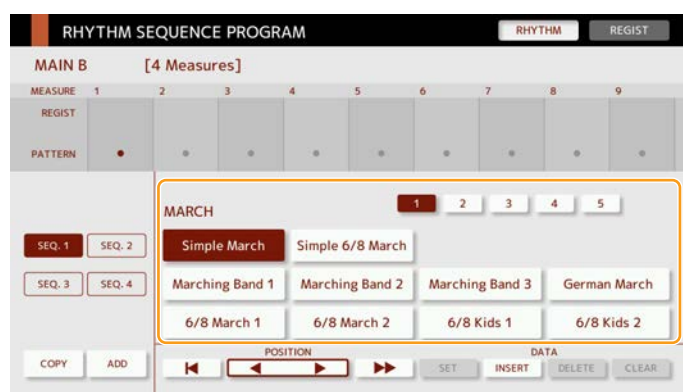
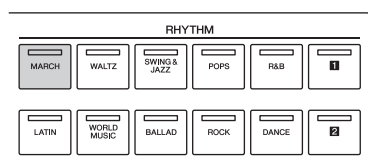
- 3** Make sure that [RHYTHM] is selected at the upper right of the display and select a Sequence number at the left side of the display.

RHYTHM SEQUENCE PROGRAM display



- 4** Select the Rhythm that you want to enter.

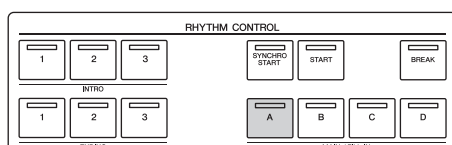
Press a RHYTHM button on the panel to select a category, and then select the desired Rhythm from the list on the display. To select a User Rhythm, press User button [1] or [2].



- 5** Select the Rhythm section that you want to enter from the RHYTHM CONTROL buttons and press [INSERT] at the bottom of the display.

Press one of the desired MAIN/FILL IN [A] – [D], INTRO [1] – [3], ENDING [1] – [3], or [BREAK] buttons and confirm that the section to be entered is shown at the top of the display. Each time you press the MAIN/FILL IN button, the section switches. When the lamp is lit, the Main section is selected, and when it is flashing, the Fill-in section is selected.

Pressing [INSERT] enters one measure of the selected Rhythm section into the “PATTERN” area. At the same time, the position advances by one measure, allowing you to enter the next measure. When entering an Ending section, the entire ending pattern is entered. For example, in the case of a two measure ending pattern, pressing [INSERT] once enters two measures. Furthermore, you cannot enter a sequence into a measure after entering an Ending section.



Section to enter
Entered sections



For instructions on editing such as deleting the entered data, see “Editing a Rhythm Sequence” on [page 138](#).

NOTE

- When entering an Intro section, check the number of measures for the section to be entered at the top of the display and set only that number of measures.
- When you press the ENDING [1] button while the Main section is playing back, a fill-in pattern will be called up before the Ending 1 pattern. However, in the Rhythm Sequence program, a fill-in pattern is not called up when Ending is entered in the Sequence.
- A maximum of 140 measures can be entered in a single sequence button.

6 Repeat steps 4 – 5 as often as necessary to program the entire Rhythm Sequence. When you have finished entering one sequence number, also enter other sequence numbers as necessary.

Use the POSITION buttons at the bottom of the display or the [DATA CONTROL] dial to select a measure, and then press the RHYTHM CONTROL [START] button on the panel to play back the Rhythm Sequence from the selected measure. You can enter the sequence while listening to it. To stop playback, press the [START] button again.

7 As necessary, program the Registration Sequence as well.

For instructions, see [page 139](#).

8 Press the DISPLAY SELECT [RHYTHM PROGRAM] button to exit from the RHYTHM SEQUENCE PROGRAM display.

NOTICE

Turning the power off before exiting from the Rhythm Sequence Program erases any entered sequence data.

9 Save the sequence data to a USB flash drive.

The sequence data can be saved to a USB flash drive as part of the Registration and other data by using the MDR function. For details, see [page 98](#). For instructions on loading the saved data, see [page 101](#).

Editing a Rhythm Sequence

You can insert a new Rhythm between the Rhythms you have entered, or delete the entered Rhythm from the sequence. Use the POSITION buttons at the bottom of the display to select the measure to edit before proceeding. You can also use the [DATA CONTROL] dial to select the measure.



POSITION		Returns the selected position to the first measure.
		Moves the selected position one measure to the left.
		Moves the selected position one measure to the right.
		Moves the selected position five measures to the right.

DATA	SET	Replaces the Rhythm in the currently selected measure with another Rhythm. Pressing [SET] enters the selected Rhythm section into the currently selected measure. However, a measure in the middle of an Ending pattern cannot be replaced with another Rhythm.
	INSERT	Use this when entering a Rhythm for the first time or when inserting a Rhythm before the currently selected measure. Select the measure located behind the one where you want to insert the Rhythm. After selecting the Rhythm to insert, press [INSERT]. The inserted Rhythm appears, and the subsequent Rhythms shift one measure to the right. This operation is not available between measures of an Ending pattern. Additional Rhythms cannot be entered beyond the Rhythm Sequence function's capacity of 140. If the insertion results in exceeding the capacity of 140, a "Data Full" message appears and the operation cannot be executed. NOTICE When you insert an Ending pattern in the middle of the sequence, any existing Rhythm data that follows the Ending pattern is automatically deleted.
	DELETE	Deletes the Rhythm in the currently selected measure. Select the measure which contains the Rhythm that you want to delete and press [DELETE]. If you select an Ending pattern and press [DELETE], the entire Ending pattern is deleted. It is not possible to delete only a single measure of the Ending.
	CLEAR	Erases all entered Rhythm Sequence data. Pressing [CLEAR] calls up a message prompting confirmation of the operation. Pressing [CLEAR] erases all data and a message will appear indicating that the deletion is complete. Pressing [CANCEL] aborts the operation without erasing anything.

Programming a Registration Sequence

The Registration Sequence function lets you program information such as "at what measure and timing does the Registration switch to a particular number," which is saved as part of the Rhythm Sequence. If you program the Registration Sequence, the Registrations are automatically called up in sync with playback of the Rhythm Sequence. You can also program the Next Unit function in Registration Sequence to load the next Unit automatically.

NOTE

If you load a Registration while a Rhythm is playing, the sequence data and User Rhythms in the Registration data cannot be loaded. Load Registrations after stopping the Rhythm.

1

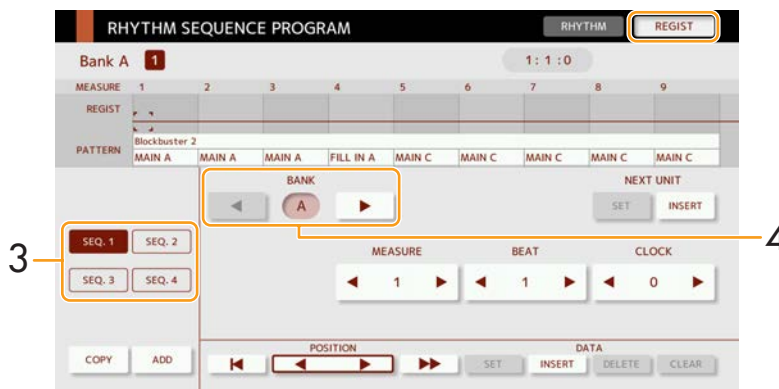
Program a Rhythm Sequence (page 136).

When adding a Registration Sequence to data already saved on a USB flash drive, load the saved data first (page 101).

2

Select [REGIST] at the upper right of the RHYTHM SEQUENCE PROGRAM display.

RHYTHM SEQUENCE PROGRAM display



3

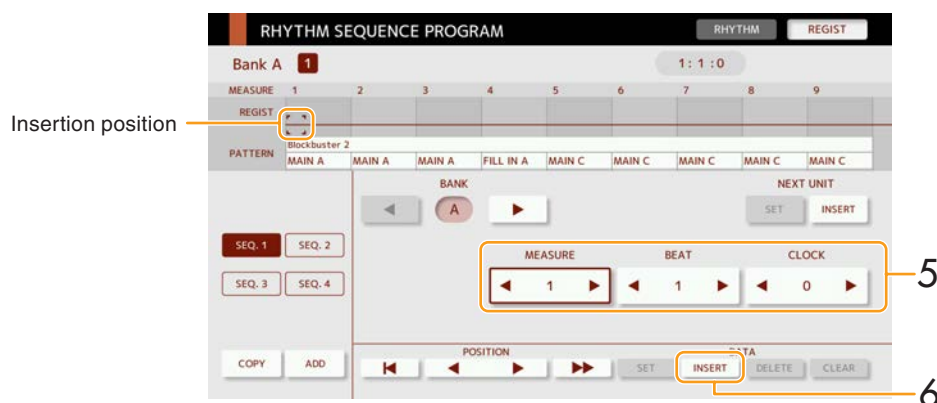
Select the sequence number at the left side of the display.

4 Select a Bank, and then press the desired Registration Memory number button.



5 Set the timing (Measure:Beat:Clock) at which you want to call up the Registration selected in step 4.

Set “MEASURE,” “BEAT,” and “CLOCK” by using the [◀]/[▶] buttons provided for each box. You can also use the [DATA CONTROL] dial to change the value. Since recalling a Registration takes a certain amount of time, the change may not occur in time if it is set exactly at the timing indicated in the notation. In such case, set the timing a bit earlier so that the Registration is changed more naturally and smoothly.



NOTE

One beat is equal to 96 clocks. To set CLOCK to 90 quickly, set one beat forward, and then reverse the clock by pressing [◀]. For example, in order to set to “4/3/90,” first set it to “4/4/0,” and then reverse the clock to “90.”

6 Press [INSERT] to enter the Registration selected in step 4.

The entered Registrations are shown in the “REGIST” area. Up to 140 Registrations can be entered. If some Registration numbers are entered to the same Measure/Beat/Clock, the last entered one takes priority.



7 Repeat steps 4 through 6 to complete the Registration Sequence. When you have finished entering one sequence number, also enter other sequence numbers as necessary.

8 Press the DISPLAY SELECT [RHYTHM PROGRAM] button to exit from the RHYTHM SEQUENCE PROGRAM display.

NOTICE

Turning the power off before exiting from the Rhythm Sequence Program erases any entered sequence data.

9 Save the sequence data to a USB flash drive.

The sequence data can be saved to a USB flash drive as part of the Registration and other data by using the MDR function. For details, see [page 98](#). For instructions on loading the saved data, see [page 101](#).

Entering Next Unit

When you program the Next Unit function in Registration Sequence, the Registration data in the next Unit of the current Song will be loaded automatically.

Set the timing (Measure:Beat:Clock) at which you want to input the Next Unit, and then press NEXT UNIT [SET] or [INSERT]. The Next Unit mark  appears at the insertion position. If a Registration has already been entered at the insertion position, a Next Unit cannot be inserted at the same position.

To delete a Next Unit, use the POSITION buttons at the bottom of the display or the [DATA CONTROL] dial to move the cursor to the Next Unit position and press [DELETE].

NOTE

- Depending on the data size, loading a Next Unit may take a certain amount of time. Because of this you should enter the Next Unit at an early enough timing (Measure:Beat:Clock).
- The time required to load a Registration is the same regardless of whether you program a Next Unit in a Registration Sequence or execute a Next Unit with the Registration Shift function ([page 82](#)).

Editing a Registration Sequence

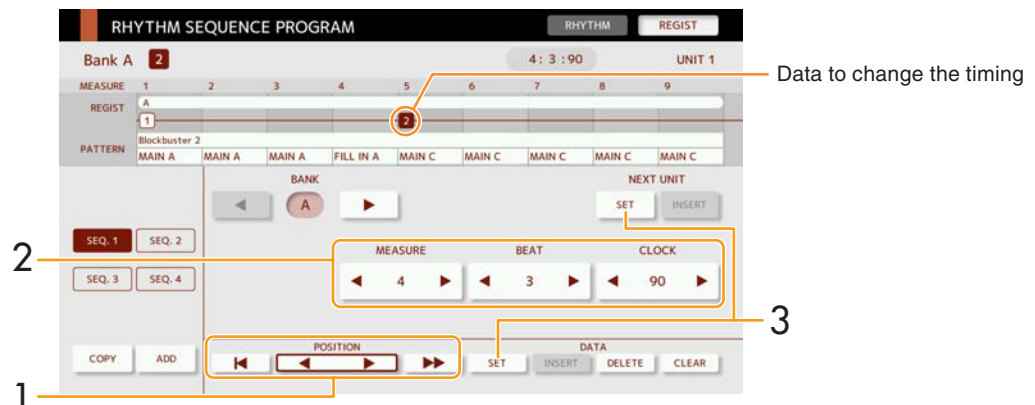
Edit the Registration number or Next Unit entered in the Registration Sequence.

■ To change the timing

1 Use the POSITION buttons to select the desired Registration number or Next Unit to change the timing.

[◀] selects the first Registration. [◀◀] selects the previous Registration, and [▶] selects the next Registration.

[▶▶] selects the Registration five positions behind.



2 Set the timing (MEASURE:BEAT:CLOCK).

3 Press [SET].

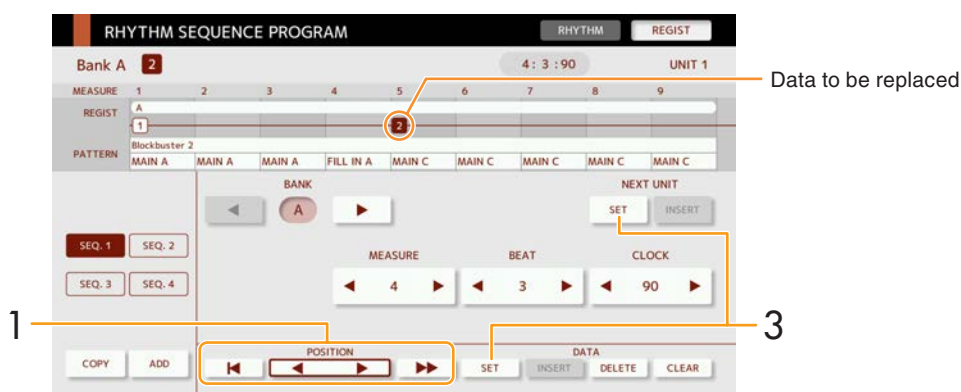
To change the Registration number timing, press DATA [SET]. To change the Next Unit timing, press NEXT UNIT [SET].

■ To replace data

You can replace the already entered Registration number or Next Unit with other data (Registration number or Next Unit).

1 Use the POSITION buttons to select the Registration number or Next Unit to be replaced with another one.

[◀] selects the first Registration. [◀◀] selects the previous Registration, and [▶] selects the next Registration. [▶▶] selects the Registration five positions behind.



2 When replacing the data with a Registration number, select a Bank, and then press the desired Registration Memory number button to enter.



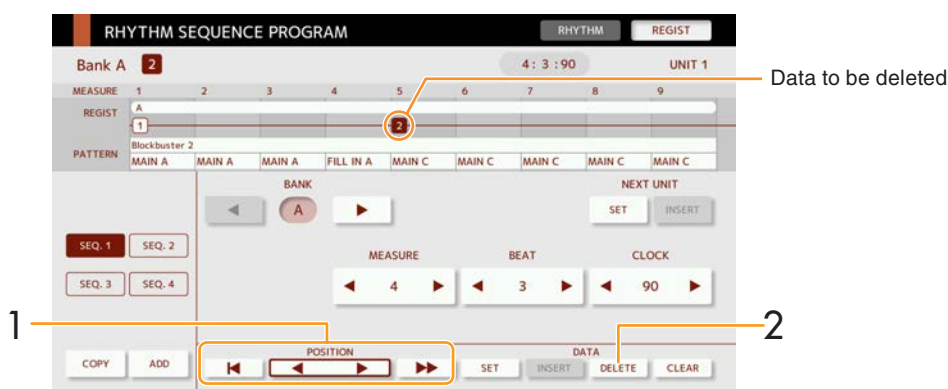
3 Press [SET].

To replace the data with the Registration number, press DATA [SET]. To replace the data with Next Unit, press NEXT UNIT [SET].

■ To delete data

1 Use the POSITION to select the desired Registration number or Next Unit to delete.

[◀] selects the first Registration. [◀◀] selects the previous Registration, and [▶] selects the next Registration. [▶▶] selects the Registration five positions behind.



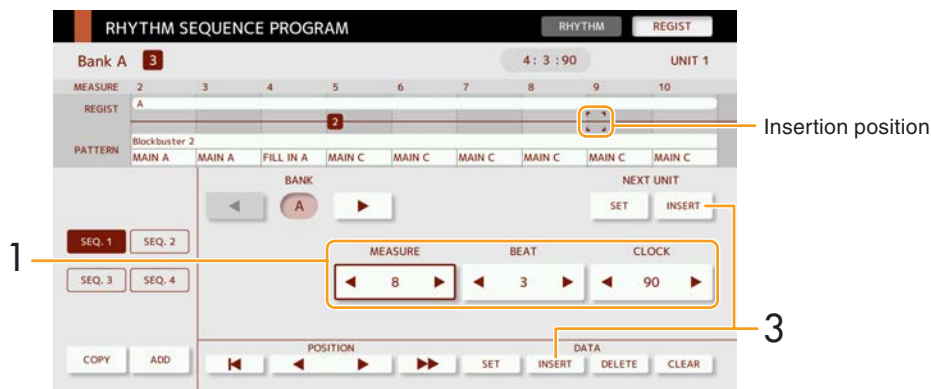
2 Press [DELETE].

The selected Registration number or Next Unit will be deleted.

If you want to delete all of the data in the Registration Sequence that was entered, press [CLEAR]. A message appears prompting confirmation of the delete operation. Pressing [CLEAR] erases all data and displays a message indicating that the deletion is complete. Pressing [CANCEL] aborts the operation without erasing anything.

■ To insert data

1 Set the position (MEASURE:BEAT:CLOCK) to insert the Registration number or Next Unit.



2 When inserting a Registration number, select the bank, and then press the desired Registration Memory number button to insert.



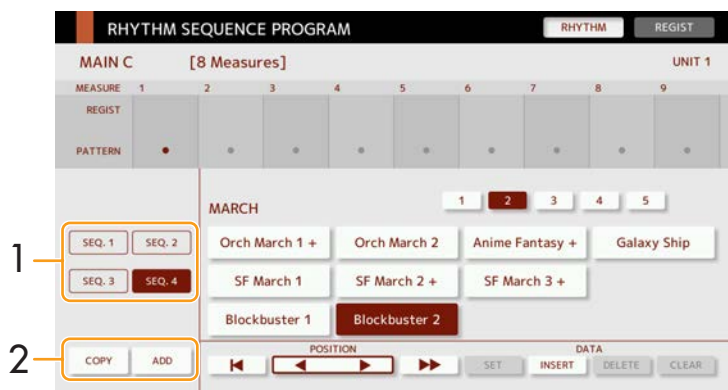
3 Press [INSERT].

To insert a Registration number, press DATA [INSERT]. To insert a Next Unit, press NEXT UNIT [INSERT].

Copying a Rhythm Sequence/Registration Sequence

By using previously created sequence data, you can more efficiently program sequences. You can copy the data of another sequence number into a sequence number that has no data. You can also add the data of another sequence number to the end of the currently created sequence.

- 1 Select the sequence number at the left side of the display as the copy or add destination.



- 2 Press [COPY] or [ADD], and then select the sequence number to be copied or added.

When the confirmation message appears, press [COPY] or [ADD] to execute the operation. Pressing [CANCEL] closes the message without copying or adding.

NOTE

- If you copy to a sequence number that already contains data, the original data will be erased.
- If you add a Rhythm Sequence to another Rhythm Sequence that has an Ending section at the end, the section will automatically change to MAIN A, and the new sequence will be added after the MAIN A section.

- 3 Edit the sequence as necessary.

For details, see “Editing a Rhythm Sequence” (page 138) or “Editing a Registration Sequence” (page 141).

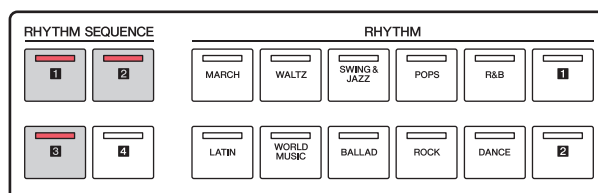
Playing Rhythm Sequences

- 1 When using data saved on a USB flash drive, use the MDR function to load the data.

For details, see [page 101](#).

- 2 Press the RHYTHM SEQUENCE [1] – [4] buttons containing the sequence data that you want to play, making sure that all their lamps are lit.

Multiple buttons can be pressed. If multiple buttons are turned on, they are played back in numerical order.



3

Press the RHYTHM CONTROL [START] button to start the sequence playback.

You can also start by turning on the RHYTHM CONTROL [SYNCHRO START] button and playing the Lower Keyboard or Pedalboard.

The Rhythms are played in numerical order for the sequences that are turned on. If Registration Sequence data is also included, the Registration changes along with the Rhythm playback.

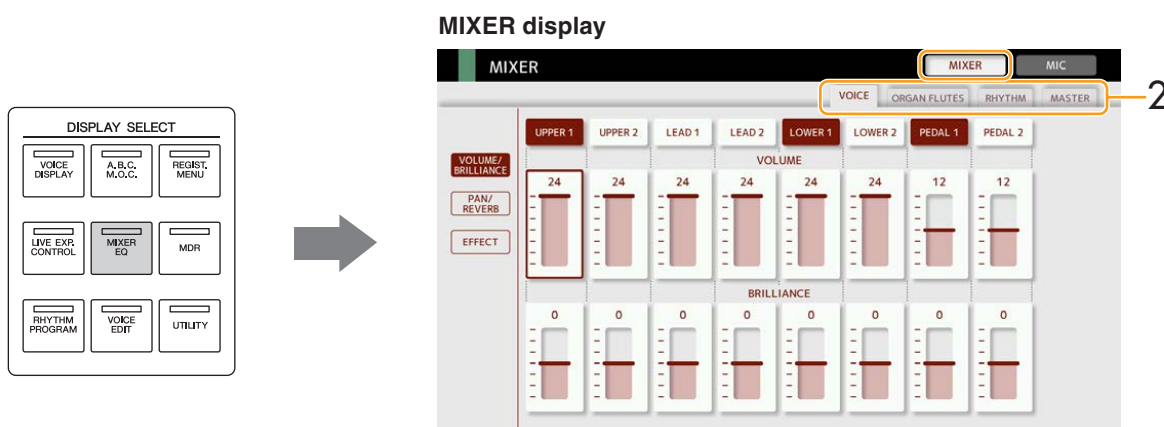
Pressing a RHYTHM SEQUENCE button while a sequence is playing cancels only the sequence for the button that was pressed. However, you cannot cancel a sequence that is currently playing. The button lamp will be turned off when playback of the sequence is finished.

The Rhythm automatically stops once the programmed number of measures has been played. If you want to stop during playback, press the RHYTHM CONTROL [START] button.

The Mixer is a built-in function within the Electone that combines multiple audio signals and adjusts the volume balance, stereo positioning, and effect depth, etc.—letting you adjust the volume balance and tone among the various Voice sections and Rhythm parts.

1 Press the **DISPLAY SELECT [MIXER EQ]** button to call up the **MIXER** display.

If the MIC display is called up, press [MIXER] at the upper right of the display to switch the display. The next time you press the [MIXER EQ] button, the previously opened display will appear.



2 Select the tab for the part that you wish to balance and adjust the values for each item.

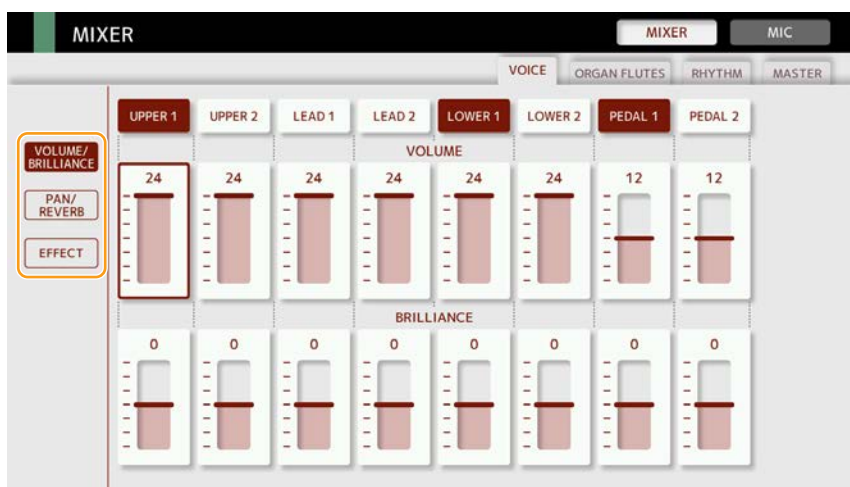
VOICE	Adjusts the tone of each Voice section. For details, see page 147 .
ORGAN FLUTES	Adjusts the tone of the Organ Flutes for the Upper and Lower Keyboards. For details, see page 147 .
RHYTHM	Adjusts the tone of the parts that make up the Rhythm. For details, see page 148 .
MASTER	Adjusts the overall sound of the Electone instead of the balance among individual parts. For details, see page 148 .

3 Store the settings on the **MIXER** display to the **Registration Memory** ([page 79](#)).

Keep in mind, however, that the settings in the [MASTER] tab cannot be stored to Registration Memory. Use the MDR function to save it to a USB flash drive as a Registration ([page 98](#)).

Adjusting the sound of each Voice section ([VOICE] Tab)

On the [VOICE] tab, you can adjust the tonal balance between each Voice section. Select a setting item at the left side of the display and adjust the value. Adjust the sound while checking how the sound changes by turning on/off each Voice section at the top of the display.



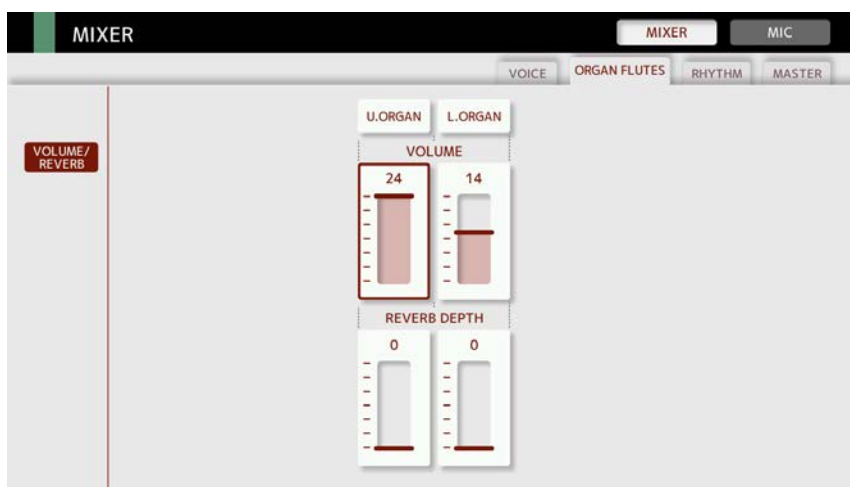
VOLUME/BRILLIANCE	Adjusts the volume and brilliance of each Voice section.
PAN/REVERB	Adjusts the pan (stereo positioning) and reverb depth for each Voice section.
EFFECT	Selects the effects to be applied to each Voice section and adjusts the depth. Two effects can be set for one Voice section. For information about the effect types available here, refer to the “Effect Type List” in the Data List (https://manual.yamaha.com/mi/rt/els03/).

NOTE

These settings are linked with the settings on the Voice Condition display (page 30) and the settings controlled by the Live Expression Control (page 53).

Adjusting the Organ Flutes sound ([ORGAN FLUTES] Tab)

On the [ORGAN FLUTES] tab, you can adjust the volume and reverb depth of the Organ Flutes for the Upper and Lower Keyboards. Adjust the sound while checking how the sound changes by turning on/off Upper Organ Flutes or Lower Organ Flutes at the top of the display.



NOTE

- The settings here are linked with the settings on the ORGAN FLUTES display (page 41) and the settings controlled by the Live Expression Control (page 53).
- When a VCM Organ is selected, the settings for the Upper and Lower Keyboards are linked.

Adjusting the Rhythm Sound ([RHYTHM] Tab)

On the [RHYTHM] tab, you can adjust the volume and reverb depth for the percussion parts (Main Drum, Add Drum) and accompaniment parts (Chord 1, Chord 2, Pad, Phrase 1, and Phrase 2) of the Rhythm, and the Keyboard Percussion. Adjust the sound while checking how it changes by turning each part on/off at the top of the display.



NOTE

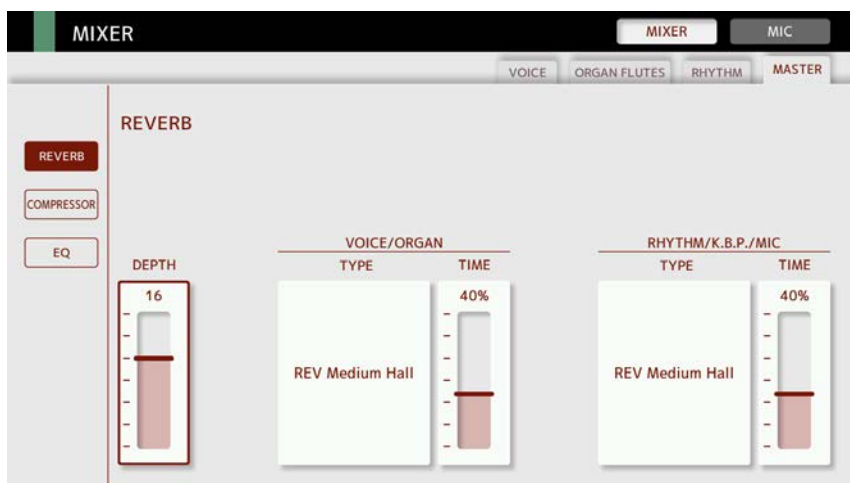
The settings here are linked with the settings on the Rhythm Condition display (page 63) and the settings controlled by the Live Expression Control (page 53).

Adjusting the Overall Sound ([MASTER] Tab)

On the [MASTER] tab, you can adjust the overall sound of the Electone. Select a setting item at the left side of the display and adjust the value.

REVERB

Adjust the amount of reverb applied to the overall sound. For information about the reverb types available here, refer to the “Reverb Type List” in the Data List (<https://manual.yamaha.com/mi/rt/els03/>).



DEPTH	Adjusts the reverb depth.
VOICE/ORGAN	Selects the type of reverb applied to each Voice section or Organ Voice and sets the time (reverberation duration).
RHYTHM/K.B.P./MIC	Selects the type of reverb applied to the Rhythm, Keyboard Percussion, and microphone, and sets the time (reverberation duration).

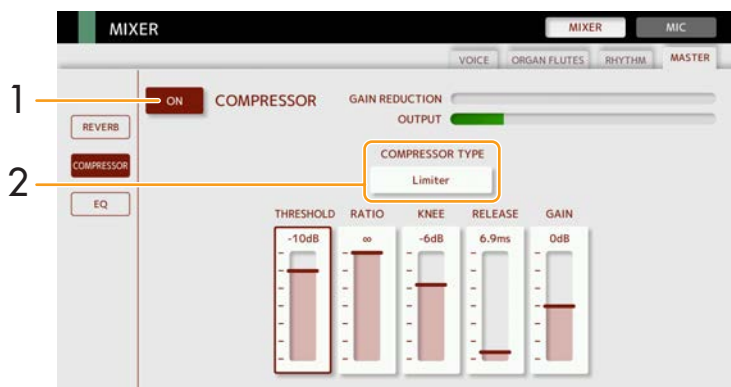
COMPRESSOR

The compressor is an effect that compresses and reduces the output of audio signals above a certain level (threshold). Typically, it is used to correct audio having a wide dynamic range, such as vocal (microphone input audio) sounds, or to change a naturally decaying guitar sound into a long sustained sound by intentionally setting the threshold for decaying instruments like a guitar to a low level. Furthermore, it is an effect that can produce various sounds such as reducing accented or loud transient sounds in the Rhythm patterns of a drum kit letting you raise the overall sound floor and achieve a more powerful sound, etc.

On this Electone, you can select from five different types of master compressors to apply to the overall sound. You can also adjust and use these compressors according to your preferences.

NOTE

- The Master Compressor has no effect on the audio playback sound.
- Depending on the overall volume of the Electone and the Registration settings, the sound may be distorted. In such a case, adjust the Voice volume (pages 31, 86) or adjust the GAIN level for the compressor (see step 3 below).



1 Turn the compressor effect on.

2 Select the **COMPRESSOR TYPE**.

- **Limiter**: Limits sudden peaks in volume to prevent clipping and distortion.
- **Bright**: Bright sound suitable for pop music.
- **Powerful**: Powerful sound suitable for rock music.
- **Smooth**: Volume changes smoothly to make the sound clear. Suitable for ballads.
- **Punchy**: Punchy sound suitable for dance music.

3 Adjust the Master Compressor selected in step 2 as necessary.

The Compressor type is displayed as “User” when the settings are changed. The **GAIN REDUCTION** section at the top of the display shows in real time the volume level compressed by the compressor while the **OUTPUT** section shows the volume level actually being output.

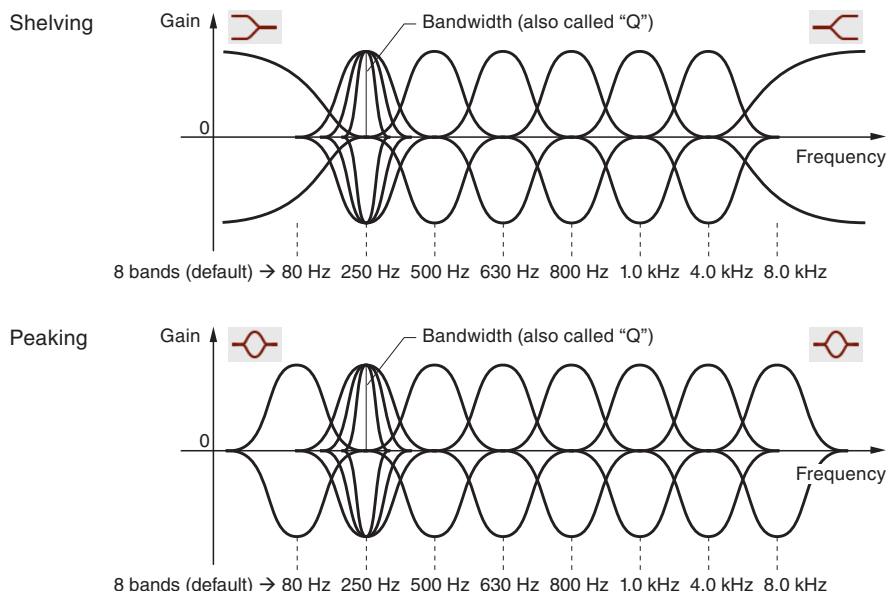
THRESHOLD	Sets the volume level at which the compressor starts to function.
RATIO	Sets the degree to which it compresses the audio exceeding the threshold. Higher values result in a stronger degree of compression.
KNEE	Sets how gradually or rapidly the audio is compressed as it approaches the threshold. Higher values result in more rapid compression.
RELEASE	Sets the time required for the audio to return to its original volume after falling below the threshold and releasing the compression. Higher values result in the audio returning to its original volume more slowly.
GAIN	Sets the output level of the compressed audio. Generally, you should raise this to achieve the desired effect.

EQ (Equalizer)

The equalizer (EQ) is a function that divides the sound into several frequency bands and raises or lowers the level (gain) of each band to correct the sound. You can adjust the overall sound of the Electone with the EQ. It is equipped with a high-performance, 8-band digital equalizer that offers six built-in types of EQ to choose from. Additionally, you can also edit the frequency bands and gain of the equalizer. When the equalizer is edited, the type name changes to “User.”

NOTE

The Master EQ has no effect on the audio playback sound.

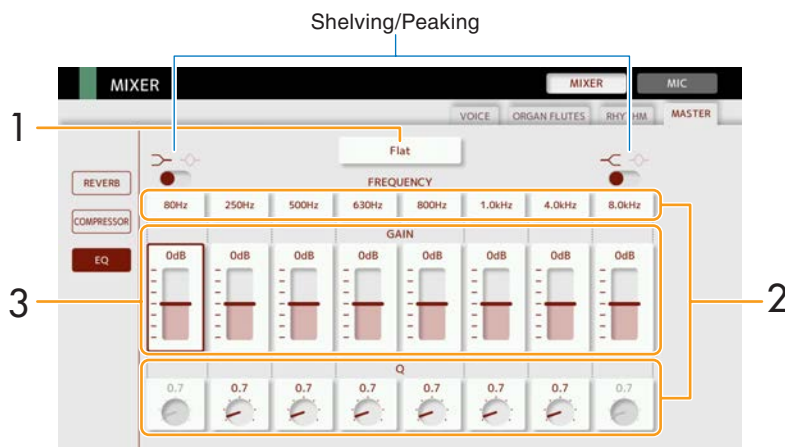


1

Select the EQ type.

- **Flat:** Flat EQ setting. The gain of each frequency is set to 0 dB.
- **Mellow:** Soft and mellow EQ setting in which high-frequency bands are reduced slightly.
- **Bright:** EQ setting for boosting the level of the high frequencies, making the sound brighter.
- **Loudness:** EQ setting in which both the low- and high-frequency sounds are emphasized. This is ideal for up-tempo music.
- **Powerful:** EQ setting in which all frequency sounds are emphasized. This powerful sound is suitable for live performance.
- **Legacy:** EQ setting recreate the sound characteristics of the ELS-02 series. This is suitable when you play the Electone by using the data created on the ELS-02 series.

Use the switches on the left and right at the top of the display to select Shelving or Peaking. Refer to the illustration above for the features of each EQ type.



2

Adjust the FREQUENCY and the width of each bandwidth (Q) as necessary.

The effective frequency width varies depending on each band. The Q can only be adjusted for a Peaking EQ. Higher Q values result in a narrower band.

3

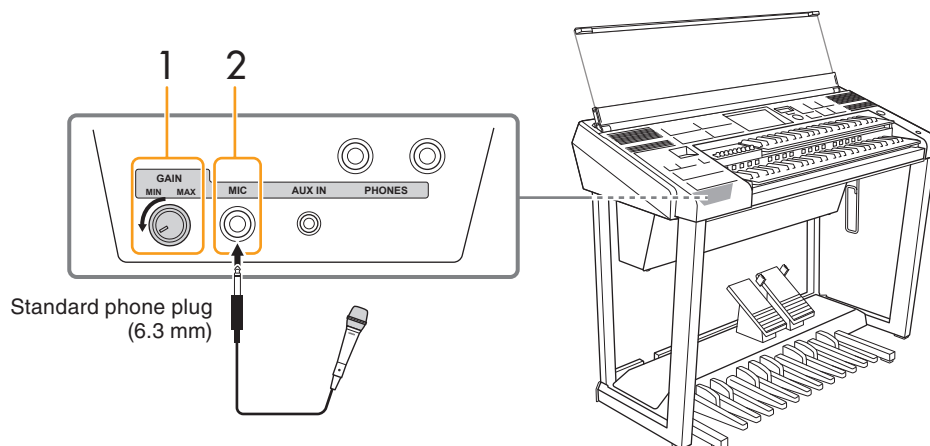
Adjust the GAIN of each band.

By connecting a microphone to the MIC jack, you can enjoy singing along with your performance or singing “karaoke.” The audio input from the microphone is output through the Electone speakers. Moreover, you can also add various harmonies to your singing voice.

Make sure to use a dynamic microphone with a TRS plug.

Connecting a microphone

- 1 Before turning on the power of the Electone, set the **GAIN** knob to the minimum (**MIN**) position.

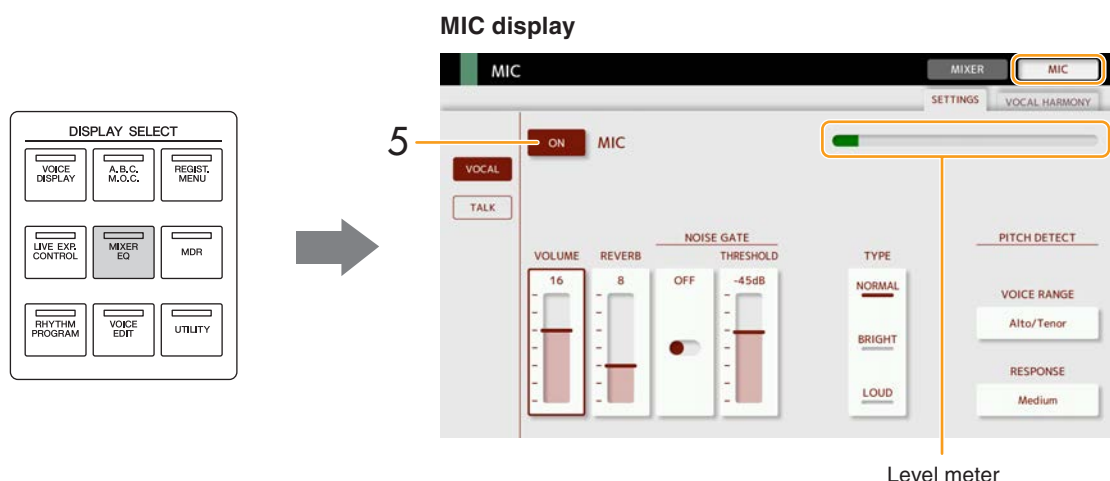


- 2 Connect the microphone to the **MIC** jack.

- 3 Turn on the power of the Electone.

- 4 Press the **DISPLAY SELECT [MIXER EQ]** button to call up the **MIC** display.

If the **MIXER** display is called up, press **[MIC]** at the upper right of the display to switch the display. The next time you press the **[MIXER EQ]** button, the previously opened display will appear.



- 5 Turn on the **MIC** button in the **MIC** display.
- 6 While talking into the microphone, turn the **GAIN** knob to adjust the input volume.
Make adjustments while checking the input level meter at the top of the display. Adjust the level so that it stays within the green to yellow range. If it turns red, the input volume is too high.

Disconnecting the microphone

- 1 Set the **GAIN** knob to the minimum (**MIN**) position.
- 2 Disconnect the microphone from the **MIC** jack.

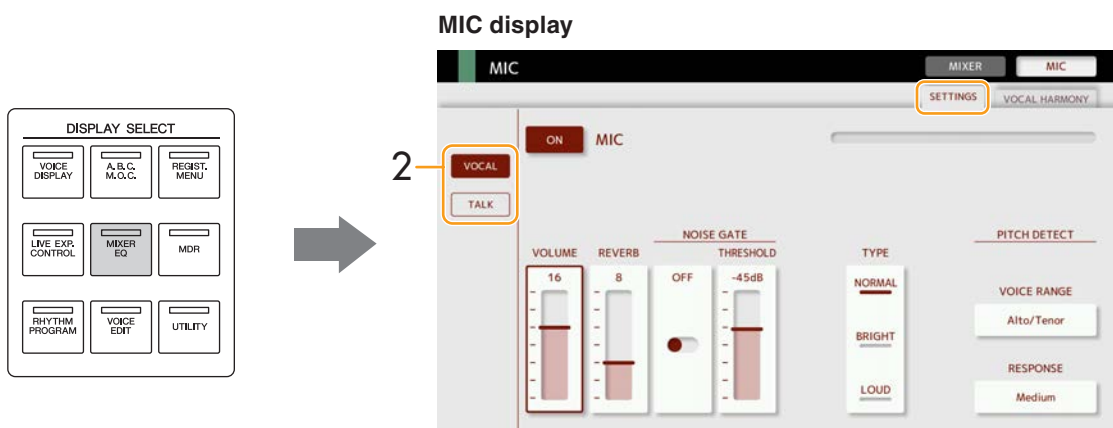
NOTE

Before turning off the power of the Electone, make sure to set the **GAIN** knob to the minimum position.

Making microphone-related settings

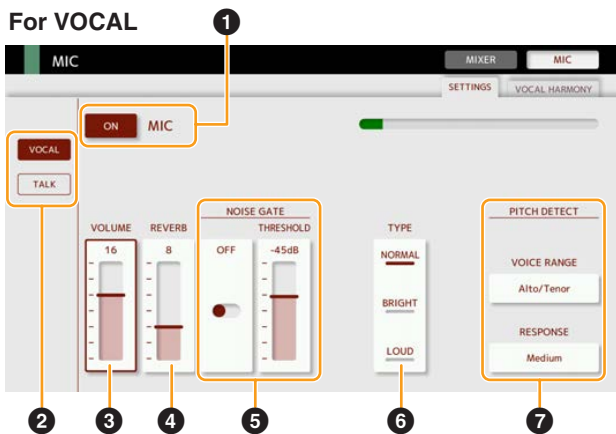
This section lets you make various effect settings applied to the microphone input sound. The settings are configured separately when Vocal is turned on (for your performances such as singing) and when Talk is on (for talking or making announcements between songs).

- 1 Press the **DISPLAY SELECT [MIXER EQ]** button to call up the **MIC** display.
If the **MIXER** display is called up, press **[MIC]** at the upper right of the display to switch the display. The next time you press the **[MIXER EQ]** button, the previously opened display will appear.

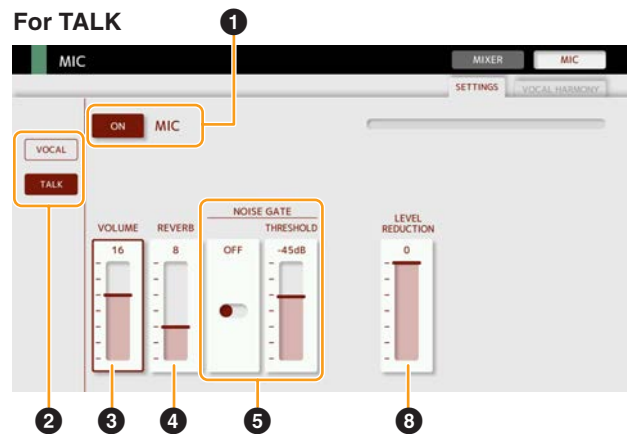


- 2 In the **[SETTINGS]** tab, select **[VOCAL]** or **[TALK]** and make settings respectively.
Select **[VOCAL]** for singing and other performances, and **[TALK]** for talking or making announcements. The settings can be switched with one touch when needed during a concert, etc.

For VOCAL



For TALK

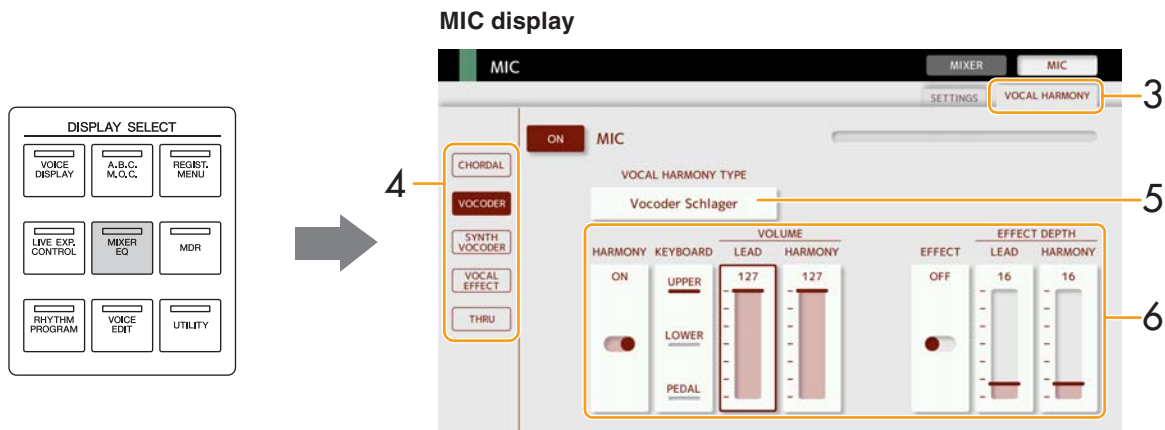


1	MIC ON/OFF	Turns the audio input from the microphone on/off. NOTE The settings here are linked with the settings on the [VOCAL HARMONY] tab (page 154).
2	VOCAL/TALK switch	When you sing into the microphone for your performance, turn [VOCAL] on. When you talk to make announcements between songs of your performance, turn [TALK] on. You can switch the microphone setting with one touch depending on the situation. NOTE The Live Expression Control function (page 53) allows you to use a Footswitch to switch the Vocal and Talk settings.
3	VOLUME	Adjusts the volume of the microphone input sound. As you input the sound, the level is shown in the level meter at the top of the display.
4	REVERB	Sets the Reverb Depth applied to the microphone audio.
5	NOISE GATE	This function mutes the input signal when the input from the microphone falls below a specified level. This effectively removes extraneous noise.
	ON/OFF	Switches the Noise Gate on/off.
	THRESHOLD	Sets the level of the input sound at which the Noise Gate starts to function.
6	TYPE (VOCAL only)	Selects the Vocal type. • NORMAL: The basic setting. • BRIGHT: Setting for making a singing voice brighter and more noticeable. • LOUD: Setting for keeping the volume of the singing voice and allowing you a louder output.
7	PITCH DETECT (VOCAL only)	Sets how to detect the pitch of the audio input to the microphone during a performance.
	VOICE RANGE	Sets the characteristics of the audio input to the microphone. • Bass: Effective setting for lower voices. This is also suitable for performances involving roaring or shouting. • Alto/Tenor: Effective setting for mid-range voices. • Soprano: Effective setting for higher voices. This is also suitable for singing close to the microphone. • All Range: Setting for singing across a wide voice range from Bass to Soprano.
	RESPONSE	Sets the speed of the pitch detection after receiving sound input from the microphone. The detection speed increases from Slow to Medium Slow, Medium, Medium Fast, and Fast. The settings here determine the response (speed) of the Vocal Harmony effect applied to the microphone sound.
8	LEVEL REDUCTION (TALK only)	Adjusts the amount of reducing the volume of non-microphone sound to balance the microphone sound with the Electone performance sound.

Adding harmony to your singing voice (Vocal Harmony)

The Vocal Harmony feature lets you add harmonies to your singing voice input via the microphone.

- 1 **Connect a microphone to the Electone.**
- 2 **Press the DISPLAY SELECT [MIXER EQ] button to call up the MIC display.**
If the MIXER display is called up, press [MIC] at the upper right of the display to switch the display. The next time you press the [MIXER EQ] button, the previously opened display will appear.



- 3 **Select the [VOCAL HARMONY] tab.**
- 4 **Select the Vocal Harmony category on the left side of the display.**

CHORDAL	Harmony is added to the microphone sound according to the chords played on the Lower Keyboard.
VOCODER	Harmony is added to the microphone sound according to the pitch of the notes played on the keyboard selected in the "KEYBOARD."
SYNTH VOCODER	Changes the microphone sound into a mechanical sound like a robot voice. The pitch is controlled by playing the keyboard selected in "KEYBOARD."
VOCAL EFFECT	Effect is added to the microphone sound. No harmony is added.
THRU	Vocal Harmony and effects are not applied. Step 5 and subsequent steps are not required.

- 5 **Select the Vocal Harmony Type.**
For the Vocal Harmony Types available here, refer to the "Vocal Harmony Type List" in the Data List (<https://manual.yamaha.com/mi/rt/els03/>).

- 6 **Make the necessary settings.**
The items that can be set differ depending on the category selected in step 4.

HARMONY ON/OFF	Turns the Vocal Harmony on/off.
KEYBOARD	Determines which keyboard controls the harmony when VOCODER or SYNTH VOCODER is selected.

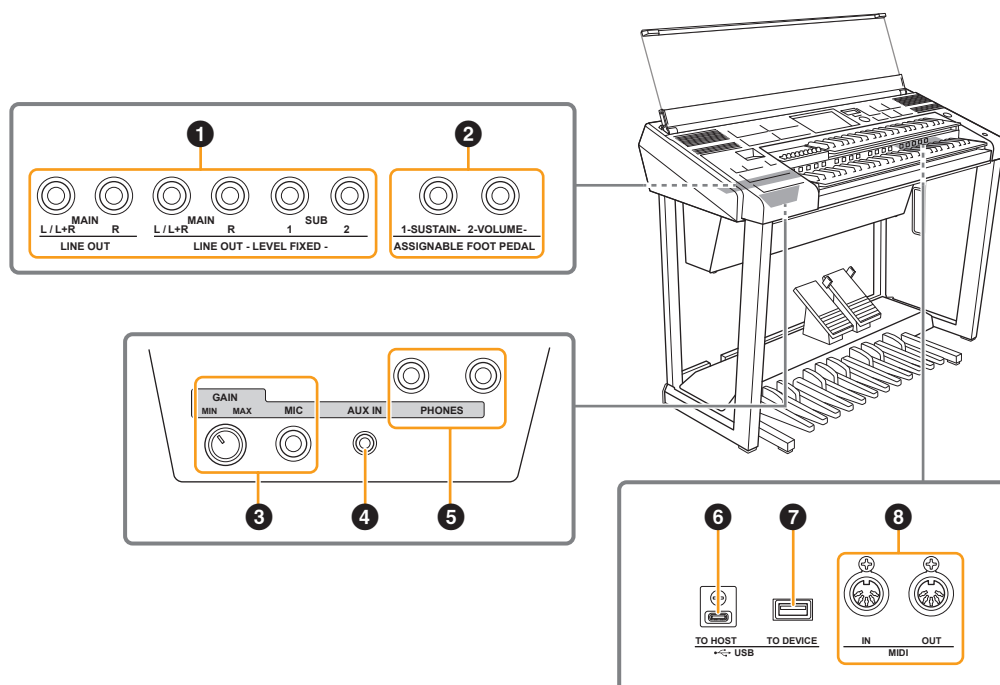
VOLUME	Adjusts the volume of the Vocal Harmony when CHORDAL or VOCODER is selected. You can individually adjust the levels of LEAD (microphone input sound) and HARMONY (harmony sound only). Range: 0 – 127
EFFECT ON/OFF	Turns the effect applied to the Vocal Harmony on/off.
EFFECT DEPTH	Adjusts the depth of the effect. When CHORDAL or VOCODER is selected, you can individually adjust the effect applied to LEAD (microphone input sound) and HARMONY (harmony sound only). Range: 0 – 127

7

Try singing into the microphone to check how your voice changes.

For CHORDAL, VOCODER and SYNTH VOCODER, sing into the microphone while playing the keyboard.

This Electone features various terminals and jacks for connecting external devices on the underside of the Keyboard. The terminals and jacks are located underneath the keyboards (as shown below).



CAUTION

Before connecting to other electronic devices, turn off the power of all devices. Also, before turning the power of any devices on or off, be sure to set all volume levels to minimum (0). Otherwise, electric shock, permanent hearing loss, or damage to the devices may occur.

- ❶ **LINE OUT jacks, LINE OUT - LEVEL FIXED - jacks:** For connecting powered speakers and other devices to output the Electone sound to external devices. This allows you to output the performance sound at a higher volume, etc. ([page 157](#)).
- ❷ **ASSIGNABLE FOOT PEDAL jacks:** For connecting a separately sold Footswitch (FC4A or FC5) or Foot Controller (FC7) ([page 169](#)).
- ❸ **MIC jack, GAIN knob:** When a microphone is connected, the input sound can be output from the Electone. You can also add harmony to your singing voice. For details, see the “Microphone” chapter ([page 151](#)).
- ❹ **AUX IN jack:** For connecting an audio player. Audio playback on the connected device is output from the Electone ([page 159](#)).
- ❺ **PHONES jacks:** For connecting headphones ([page 10](#)).
- ❻ **USB TO HOST terminal:** For connecting a computer to transmit/receive data ([page 166](#)), or an iPhone/iPad to use apps ([page 162](#)).
- ❼ **USB TO DEVICE terminal:** For connecting a USB flash drive or USB wireless LAN adaptor ([page 168](#)). This is the same as the USB TO DEVICE terminal on the control panel. However, it is recommended that you use the terminal under the keyboard unit for devices that are rarely connected or disconnected.
- ❽ **MIDI terminals:** For connecting MIDI devices to transmit/receive data ([page 160](#)).

Outputting the Electone sound to external speakers, etc. (LINE OUT jacks)

By connecting speakers, mixers, or audio recording devices to the LINE OUT jacks of the Electone, you can output the Electone sound to connected external devices. For example, you can connect speakers with built-in amplifiers to play sound through external speakers or connect an audio recording device to record your performance on the Electone.



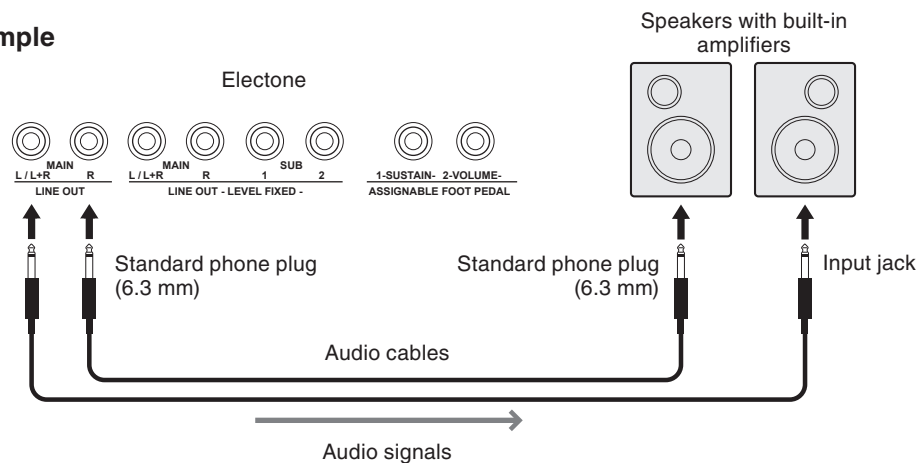
CAUTION

Before connecting to other electronic devices, turn off the power of all devices. Also, before turning the power of any devices on or off, be sure to set all volume levels to minimum (0). Otherwise, electric shock, permanent hearing loss, or damage to the devices may occur.

NOTICE

- To prevent damage to external devices when outputting the Electone's sound to an external device, first turn on the power to the Electone followed by the external device. When turning off the power, first turn off the power to the device followed by the Electone.
- Do not route the output from the LINE OUT jacks to the AUX IN jack. (If an external audio device is connected to the LINE OUT jacks, do not send the audio output from that device into the Electone's AUX IN jack.) Since sound input into the AUX IN jack of the Electone is directly output from the LINE OUT jack, audio-related feedback may occur and will make normal performance impossible, and may even damage the equipment.

Example



NOTE

For monaural output (using only one speaker), use the LINE OUT [L/L+R] jack.

There are multiple LINE OUT jacks which can be used for different purposes according to your needs.

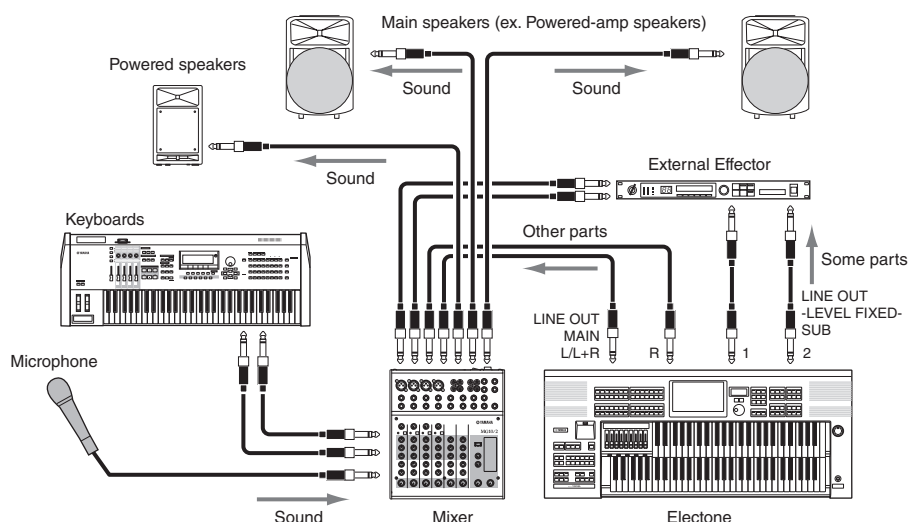
- **LINE OUT MAIN [L/L+R]/[R]:** Output the overall sound of the Electone in stereo. The output level can be adjusted with the [MASTER VOLUME] dial. Use these jacks when connecting to speakers or audio recording equipment. When using only one speaker, use the [L/L+R] jack.
- **LINE OUT-LEVEL FIXED- MAIN [L/L+R]/[R], SUB [1]/[2]:** Output the Electone audio for each part. The output destination can be specified for each part ([page 158](#)). The output level is fixed and cannot be adjusted with the [MASTER VOLUME] dial. Use these jacks if you are connecting a mixer, etc. and you want to adjust the volume or tonal balance.

Connecting a mixer for live performance

When using the Electone for concerts or other events, it is common to connect the Electone to a mixer and then connect the mixer to the speakers rather than connecting the Electone directly to the speakers. Connecting through a mixer makes it easier to adjust the volume and tonal balance with other instruments and achieve a more cohesive performance.

To connect to a mixer, use the LINE OUT-LEVEL FIXED- jacks of the Electone. Since MAIN and SUB outputs are available, you can separately output each part, such as outputting some parts from SUB to apply external effects and other parts from MAIN to adjust on a mixer. For information on setting the output destination, see ["Setting the output destinations for the Electone sound by part"](#) below.

Example



Power-on sequence

To protect the speakers from noise when turning the power on or off, pay close attention to the order in which you turn devices on or off. Before turning the power on to the devices, set the volume of all devices to minimum (0).

Follow the sequence below when turning the power on and perform these steps in reverse (3->2->1) when turning the power off.

1. Electone or keyboards and other external sound sources
2. Mixer
3. Powered speakers

NOTE

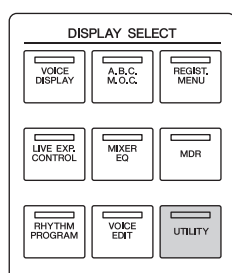
Using a TRS plug to connect to a mixer with balanced inputs enables balanced output from the Electone, reducing noise. The output level remains the same as with unbalanced output.

Setting the output destinations for the Electone sound by part

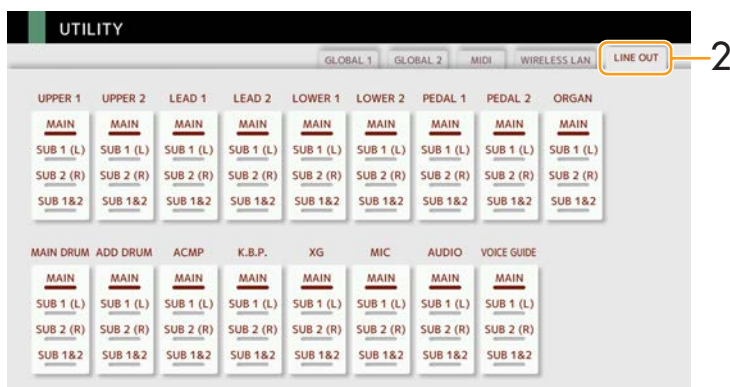
When outputting to external devices from the LINE OUT jacks, you can set which jack to use for each part such as Voice sections, Rhythms, or the microphone.

1

Press the DISPLAY SELECT [UTILITY] button to call up the UTILITY display.



UTILITY display



2 In the [LINE OUT] tab, select the output destination for each part.

The output destination can be selected from MAIN, SUB 1, SUB 2, or SUB 1&2. Parts assigned to MAIN or SUB 1&2 are output in stereo (SUB 1 = Left, SUB 2 = Right). Parts assigned to SUB 1 or SUB 2 are output in mono. Effects are only applied to MAIN.

Furthermore, if SUB 1, SUB 2 or SUB 1&2 is selected, that part will not be output from the built-in speakers, PHONES jack, or the USB TO HOST terminal. Additionally, the audio will not be recorded.

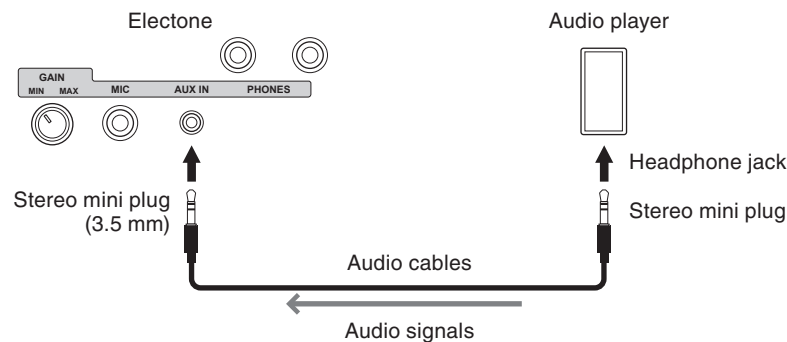
Outputting the sound of an audio player from the built-in speakers of the Electone (AUX IN jack)

By connecting an external audio player to the AUX IN jack of the Electone, you can hear the sound played on the connected audio player through the speakers of the Electone.

NOTICE

To prevent damage to the external device when using the AUX IN jack, first turn on the power to the external device followed by the Electone. When turning off the power, first turn off the power to the Electone followed by the external device.

Example



NOTE

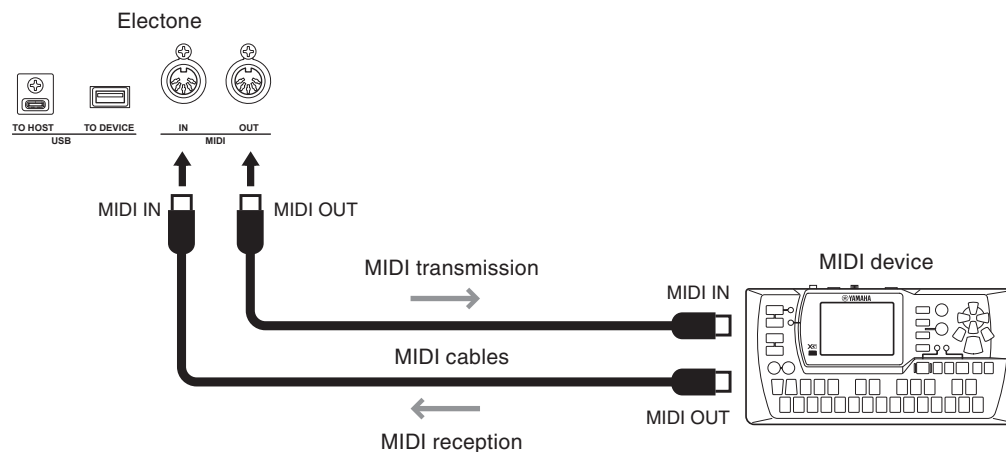
- Use audio cables and adaptor plugs that have no (zero) resistance.
- You can connect a computer or smart device (such as an iPhone, iPad, or Android device) to the USB TO HOST terminal with a USB cable. In this case, the audio playback on the connected device that is output from the Electone speakers. For details, see [page 167](#).

Connecting to MIDI devices (MIDI terminals)

By using MIDI cables and connecting to a MIDI device (keyboard, synthesizer, or sequencer, etc.) to the MIDI terminals of the Electone, you can output the sound of the external MIDI device from the Electone, or control the Electone from the external MIDI device.

- **MIDI [IN]:** Receives MIDI messages from another MIDI device.
- **MIDI [OUT]:** Transmits MIDI messages to another MIDI device.

Example



NOTE

- For a general overview of MIDI and how you can effectively use it, refer to “MIDI Basics” on the Yamaha website (<https://download.yamaha.com/>).
- For information on MIDI settings on your sequence software, refer to the manual of the relevant software.
- MIDI messages cannot be transmitted or received with MIDI devices while using the MDR (Music Data Recorder) function.
- When the USB TO HOST terminal is in use, communication via the USB TO HOST terminal takes priority, and the MIDI terminals cannot be used.

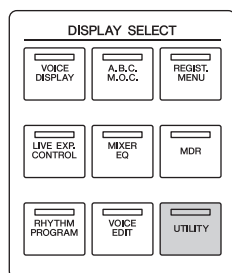
Making MIDI-related settings

When you connect the Electone to a MIDI device, you can set how the external device controls the Electone or how the Electone controls the external device.

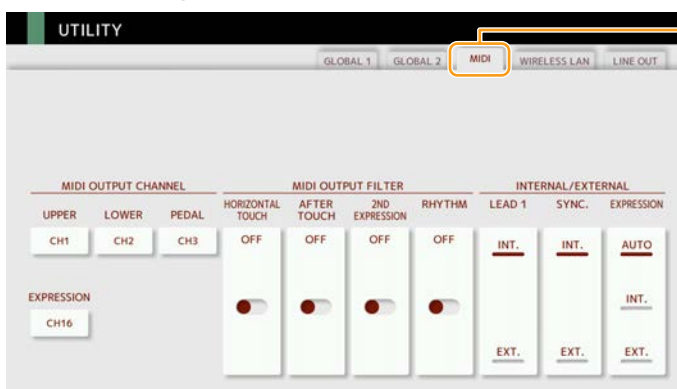
NOTE

When connecting to a computer, use the USB TO HOST terminal. For details, see [page 166](#).

- 1 Press the **DISPLAY SELECT [UTILITY]** button to call up the **UTILITY** display.



UTILITY display



2 In the [MIDI] tab, make the MIDI settings.

MIDI OUTPUT CHANNEL	Sets the MIDI output channels. You can set any channel from 1 through 16 individually for the Upper Keyboard, Lower Keyboard, Pedalboard, and Expression Pedal. The MIDI messages for each keyboard and Expression Pedal will be transmitted by using the output channel set here. Set the output channels to match the receive channel of the connected MIDI device that is the destination for the MIDI messages. You can also set to OFF for the Expression Pedal in which the MIDI data is not output.	
MIDI OUTPUT FILTER	Deletes unnecessary MIDI data and keeps it from being transmitted from the Electone. The four types of MIDI data that can be cut are Horizontal Touch, After Touch, Second Expression, and Rhythm start/stop information. The specific MIDI data for filters that are set to ON are blocked and not output to external devices. NOTE • AFTER TOUCH also includes Polyphonic After Touch (page 32). • HORIZONTAL TOUCH is not shown on the ELS-03G. In addition, there is no Polyphonic After Touch function.	
INTERNAL/EXTERNAL	Switches control over the displayed items between the Electone (INT.) or the connected device (EXT.).	
	LEAD 1	Determines internal or external control of Lead Voice 1. • INT. (Internal): Lead Voice 1 sounds on the Upper Keyboard. When the Keyboard Assign function (page 28) is turned on, it sounds on the Lower Keyboard or Pedalboard. • EXT. (External): Lead Voice 1 responds to performance data transmitted from the external device via MIDI channel 4.
	SYNC.	To synchronize playback with an external MIDI device, you can select either the instrument's internal clock or MIDI clock signals from the external device (external clock) connected to the Electone. Ordinarily, this is set to INT. • INT. (Internal): The Electone uses its own internal clock. • EXT. (External): The Electone uses an external clock input from the MIDI [IN] terminal. The Electone follows the clock of the external device.
	EXPRESSION	Sets what controls the overall volume of the Electone. Ordinarily, this control is set to AUTO. • AUTO: Automatically switches between INT. and EXT. • INT. (Internal): Adjusts the Electone volume by using a controller assigned with the "Expression" function via Live Expression Control (page 53). • EXT. (External): When receiving external MIDI messages or playing a Song with MDR, the Electone volume is controlled by the received MIDI messages or the data recorded in the MDR. The volume cannot be adjusted with a controller assigned with the "Expression" function.

Connecting an iPhone/iPad and using apps

You can enjoy more convenient features by connecting an iPhone or iPad and using the following compatible apps with the Electone.

- **Electone Data Library:** Lets you save and manage Registration data for use on the Electone.
- **Rec'n'Share:** Lets you record audio and video of your performance in high sound quality, and share that data on the Internet.

For details about the apps, see the individual app pages on the following website.

<https://www.yamaha.com/2/kbdapps/>

NOTE

Rec'n'Share for Android cannot be used with the Electone.

After installing an app on your iPhone or iPad, connect it to the Electone and try it out. Use a USB cable to connect the iPhone or iPad with the Electone. When using “Electone Data Library,” you can also use a UD-WL01 USB wireless LAN adaptor for connection.

Connecting with a USB cable (USB TO HOST terminal)

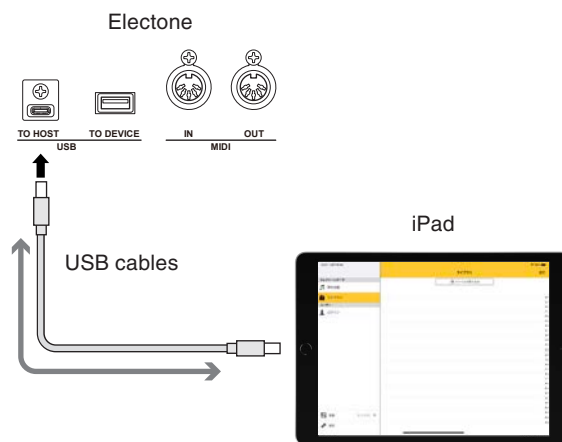
By using a USB cable, you can connect an iPhone or iPad to the USB TO HOST terminal of the Electone. Before using the USB TO HOST terminal, be sure to read the “Precautions when using the USB TO HOST terminal” (page 166).

When connecting a device equipped with a USB Type-C™ terminal, use a CC type USB cable. When connecting a device equipped with a Lightning connector, use an AC type USB cable and a genuine Apple adaptor.

NOTICE

Use a CC or CA type USB cable of less than 3 meters. The cable must be a communication cable compliant with USB standards, and not a charging-only cable.

Example



NOTE

- You can set whether audio input from the iPhone, iPad, computer or other external device to the Electone's USB TO HOST terminal is output to the external device or not along with the performance sound on the Electone (Audio Loopback). See page 167.
- An iPhone or iPad connected to the USB TO HOST terminal cannot be charged by the Electone.

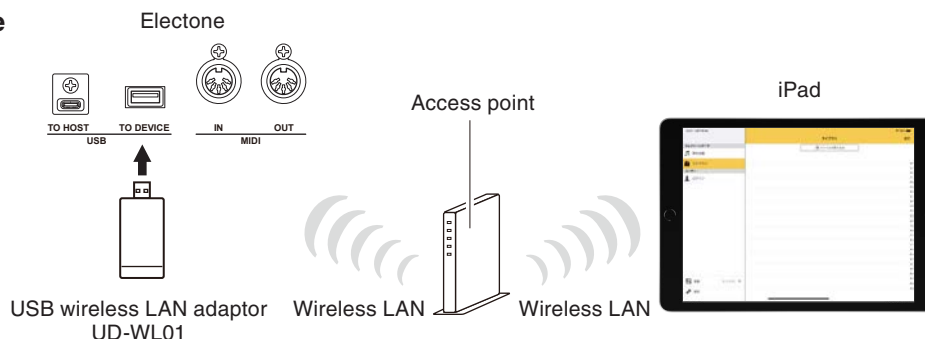
Connecting via wireless LAN (Wi-Fi) by using the UD-WL01 (sold separately)

When using the “Electone Data Library” app, you can connect an iPhone or iPad to the Electone via wireless LAN (Wi-Fi). To connect via wireless LAN, you need to prepare the separately sold UD-WL01 USB wireless LAN adaptor. Before using the USB wireless LAN adaptor, be sure to read the “Precautions when using the USB TO DEVICE terminal” (page 168).

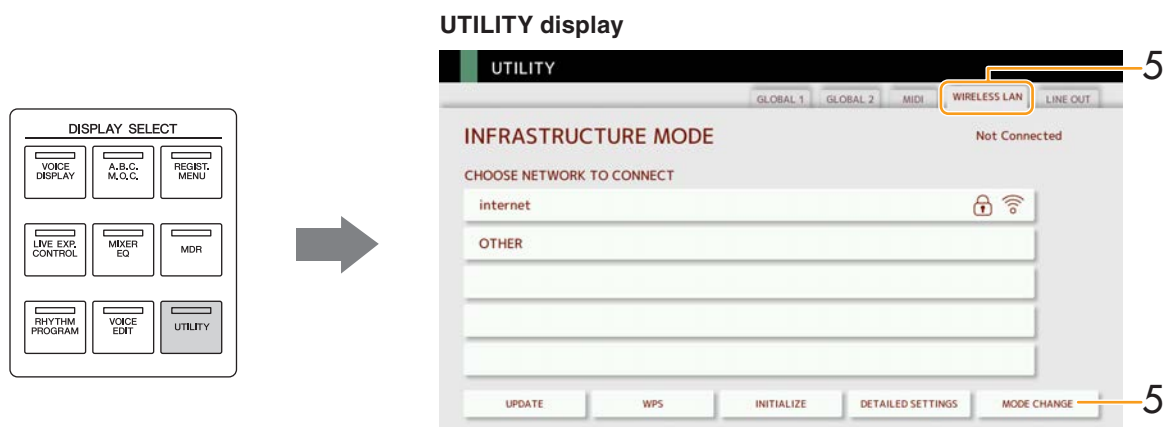
NOTE

The USB wireless LAN adaptor (UD-WL01) may not be available depending on your area.

Example



- 1 Turn off the power of the Electone.
- 2 Connect the UD-WL01 USB wireless LAN adaptor to the USB TO DEVICE terminal of the Electone.
It is recommended that you use the USB TO DEVICE terminal located under the Keyboard unit. It is convenient to keep the USB TO DEVICE terminal on the panel open for connecting USB flash drives.
- 3 Turn on the Electone.
- 4 Press the DISPLAY SELECT [UTILITY] button to call up the UTILITY display.



- 5 In the [WIRELESS LAN] tab, press [MODE CHANGE] and select either Infrastructure Mode or Access Point Mode.

- **INFRASTRUCTURE MODE:** Connects the USB wireless LAN adaptor to the iPhone or iPad via the access point. Use this method when connecting to other networks while connected.
- **ACCESS POINT MODE:** Directly connects the USB wireless LAN adaptor to the iPhone or iPad without going through an access point. Use this method when there is no access point that you can connect to or when there is no need to connect to other networks while connected.

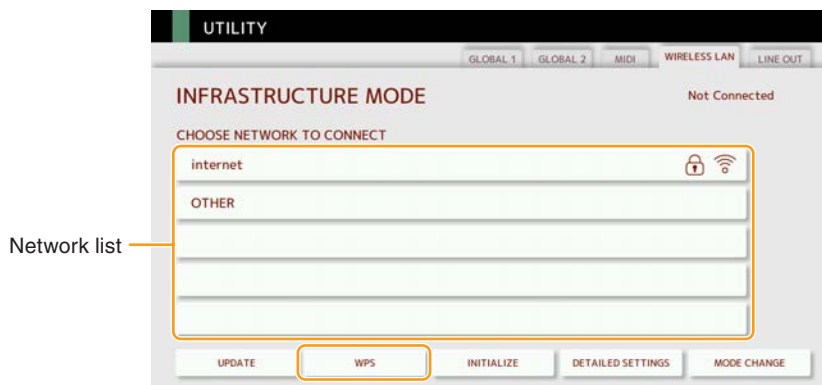
NOTE

An “access point” refers to a device which acts as a base station when data is transmitted/received via a USB wireless LAN adaptor. Some access points are combined with router or modem functions.

6 Connect the instrument to the network.

■ INFRASTRUCTURE MODE

There are two methods of connection. Choose the appropriate method for your network environment.



- **Connect by WPS:** If your access point supports WPS, you can connect with a simple operation without entering any settings information. Pressing [WPS] on the display of the Electone shows a confirmation message. Press [OK] in the display, and then press the WPS button on your access point within two minutes.

NOTE

For information on whether your access point supports WPS, or about the operations in the setting of the access point, refer to the manual for the access point you are using.

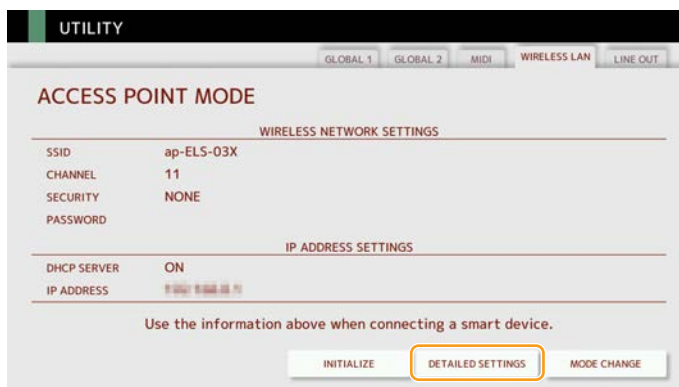
- **Connecting by selecting from the network list:** Select an available network from the network list on the display. A network shown with a lock icon (🔒) is secured. Enter the password, and then press [CONNECT]. You can connect to a network without a lock icon simply by selecting them. If the network that you want to connect to is not shown, select "OTHER" and enter the SSID, security method, and password to connect. See [page 111](#) for instructions on entering characters.

If you want to change a static IP address or other settings, press [DETAILED SETTINGS] to set them. To initialize the connection information and return it to the factory defaults, press [INITIALIZE].

■ ACCESS POINT MODE

Press [DETAILED SETTINGS] to make a static IP address or other settings. After finish making settings, press [SAVE] to save them. See [page 111](#) for instructions on entering characters.

- **Wireless:** Sets the SSID, security method, password, and channel.
- **IP address:** Sets the static IP address, etc.
- **Other:** Sets the host name or display information such as the MAC address of the USB wireless LAN adaptor.



To initialize the connection information and return it to the factory defaults, press [INITIALIZE].

7 Connect the iPhone/iPad to the Electone.

- 7-1** Call up the Wi-Fi display on the iPhone/iPad by tapping Settings > Wi-Fi.
- 7-2** Turn on the Wi-Fi.
- 7-3** From the network list shown on the display, select the network you set in step 6. If the password is required, input the password.

The connection is completed. When in the Infrastructure Mode, if the Electone successfully connects to the network, "Connected" is shown at the upper right of the display. Once connected, try using the app.

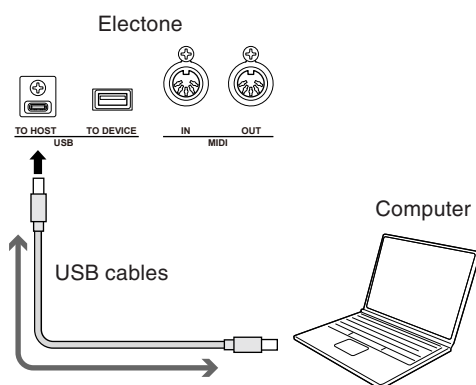
Connecting to a Computer

By connecting a computer to the USB TO HOST terminal of the Electone with a USB cable (CC or AC type), you can transmit or receive MIDI and audio data between the Electone and the computer. You can save your performances to a computer and create notation or upload them on your website (which requires separate score writing software or sequencing software). Additionally, you can also play data on the computer through the Electone. Before using the USB TO HOST terminal, be sure to read the “Precautions when using the USB TO HOST terminal” below.

NOTICE

If you are using a DAW (digital audio workstation) application with this instrument, set the Audio Loopback function to off (page 167). Otherwise, a loud sound may occur, depending on the settings of the computer.

Example



When transmitting or receiving MIDI data, you will need to make MIDI-related settings such as the transmitting and receiving channels. See page 160.

When transmitting or receiving audio signals by using a computer running Windows, if operation is unstable or delays occur, use the “Yamaha Steinberg USB Driver.” On the website below, search for “Yamaha Steinberg USB Driver” and install it on the computer. For instructions on installing the driver, refer to the Installation Guide included with the download file.

Yamaha Downloads <https://download.yamaha.com/>

Precautions when using the USB TO HOST terminal

When connecting a computer or smart device (iPhone/iPad or Android device) to the USB TO HOST terminal, make sure to observe the following points to avoid freezing the computer, smart device or Electone and corrupting or losing data.

NOTICE

- Use a CC or AC type of USB cable of less than 3 meters. In addition, use a data communication cable that is compliant with USB standards rather than a charging-only cable.
- Execute the following before turning the power to the Electone on/off or plugging/unplugging the USB cable.
 - Quit any open application software on the computer.
 - Confirm that no data is being transmitted from the main unit (data is transmitted when playing the keyboard or playing back a song).
- While the computer is connected to the Electone, you should wait for six seconds or more between these operations: (1) when turning the power of the instrument off then on again, or (2) when alternately connecting/disconnecting the USB cable.

If the computer, smart device, or Electone freezes, restart the application software or the computer/smart device, or turn the power to the Electone off and on again.

Transmitting and receiving audio data (USB Audio Interface function)

By connecting a computer or smart device (iPhone/iPad or Android device) to the USB TO HOST terminal with a cable, digital audio data can be transmitted or received. This USB Audio Interface function provides the following advantages. When audio data is played on the connected device, it is output from the Electone speakers. This gives you direct, clear sound in which the sound quality has less noise and deterioration than that from the [AUX IN] jack. Moreover, you can record your performance on the Electone as audio data by using separate recording software or music production software.

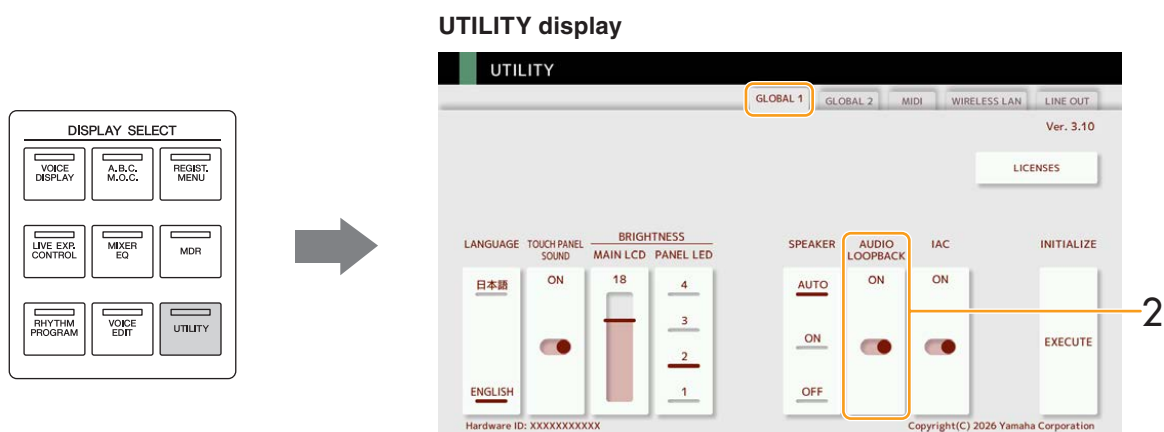
Turning Audio Loopback on/off

You can set whether audio input sound from the computer or other external device connected to the USB TO HOST terminal is output or not along with the performance sound on the Electone. Set the Audio Loopback function to on to output, or off not to output. For example, by using the connected computer, if you want to record the audio input sound as well as the performance sound played on the Electone, set Audio Loopback to on. If you intend to record only the sound played on the Electone, set Audio Loopback to off.

NOTE

With Audio recording on the Electone (page 106), the audio input sound from the external device is recorded when this is set to on, while the sound is not recorded when this is set to off.

- 1 Press the DISPLAY SELECT [UTILITY] button to call up the UTILITY display.



- 2 In the [GLOBAL 1] tab, set AUDIO LOOPBACK to ON or OFF.

Connecting a USB flash drive / USB wireless LAN adaptor (USB TO DEVICE terminal)

A USB flash drive or UD-WL01 USB wireless LAN adaptor can be connected to the USB TO DEVICE terminal. If you connect a USB flash drive, you can use the MDR function (page 90) to save Registrations as well as record or play back performances. If you connect a USB wireless LAN adaptor, you can wirelessly connect a smart device to use apps (page 162).

Before using the USB TO DEVICE terminal, be sure to read “Precautions when using the USB TO DEVICE terminal” below.

NOTE

The USB wireless LAN adaptor (UD-WL01) may not be available depending on your area.

Precautions when using the USB TO DEVICE terminal

This Electone features three USB TO DEVICE terminals (two on the panel and one on the bottom of the keyboard unit). When connecting a USB device to the terminal, be sure to handle the USB device with care. Follow the important precautions below.

NOTE

For more information about the handling of USB devices, also refer to the manual of the USB device.

■ Compatible USB devices

- USB flash drive
- USB wireless LAN adaptor (UD-WL01 sold separately)

Other USB devices (USB hubs, smartphones, etc.) cannot be used even if connected.

Use a USB flash drive that has been confirmed to work with the Electone. For a list of compatible USB devices, access the Yamaha website below. Use of unsupported devices may result in data saving/recalling operations to abort, etc.

Yamaha Downloads <https://download.yamaha.com/>

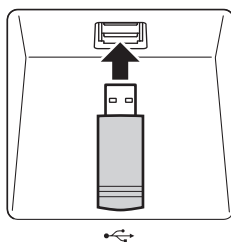
Although USB devices 2.0 to 3.2 can be used on this product, the amount of time for saving to or loading from the USB device may differ depending on the type of data or the status of the product.

NOTICE

The rating of the USB TO DEVICE terminal is a maximum of 5 V/500 mA. Do not connect USB devices having a rating above this, since this can cause damage to the Electone itself.

■ Connecting a USB device

When connecting a USB device to the USB TO DEVICE terminal, make sure that the connector on the device is appropriate and that it is connected in the proper direction.

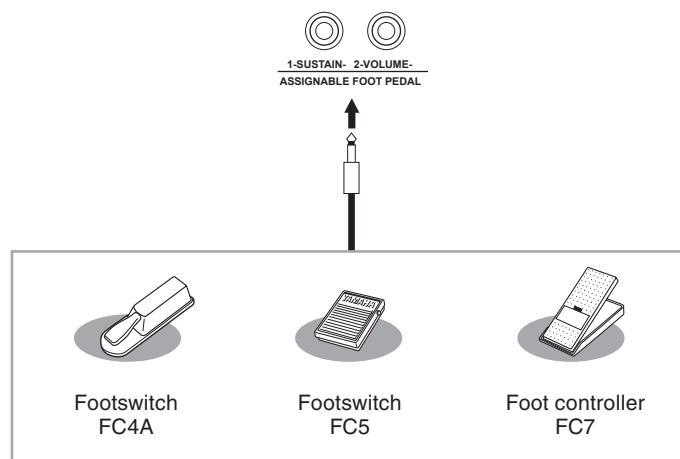


NOTICE

- Avoid connecting or disconnecting the USB device during playback/recording and file management operations (such as Save, Copy, Delete and Format), or when accessing the USB device. Failure to observe this may result in the Electone operation “freezing” or corruption of the USB device and the data.
- When connecting and disconnecting the USB device, make sure to wait a few seconds between operations.
- Do not use an extension cable when connecting a USB device.

Using a separately sold pedal to control the Electone (ASSIGNABLE FOOT PEDAL jacks)

The FC4A or FC5 footswitches and the FC7 foot controller (sold separately) can be connected to the ASSIGNABLE FOOT PEDAL jacks. By default, the Sustain function is assigned to the [1-SUSTAIN-] jack, and the Volume adjustment function is assigned to the [2-VOLUME-] jack. To assign other functions, make settings in the LIVE EXPRESSION CONTROL display. For details, see [page 53](#). A footswitch can be used for switching functions on and off, while a foot controller controls continuous parameters such as volume.



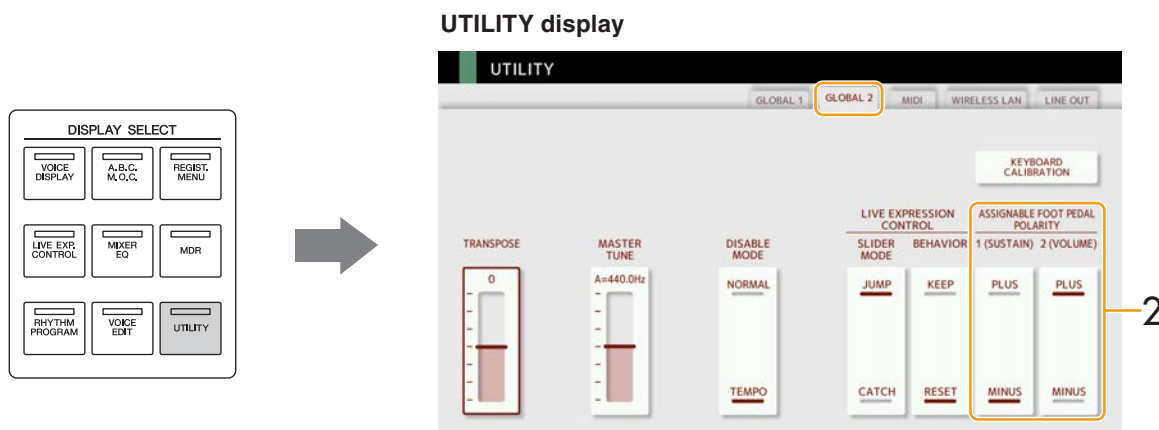
NOTE

Make sure to connect or disconnect the pedal only when the power is off. In addition, do not press the footswitch/foot pedal while turning the power on.

Setting the polarity of the assignable foot pedal

If the connected pedal works in the opposite way of its normal effect (sustain is applied when releasing the Pedal, etc.), reverse the polarity setting.

- 1 Press the **DISPLAY SELECT [UTILITY]** button to call up the **UTILITY** display.



- 2 In the **[GLOBAL 2]** tab, set the **ASSIGNABLE FOOT PEDAL POLARITY**.

“1 (SUSTAIN)” is the polarity for the pedal connected to the [1 SUSTAIN] jack, and “2 (VOLUME)” is the polarity for the pedal connected to the [2 VOLUME] jack.

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