



STAGE KEYBOARD CLAVIER DE SCÈNE TECLADO DE ESCENARIO

> YC88 YC73

OWNER'S MANUAL

MODE D'EMPLOI

MANUAL DE INSTRUCCIONES

found on or near the name plate, which is at the rear of the unit. You should note this serial number in the space provided below and retain this manual as a permanent record of your purchase to aid identification in the event of theft.

Model No.

Serial No.

The model number, serial number, power requirements, etc., may be

(rear\_en\_01)

Le numéro de modèle, le numéro de série, l'alimentation requise, etc., se trouvent sur ou près de la plaque signalétique du produit, située à l'arrière de l'unité. Notez le numéro de série dans l'espace fourni ci-dessous et conservez ce manuel en tant que preuve permanente de votre achat afin de faciliter l'identification du produit en cas de vol.

N° de modèle

N° de série

(rear\_fr\_01)

El número de modelo, el número de serie, los requisitos de alimentación, etc. pueden encontrarse en la placa de identificación o cerca de ella. Esta placa se encuentra en la parte posterior de la unidad. Debe tomar nota del número de serie en el espacio proporcionado a continuación y conservar este manual como comprobante permanente de su compra para facilitar la identificación en caso de robo.

Nº de modelo

Nº de serie

(rear\_es\_01)

### **FCC INFORMATION (U.S.A.)**

- 1. IMPORTANT NOTICE: DO NOT MODIFY THIS UNIT!
  - This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modifications not expressly approved by Yamaha may void your authority, granted by the FCC, to use the product.
- 2. IMPORTANT: When connecting this product to accessories and/or another product use only high quality shielded cables. Cable/s supplied with this product MUST be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the USA.
- 3. NOTE: This product has been tested and found to comply with the requirements listed in FCC Regulations, Part 15 for Class "B" digital devices. Compliance with these requirements provides a reasonable level of assurance that your use of this product in a residential environment will not result in harmful interference with other electronic devices. This equipment generates/uses radio frequencies and, if not installed and used according to the instructions found in the users manual, may cause interference harmful to the operation of other electronic devices. Compliance with FCC regula-

tions does not guarantee that interference will not occur in all installations. If this product is found to be the source of interference, which can be determined by turning the unit "OFF" and "ON", please try to eliminate the problem by using one of the following measures:

Relocate either this product or the device that is being affected by the interference.

Utilize power outlets that are on different branch (circuit breaker or fuse) circuits or install AC line filter/s.

In the case of radio or TV interference, relocate/reorient the antenna. If the antenna lead-in is 300 ohm ribbon lead, change the lead-in to co-axial type cable.

If these corrective measures do not produce satisfactory results, please contact the local retailer authorized to distribute this type of product. If you can not locate the appropriate retailer, please contact Yamaha Corporation of America, Electronic Service Division, 6600 Orangethorpe Ave, Buena Park. CA90620

The above statements apply ONLY to those products distributed by Yamaha Corporation of America or its subsidiaries.

(class B)

#### **COMPLIANCE INFORMATION STATEMENT (Supplier's declaration of conformity procedure)**

Responsible Party: Yamaha Corporation of America

Address: 6600 Orangethorpe Ave., Buena Park, Calif. 90620

Telephone: 714-522-9011

Type of Equipment: STAGE KEYBOARD

Model Name: YC88, YC73

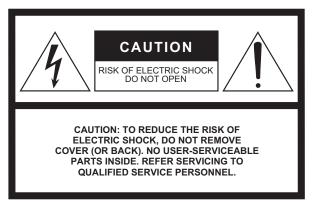
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: 1) this device may not cause harmful interference, and

2) this device must accept any interference received including interference that may cause undesired operation.

(FCC SDoC)

<sup>\*</sup> This applies only to products distributed by Yamaha Corporation of America.

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The above warning is located on the rear of the unit.

#### **Explanation of Graphical Symbols**



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

#### IMPORTANT SAFETY INSTRUCTIONS

- Read these instructions.
- 2 Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8 Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10 Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

- Only use attachments/accessories specified by the manufacturer.
- Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/ apparatus combination to avoid injury from tip-over.



- 13 Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

#### WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

(UL60065 03)

#### Information for users on collection and disposal of old equipment:



This symbol on the products, packaging, and/or accompanying documents means that used electrical and electronic products should not be mixed with general household waste.

For proper treatment, recovery and recycling of old products, please take them to applicable collection points, in accordance with your national legislation.

By disposing of these products correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.

For more information about collection and recycling of old products, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.

#### For business users in the European Union:

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

#### Information on Disposal in other Countries outside the European Union:

This symbol is only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.

(weee\_eu\_en\_02)

### **PRECAUTIONS**

#### PLEASE READ CAREFULLY BEFORE PROCEEDING

Please keep this manual in a safe and handy place for future reference.



#### WARNING

Always follow the basic precautions listed below to avoid the possibility of serious injury or even death from electrical shock, short-circuiting, damages, fire or other hazards. These precautions include, but are not limited to, the following:

#### **Power supply/Power cord**

- Do not place the power cord near heat sources such as heaters or radiators. Also, do not excessively bend or otherwise damage the cord, or place heavy objects on it.
- Only use the voltage specified as correct for the instrument. The required voltage is printed on the name plate of the instrument.
- Use only the supplied power cord/plug.
- Check the electric plug periodically and remove any dirt or dust which may have accumulated on it.
- Be sure to connect to an appropriate outlet with a protective grounding connection. Improper grounding can result in electrical shock.

#### Do not open

 This instrument contains no user-serviceable parts. Do not open the instrument or attempt to disassemble or modify the internal components in any way. If it should appear to be malfunctioning, discontinue use immediately and have it inspected by qualified Yamaha service personnel.

#### Water warning

- Do not expose the instrument to rain, use it near water or in damp or wet conditions, or place on it any containers (such as vases, bottles or glasses) containing liquids which might spill into any openings. If any liquid such as water seeps into the instrument, turn off the power immediately and unplug the power cord from the AC outlet. Then have the instrument inspected by qualified Yamaha service personnel.
- Never insert or remove an electric plug with wet hands.

#### Fire warning

Do not put burning items, such as candles, on the unit.
 A burning item may fall over and cause a fire.

#### If you notice any abnormality

- When one of the following problems occur, immediately turn off the power switch and disconnect the electric plug from the outlet. Then have the device inspected by Yamaha service personnel.
  - The power cord or plug becomes frayed or damaged.
  - It emits unusual smells or smoke.
  - Some object has been dropped into the instrument.
  - There is a sudden loss of sound during use of the instrument.
  - If any cracks or breakages exist on the instrument.

## A CAUTION

Always follow the basic precautions listed below to avoid the possibility of physical injury to you or others, or damage to the instrument or other property. These precautions include, but are not limited to, the following:

#### **Power supply/Power cord**

- Do not connect the instrument to an electrical outlet using a multiple-connector. Doing so can result in lower sound quality, or possibly cause overheating in the outlet.
- When removing the electric plug from the instrument or an outlet, always hold the plug itself and not the cord. Pulling by the cord can damage it.
- Remove the electric plug from the outlet when the instrument is not to be used for extended periods of time, or during electrical storms.

#### Location

- Do not place the instrument in an unstable position where it might accidentally fall over.
- Before moving the instrument, remove all connected cables, to prevent damage to the cables or injury to anyone who might trip over them.
- When setting up the product, make sure that the AC outlet you
  are using is easily accessible. If some trouble or malfunction
  occurs, immediately turn off the power switch and disconnect
  the plug from the outlet. Even when the power switch is turned
  off, electricity is still flowing to the product at the minimum
  level. When you are not using the product for a long time, make
  sure to unplug the power cord from the wall AC outlet.

#### **Connections**

- Before connecting the instrument to other electronic components, turn off the power for all components. Before turning the power on or off for all components, set all volume levels to minimum.
- Be sure to set the volumes of all components at their minimum levels and gradually raise the volume controls while playing the instrument to set the desired listening level.

#### **Handling caution**

- Do not insert a finger or hand in any gaps on the instrument.
- Never insert or drop paper, metallic, or other objects into the gaps on the panel or keyboard. This could cause physical injury to you or others, damage to the instrument or other property, or operational failure.
- Do not rest your weight on, or place heavy objects on the instrument, and do not use excessive force on the buttons, switches or connectors.
- Do not use the instrument/device or headphones for a long period of time at a high or uncomfortable volume level, since this can cause permanent hearing loss. If you experience any hearing loss or ringing in the ears, consult a physician.

Yamaha cannot be held responsible for damage caused by improper use or modifications to the instrument, or data that is lost or destroyed.

Always turn the power off when the instrument is not in use.

Even when the [STANDBY/ON] switch is in standby status (display is off), electricity is still flowing to the instrument at the minimum level. When you are not using the instrument for a long time, make sure you unplug the power cord from the wall AC outlet.

#### **NOTICE**

To avoid the possibility of malfunction/ damage to the product, damage to data, or damage to other property, follow the notices below.

#### **■** Handling

- Do not use the instrument in the vicinity of a TV, radio, stereo equipment, mobile phone, or other electric devices. Otherwise, the instrument, TV, or radio may generate noise. When you use the instrument along with an application on your smart device such as a smartphone or tablet, we recommend that you set "Airplane Mode" to "ON" on that device in order to avoid noise caused by communication.
- Do not expose the instrument to excessive dust or vibrations, or extreme cold or heat (such as in direct sunlight, near a heater, or in a car during the day) to prevent the possibility of panel disfiguration, damage to the internal components or unstable operation.
- Do not place vinyl, plastic or rubber objects on the instrument, since this might discolor the panel or keyboard.

#### **■** Maintenance

- When cleaning the instrument, use a soft and dry (or slightly damp) cloth. If the panel (front, side and bottom, excepting the controllers and the keyboard) is dirty, wipe the dirt away using a cloth moistened with a neutral detergent solution and tightly wrung out. Following this, wipe away the detergent solution using a cloth soaked in water and tightly wrung out. Do not use paint thinners, solvents, alcohol, or chemical-impregnated wiping cloths.
- During extreme changes in temperature or humidity, condensation may occur and water may collect on the surface of the instrument. If water is left, the wooden parts may absorb the water and be damaged. Make sure to wipe any water off immediately with a soft cloth.

#### ■ Saving data

- Edited Live Set Sounds (including settings of the SETTINGS screens) and settings of MENU screens are lost when you turn off the power to the instrument. This also occurs when the power is turned off by the Auto Power Off function (page 23). Save the data to the instrument, or to USB flash drive/an external device such as a computer (page 25). However, the data saved to the instrument may be lost due to some failure, an operation mistake, etc. Save your important data onto USB flash drive/an external device such as a computer (page 25). Before using a USB flash drive, make sure to refer to page 26.
- To protect against data loss through USB flash drive damage, we recommend that you save your important data onto spare USB flash drive or an external device such as a computer as backup data.

#### Information

#### ■ About copyrights

- Copying of the commercially available musical data including but not limited to MIDI data and/or audio data is strictly prohibited except for your personal use.
- This product incorporates and bundles contents in which Yamaha owns copyrights or with respect to which Yamaha has license to use others' copyrights.
   Due to copyright laws and other relevant laws, you are NOT allowed to distribute media in which these contents are saved or recorded and remain virtually the same or very similar to those in the product.
  - \* The contents described above include a computer program, Accompaniment Style data, MIDI data, WAVE data, voice recording data, a score, score data, etc.
  - \* You are allowed to distribute medium in which your performance or music production using these contents is recorded, and the permission of Yamaha Corporation is not required in such cases.

#### ■ About this manual

- The illustrations and LCD screens as shown in this manual are for instructional purposes only, and may appear somewhat different from those on your instrument.
- iPhone and iPad are trademarks of Apple Inc., registered in the U.S. and other countries.
- IOS is a trademark or registered trademark of Cisco in the U.S. and other countries and is used under license.
- The company names and product names in this manual are the trademarks or registered trademarks of their respective companies.

#### Welcome

Thank you for purchasing the Yamaha YC88/YC73.

This instrument is a Stage Keyboard designed especially for live performance.

Please read this Owner's Manual carefully before using the instrument in order to take full advantage of its various features. When you have finished reading the manual, keep it in a safe, accessible place, and refer to it when you need to better understand an operation or function.

#### Accessories

- Owner's Manual (this book)
- Power cord
- Foot pedal (FC3A)

#### **Main Features**

## Remarkably authentic organ sounds, piano sounds of unparalleled quality, and dynamic FM synth sounds

YC series are equipped with a VCM Organ tone generator and VCM Rotary Speaker simulator that have been newly developed based on Yamaha VCM (Virtual Circuitry Modeling) technology. These authentically reproduce the natural saturation and warmth of sound that are uniquely characteristic to tonewheel organs and rotary speakers—thanks to the meticulously accurate modeling of analog circuits. In addition, these are equipped with high-quality acoustic piano and electric piano sounds perfected in and derived from the Yamaha CP series. It also features an FM tone generator with 128-note polyphony for comprehensive dynamic performance.

#### ■ Weighted hammer-action keyboards suitable for playing as a piano/electric piano

The YC88's NW-GH3 (Natural Wood Graded Hammer keyboard with synthetic ebony and ivory keytops) keyboard reproduce a touch of grand piano by giving all keys an authentic resistance that increases from the top register to the lower. Moreover, the YC73 features a BHS (Balanced Hammer Standard) keyboard, perfect for performing as an electric piano.

#### ■ Design embodies high-class appearance and portability

The finely crafted design and aluminum exterior of YC series delivers both a sleek, professional appearance in a lightweight, highly portable instrument—perfect for onstage use.

#### ■ User interface provides total intuitive control—essential for live performance

All controls required during onstage are placed in the dedicated Sections on the panel, such as Organ and Keys. This gives you direct access to the parameters you need at any time and allows you to instantly improvise sound changes, on the fly. In addition, the Organ Section features newly developed physical drawbars, which naturally deliver exceptionally high playability, and even allow you to immediately check the current settings of the drawbars (with LED indicators) when switching among different sounds (Live Set Sounds)—letting you fully concentrate on your performance.

#### ■ Connect with other devices and expand your performance potential

Comprehensive MIDI control function and powerful Master Keyboard function make it more useful to connect and use this instrument with software synthesizers and external MIDI devices. Moreover, the instrument has a built-in Class Compliant USB Audio/MIDI interface, which makes for greater recording ease in home and professional studios, as well as greater onstage performance power.

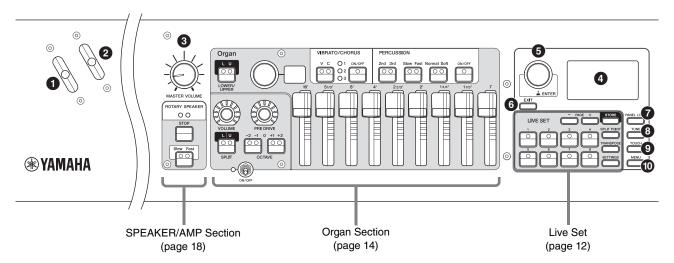
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#### Controls and Functions

#### **Front Panel**



#### 1 Bend Lever

For using as the Pitch Bend controller or as to change the rotation speed of the rotary speaker on the SPEAKER/ AMP Section.

Which of the two functions is used by the Bend Lever can be set from the [SETTINGS] button → "Controllers" → "Bend Lever" → "Mode" (page 49). In the default settings, this is set to "Pitch Bend."

#### NOTE

The pitch bend range can be set for each Section from the [SETTINGS] button  $\rightarrow$  "Controllers"  $\rightarrow$  "Bend Lever"  $\rightarrow$  "Pitch Bend Range" (page 49).

#### 2 Modulation Lever (Assignable)

For applying vibrato to the sound.

Another Control Change number can be assigned to this lever. The assignment of Control Change number can be set from the [SETTINGS] button → "Controllers" → "Modulation Lever" → "Assign" (page 49).

#### **NOTE**

- The vibrato depth and speed can be set for each Section from the [SETTINGS] button → "Controllers" → "Modulation Lever" → "P.Mod Depth"/ "P.Mod Speed" (page 49).
- The Modulation (CC#1) effect is not applied to the Organ Section when the VCM Organ type (H1 to H3) is selected. To apply the vibrato effect to the VCM Organ type, use the Organ Section VIBRATO/CHORUS (page 15).

#### **③** [MASTER VOLUME] knob

For adjusting the overall volume of the instrument.

#### 4 LCD

Displays the system messages, parameter settings, and a range of other information depending on the function currently being used.

#### ■ Settings of LCD and the lamps

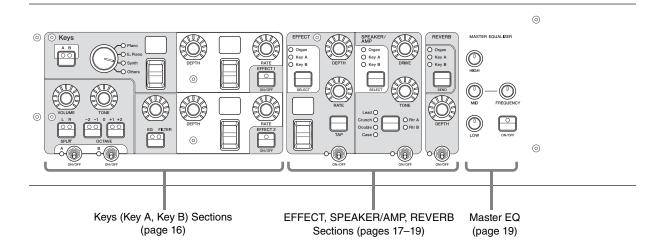
To make the following settings, press the [MENU] button → "Control Panel" → "Display Lights."

Section	For setting whether the indicator lamps of each Section are always lit up ("On") regardless of the status of the corresponding Section [ON/OFF] switch.
Ins Effect	For setting whether the lamps in the EFFECT 1 and 2 areas of the Key A/Key B Sections are always lit up ("On") regardless of the status of each of the EFFECT 1/2 [ON/OFF] buttons.
LCD SW	For setting whether to display ("On") or not display ("Off") the Top screen of the LCD. The various setting screens such as the MENU screens and the SETTINGS screens are always shown regardless of this setting.
LCD Contrast	For adjusting the contrast of the LCD.

#### 5 Encoder dial/[ENTER] button

For displaying the Live Set View (page 12) on the LCD and to edit the currently selected parameter. In the MENU and SETTINGS screens, use this dial to move the cursor (highlighted) up or down.

Also, pressing the Encoder dial is equivalent to pressing the [ENTER] button. Use this button to determine the selected parameter or to execute each operation.



#### **6** [EXIT] button

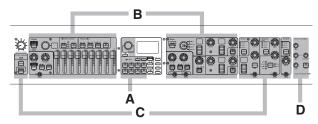
The MENU screens and the SETTINGS screens have a hierarchical structure. Press this button to exit from the current screen and return to the previous level. Also, holding down this button and pressing other specific buttons/knobs gives you access to a variety of convenient shortcuts and quick operations (Special Operations; page 31).

#### [PANEL LOCK] button

When this is set to "On," control panel operations are disabled, ensuring the settings cannot be inadvertently changed. While the panel lock is engaged, will appear on the top left corner of the LCD display.

#### NOTE

Panel lock settings can be made individually for the following areas from the [MENU] button  $\rightarrow$  "Control Panel"  $\rightarrow$  "Panel Lock Settings" (page 39).



- A. Live Set
- B. Organ/Keys
- C. Effect/Sp Amp/Reverb
- D. Master EQ

#### **③** [TUNE] button

For setting the tuning for the entire instrument (414.72–466.78 Hz, the default value is 440.00 Hz). Press the [TUNE] button, and then use the Encoder dial to change the value.

#### 9 [TOUCH] button

For selecting curves that determine how the actual velocities will be generated according your playing strength. The following five types of settings are available. The setting can also be changed from the [MENU] button → "General" → "Keyboard/Pedal" → "Touch Curve" (page 38).

Settings	Characteristics
Normal	This curve produces velocities in direct proportion to the strength of your keyboard playing. This is the most common type of curve.
Soft	This curve makes it easier to produce high velocities across the entire keyboard.
Hard	This curve makes it more difficult to produce high velocities across the entire keyboard.
Wide	This curve accentuates your playing strength by producing lower velocities in response to softer playing and louder velocities in response to harder playing. You can use this setting to expand the dynamic range of your performances.
Fixed	This curve produces the same amount of sound change, regardless of how hard or soft you play the keyboard. The fixed velocity can be set from the [MENU] button → "General" → "Keyboard/Pedal" → "Fixed Velocity."

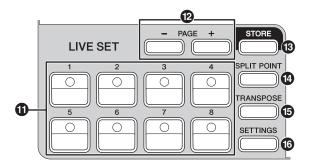
#### **NOTE**

Conventionally, organs do not respond to playing strength (key velocity). Because of this, the Organ Section only produces a fixed-velocity sound, regardless of playing strength, and the settings of the [TOUCH] button do not affect the Organ Section.

#### (MENU) button

For calling up the screens for making overall system settings (page 36).

#### **Live Set**



#### 1 Live Set Sound [1]–[8] buttons

For calling up the stored Live Set Sounds.

#### Live Set Sound

The name "Live Set Sound" refers to sound settings that include the Voices of the Organ Section (page 14) and Keys Sections (Key A/Key B; page 16), the Effects of the EFFECT Section (page 17) and SPEAKER/AMP Section (page 18) and REVERB Section (page 19). You can freely combine Voices and Insertion Effects to create and store a custom Live Set Sound, and then easily call up that sound. This instrument features an SSS (Seamless Sound Switching) function to ensure that the sound does not cut off even when switching the Live Set Sound, resulting in a more natural performance.

#### NOTE

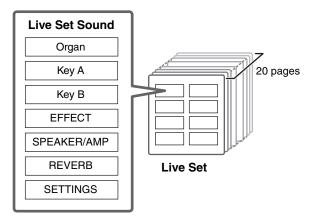
If you wish to mute the sound continued due to SSS, press the currently selected Live Set Sound button again.

#### PAGE [-]/[+] buttons

For switching the Live Set Page. The Live Set Sound changes accordingly.

#### **Live Set**

A Live Set combines Live Set Sounds [1]–[8] into a single Live Set Page. A total of 20 pages can be stored. With the default settings (factory settings), the preset Live Set Sounds have been installed in the Live Set Pages 1–10.



#### **Live Set View**

Turn the Encoder dial when at the Top screen to open the Live Set View. On the Live Set View, the names of the Live Set Sounds [1]–[8] for one Live Set Page are displayed in a screen. The indication will appear on the left of the currently selected Live Set Sound. To change the Live Set Sound in Live Set View, turn the Encoder dial to select a Live Set Sound, and then press the [ENTER] button. Once the change is made, it will return automatically to the Top screen. To keep the Live Set View displayed during performances, set "Live Set View Mode" to "Keep" (page 39).



Live Set View Mode

#### (B) [STORE] button

For storing the edited Live Set Sound.

The following content is stored. Stored settings will be retained when this instrument is turned off.

- Settings of the Organ Section
- Settings of the Key A and Key B Sections
- Settings of the EFFECT Section
- Settings of the SPEAKER/AMP Section
- Settings of the REVERB Section
- Settings in SETTINGS (including SPLIT POINT and TRANSPOSE)

#### NOTE

Settings of the Master EQ cannot be stored in Live Set Sound.

#### ■ Storing a Live Set Sound

#### 1. Press the [STORE] button.

A screen for selecting the Live Set Sound to be stored to appears.



#### 2. Press the [ENTER] button to store the data.

"Completed." appears on the screen, and then it returns to the Top screen.



#### **NOTE**

If you wish to store the currently edited settings to another Live Set Sound, use the Encoder dial to select which Live Set Sound to store the data to. You can confirm the sound of that has already been stored in the destination by playing the keyboard, before step 2.





#### NOTICE

- The settings will be overwritten if you change the settings of an existing Live Set Sound (including one of the preset Live Set Sounds) and then store those changes. Proceed with caution, as the original settings will be lost.
- The settings currently being edited will be lost if you select a different Live Set Sound or turn off the power before storing the settings.

#### **NOTE**

- If you selected a different Live Set Sound causing your edits to be lost, you can use the "Edit Recall" function to recall the last edited status (page 41).
- You can download the preset Live Set Sounds from Soundmondo. Soundmondo is a service for managing and sharing the Sound settings on an iOS application or by using the Google Chrome browser on a Mac or PC. For details, refer to the website below. http://www.yamaha.com/2/soundmondo

#### ■ Swapping/Copying Live Set Sounds

- 1. Call up the Live Set Sound you want to swap from or copy.
- 2. Open the operating screen.

[MENU] button → "Job" → "Live Set Manager" → "Swap"/ "Copy."



**3.** Select the Live Set Sound you want to swap to or copy to.

Use the Encoder dial to select the intended Live Set Sound. Press the [ENTER] button. The messages "Executing.." → "Completed." appear on the screen, and then operation returns automatically to the Top screen.

#### ■ Initializing the Live Set Sound

- **1.** Call up the Live Set Sound you want to initialize.
- **2.** Open the initialization screen.

[MENU] button → "Job" → "Live Set Manager" → "Initialize."

**3.** Execute initialization.

Use the Encoder dial to select "Live Set Sound Init" and then press the [ENTER] button. The messages "Initializing.." → "Completed." appears on the screen, and then it returns automatically to the Top screen.

#### NOTE

If you want to reset the sound settings currently being edited to the default state, press the [EXIT] and the [SETTINGS] buttons simultaneously. This operation does not overwrite the stored Live Set Sound.

#### (ISPLIT POINT) button

For changing the Split Point. Turn the Encoder dial or press the key you wish to assign as the Split Point. The setting will be stored in the current Live Set Sound.

#### Split

The Split function allows you play different Voices with the right and left hands. The point on the keyboard that separates the right hand section and the left hand section of the keyboard is called the "Split Point."

#### NOTE

- You can also set by pressing the desired key while holding the [SPLIT POINT] button.
- The note set as the Split Point becomes the lowest note of the right hand section.
- The Split Point can also be changed from the [SETTINGS] button → "Function" → "Split Point" (page 44).

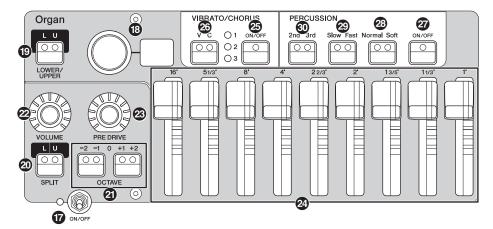
#### (5) [TRANSPOSE] button

For adjusting the pitch in semitone steps. The settings can be stored to the Live Set Sound. The settings can also be changed from the [SETTINGS] button → "Sound" → "Function" → "Transpose" (page 44).

#### (6) [SETTINGS] button

For calling up the screens for making detailed settings for the currently selected Live Set Sound (page 42). You can make various settings, including the Organ customization and Mono/Poly settings for Key A and Key B. Settings made here are stored in the Live Set Sound.

#### **Organ Section**



The YC88/YC73 Organ Section allows you to select an organ type from the VCM Organ tone generator that faithfully reproduces a tonewheel-type vintage organ or an FM tone generator that reproduces a transistor-type organ, and uses physical drawbars allowing you to perform while changing the organ sound in real time. You can also adjust the detailed parameters to create an organ sound that includes differences between individual instruments etc.

#### 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 uses DSP to emulate 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

By applying this technology, the VCM Organ tone generator fully reproduces the following characteristics of a vintage organ.

- Natural, organic harmonies when playing chords thanks to a matrix circuit that connects the keyboard, tone wheels, and drawbars
- Percussion sound with remarkable presence—based on vacuum tube circuit analysis
- Key clicks and leakage sounds—based on electrical circuit analysis
- Natural sound distortion—simulating vintage vacuum tube pre-amplifiers
- Vibrato/Chorus effect—from scanner-based vibrato circuitry
- Changes in frequency characteristics and drive amount that responds dynamically to operation of the expression pedal

Adjustment of these detailed parameters makes it possible to accurately recreate the distinctive characteristics of the original instruments—including all of their specially attractive imperfections, faults and even deterioration.

#### Section [ON/OFF] switch

To enable (turn on) or disable (turn off) this Section. When this Section is enabled (on), the lamp lights up and pressing a key generates sound.

#### (B) Organ type selector/display

Turn the Encoder dial to select the Organ type to be used. The selected type (H1–H3, F1–F3) is shown on the display.

H1–H3 indicate the VCM Organ types, while F1–F3 indicate the types using the FM tone generator.

H1	This type faithfully reproduces a standard vintage organ. It is fit for organ solos and music in which the organ is the main instrument.
H2	This type is characterized by its deep sound with emphasis in the mid- to low-range tones. It is ideal for when you want to have an edge or presence that cuts through the rest of the band or ensemble.
НЗ	This type has a unique percussion sound. This type works well with the drive effects, and is suitable for playing fast passages.
F1	This organ generates simple sine waves.
F2	This type recreates a famous British transistor combo organ.
F3	This type recreates a famous Italian transistor combo organ.

The type setting is common to both LOWER and UPPER parts.

#### NOTE

The organ sound characteristics (such as leakage level of the tonewheel and volume of the key click sound) can be set from the [SETTINGS] button → "Sound" → "Organ Settings" (page 42). These settings are stored in the Live Set Sound.

#### (D) LOWER/UPPER [L U] button

The Organ Section is divided into two parts: LOWER and UPPER. Use this button to select which of those two parts you want to display/change the settings of.

#### 2 SPLIT [L U] button

For selecting the setting whether each part of the Organ sounds or not when you play each keyboard section relative to the Split Point. Pressing the button alternates sequentially between the four settings.

Off	The part selected by the LOWER/UPPER [L U] button sounds, regardless of which key you play.
L+U	The LOWER part sounds when you play the left section of the keyboard, and the UPPER part generates sounds when you play the right section of the keyboard.
U	The part selected by the LOWER/UPPER [L U] button sounds only when you play the right section of the keyboard. The LOWER/UPPER [L U] is automatically changed to "U."
L	The part selected by the LOWER/UPPER [L U] button sounds only when you play the left section of the keyboard. The LOWER/UPPER [L U] is automatically changed to "L."

#### NOTE

For details about the Split Point, refer to page 13.

#### **3** OCTAVE [-2 -1]/[+1 +2] buttons

To change the range of the keyboard in units of one octave.

Press the [-2 -1] button and [+1 +2] button simultaneously to restore the value to "0." This can be set separately for the LOWER and UPPER parts.

#### [VOLUME] knob

For adjusting the volume of this Section. For the Organ Section, this parameter is common to both the LOWER and UPPER parts.

#### (PRE DRIVE) knob

For changing the gain of the Organ pre-amplifier. It models the changes in distortion caused by a pre-amplifier adjustment screw in the organ body. This parameter is common to both the LOWER and UPPER parts.

#### 2 Drawbars

For adjusting the composition of the Organ's harmonics and determine the character of the sound. When you move a drawbar, the LED lights up to match the current setting and the sound changes—as if you were pulling out a drawbar on a vintage organ.

#### **NOTE**

 In situations like when you call up settings from the Live Set, the actual position of the drawbars and the LED displays (currently set values) will not match. If you move a drawbar, that position will be reflected in the settings. Or, if you press the LOWER/UPPER [L U] button while holding the [EXIT] button, the values for the actual positions of all the drawbars are immediately reflected in the settings without having to move the drawbars.

- You can change the behavior for matching the actual positions and the LED displays when drawbars are moved, from the [MENU] button → "Control Panel" → "Advanced Settings" → "Drawbar Mode" (page 39).
- For organ types F1–F3, the 1' drawbar is disabled.
- You can set the color of the drawbar LEDs separately for the LOWER and UPPER parts from the [SETTINGS] button → "Drawbar Color" → "Upper"/ "Lower" (page 50). These settings are stored in the Live Set Sound.

#### **VIBRATO/CHORUS [ON/OFF] button**

Enables the vibrato/chorus effects (lamp lights when on). These effects are only available for the VCM Organ types (H1–H3), and can be set separately for the LOWER and UPPER parts.

#### VIBRATO/CHORUS type selection button

For selecting the VIBRATO/CHORUS type. Pressing the button alternates sequentially between V (vibrato) 1–3 and C (chorus) 1–3. This setting is common to both the LOWER and UPPER parts.

#### **PERCUSSION** [ON/OFF] button

Determines whether a percussion sound is generated or not when a key is pressed. Percussion can be used only with the UPPER part using the VCM Organ type (H1–H3).

#### **NOTE**

You can set whether to link the percussion sound and the [1'] drawbar and only have one of them generate sound from the [SETTINGS] button → "Sound" → "Organ Settings" → "Perc. Link to 1feet" (page 42). With default settings, this is set to "On." These settings are stored in the Live Set Sound.

#### PERCUSSION [Normal Soft] button

For switching the level of the percussion sound.

#### 2 PERCUSSION [Slow Fast] button

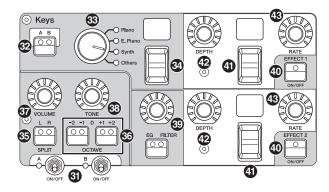
For switching the decay speed of the percussion sound.

#### @ PERCUSSION [2nd 3rd] button

For switching the pitch (harmonic) of the percussion sound.

- When this is set to [2nd], pressing a key generates a percussion sound at the same pitch as the [4'] drawbar (2nd harmonic).
- When this is set to [3rd], pressing a key generates a percussion sound at the same pitch as the [2 2/3'] drawbar (3rd harmonic).

#### Keys (Key A/Key B) Section



The YC88/YC73 Keys Sections (Key A/Key B) allow you to select a Voice for each Key from the four categories of Piano, Electric Piano, Synth, and Other. Furthermore, EG, FILTER, and two Insertion Effects (EFFECT 1, EFFECT 2) can be set individually for each of the Key A and Key B Sections. You can also make sound layers or splits, using both Key A and Key B Sections simultaneously.

#### 3 Section [ON/OFF] switch

For enabling (turning on) or disabling (turning off) the Key A and Key B Sections, respectively.

#### Keys [A B] button

For selecting which of the Key A and Key B Sections you want to display/change the settings of.

#### NOTE

- You can switch the settings of the Key A and Key B Sections by pressing the [EXIT] + Keys [A B] buttons (page 31).
- If both the Key A and Key B Sections are off, nothing will be displayed if this button is pressed.

You can also set so that the settings are displayed even when these Sections are off. Set the value under the [MENU] button  $\rightarrow$  "Control Panel"  $\rightarrow$  "Display Lights"  $\rightarrow$  "Section" to "On" (page 39).

#### Voice category selector

For selecting the Voice category to be used in the currently selected Section.

#### ❷ Voice selection switch/display

For selecting one of the Voices of the category selected with the Voice category selector. The currently selected Voice number is displayed. Operating this switch while holding the [EXIT] button moves to the top of next/previous Voice subcategory (page 31).

For a list of Voices available for the Key A and Key B Sections, refer to page 58.

#### SPLIT [L R] button

Determines where the currently selected Section can be played on the keyboard, with the Split Point as the basis. Pressing the button alternates sequentially between the three settings.

L+R	The Section sounds no matter where on the keyboard you play.
L	The Section sounds only when you play the left section of the keyboard.
R	The Section sounds only when you play the right section of the keyboard.

#### **6** OCTAVE [-2 -1]/[+1 +2] buttons

Determines the octave range of the keyboard for the currently selected Section in units of one octave. Press the [-2 -1] button and [+1 +2] button simultaneously to restore the value to "0."

#### **(7)** [VOLUME] knob

For adjusting the volume of the currently selected Section.

#### **3** [TONE] knob

For adjusting the tone of the currently selected Section. When the knob is in the center, the tone is flat. Turn the knob to the right to boost the higher and lower ranges, or turn it to the left to cut them.

#### [EG FILTER] button/knob

The knob here lets you adjust (with a convenient, single control) the EG or FILTER of the currently selected Section, while pressing the button selects the specific parameter for knob control (EG or FILTER).

#### **NOTE**

The EG and FILTER control types for each of the Key A and Key B Sections can be selected from different types of changes. Change the types by operating the [EXIT] button + [EG FILTER] knob, or from the [SETTINGS] button → "Sound" → "Key A Settings"/ "Key B Settings" → "EG Control"/ "Filter Control." For details on the EG/Filter control types, see page 34.

#### EFFECT 1/2 [ON/OFF] button

For turning the Insertion Effects on or off. To use the effects, set this to ON.

#### NOTE

To check the effect settings while the Insertion Effects are set to off, set the value under the [MENU] button  $\rightarrow$  "Control Panel"  $\rightarrow$  "Display Lights"  $\rightarrow$  "Ins Effect" to "On" (page 39).

#### 4 Effect type selection switch/display

Use this switch to select the type of Insertion Effects. The type name currently selected is displayed using two characters.

The Effect types that can be selected in EFFECT 1/2 and the EFFECT Section are different. For a list of the available Effect types, refer to page 32.

Operating this switch while holding the [EXIT] button, moves to the top of next/previous Effect category (page 31).

#### (DEPTH) knob

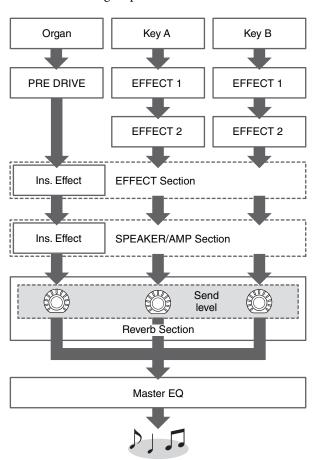
For adjusting the depth or other parameters of the Insertion Effects.

#### (B) [RATE] knob

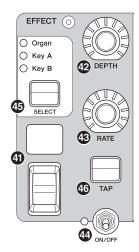
For adjusting the speed or other parameters of the Insertion Effects. The parameter to be adjusted differs for each effect type. For details, see page 32.

#### **Effect**

The YC88/YC73 features Insertion Effects that can be set individually for each of the Key A and Key B Sections, Insertion Effects that can be set for either Voice Section, and a reverb effect and Master EQ that can be set for all Voice Sections simultaneously. The illustration below shows the audio signal path.



#### **EFFECT Section**



The EFFECT Section allows you to apply an Insertion Effect to either the Organ, Key A, or Key B Section. There are also two types exclusive to this Section: Tempo Delay and Looper Delay. For a list of the available effect types, refer to page 32.

#### Section [ON/OFF] switch

For enabling (turning on) or disabling (turning off) the EFFECT Section. The lamp is lit up when effects are applied.

#### ( | SELECT | button

For selecting the Section to which the Insertion Effects will be applied.

#### **About Looper Delay**

When the Looper Delay type (page 33) is selected, the EFFECT Section behaves differently from normal:

- The Looper Delay effect is applied after the SPEAKER/ AMP Section. In addition, the effect of the REVERB Section is not applied to the delay sound.
- The status of the [SELECT] button lamps have a different meaning than normal. Pressing the [SELECT] button alternates between the two states (below).

**All lit:** The delay effect is applied to all the Organ, Key A, and Key B Sections, and the sound you play is added to the Looper.

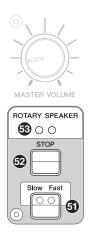
All off: The delay effect is not applied to any of the Sections, and the sound you play will not have any Looper effect. Using this lets you effectively create a rhythmic delay "loop" as you play, and then stop adding to it so you can play phrases over it while the loop continues.

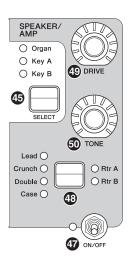
#### (TAP) button

Use this button to control the speed (tempo) when the "Tempo Delay" type is selected. Tap this button three times or more to change the tempo.

You can also change the "Tempo Delay Time" (page 45) by turning the [RATE] knob while holding the [EXIT] button.

#### SPEAKER/AMP Section





The SPEAKER/AMP Section allows you to apply speaker or amp-related Insertion Effect to either the Organ, Key A, or Key B Section. The rotary speaker type faithfully reproduces switching between slow and fast, and the behavior when stopping.

#### **To Section [ON/OFF] switch**

For enabling (turning on) or disabling (turning off) the SPEAKER/AMP Section. The lamp is lit up when effects are applied.

#### Effect type switching button

Alternates between the following effects. The lamp for the selected effect lights.

Effect	Description
Rtr A	Standard rotary speaker for organ.
Rtr B	Rotary speaker connected to a transistor preamplifier with strong distortion.
Lead	Guitar amp that features a bass of high sound pressure, and a sharp treble.
Crunch	Guitar amp that features a crunch sound.
Double	Guitar amp that features a bright sound.
Case	Speaker amp for a vintage electric piano.

#### **NOTE**

If you have selected either the Rtr A or Rtr B type, you can
use the ROTARY SPEAKER [STOP]/[Slow Fast] button to
control the operation of the rotary speaker. You can also fine-

- tune the status of the rotary speaker from [SETTINGS] button  $\rightarrow$  "Sound"  $\rightarrow$  "Rotary Speaker" (page 44).
- Rtr A and Rtr B use monaural input and stereo/monaural output. Select whether to use stereo output or monaural output from [SETTINGS] button → "Sound" → "Rotary Speaker" → "Stereo/Mono."
- Lead, Crunch, Double, and Case use stereo input and stereo output.

#### (9 [DRIVE] knob

For adjusting the amount of distortion in the speaker/ amp sound. Turn this knob to the right to increase the distortion.

#### **(5)** [TONE] knob

For adjusting the tone of the speaker/amp sound. When the knob is in the center, the tone is flat. Turn to the right to boost treble and cut bass. Turn to the left to boost bass and cut treble.

#### **⑤** [Slow Fast] button

For switching the rotation speed of the rotary speaker. Pressing the [Slow Fast] button while a type other than Rtr A or Rtr B is selected automatically selects the Rtr A type. In addition, pressing this button will automatically turn the SPEAKER/AMP Section on even if the Section itself is off.

## Controllers that can be used for switching the Slow/Fast

The rotary speaker rotation speed switching function can also be assigned to the following controllers.

- Bend Lever
- Modulation Lever
- FOOT CONTROLLER [1]
- FOOT CONTROLLER [2]
- FOOT SWITCH [SUSTAIN]
- FOOT SWITCH [ASSIGNABLE]

The function of the FOOT SWITCH [ASSIGNABLE] can be set via the [MENU] button → "General" → "Keyboard/Pedal" → "Foot Switch Assign" (page 38). The function of the other controllers can be set via the [SETTINGS] button → "Controllers" (page 49).

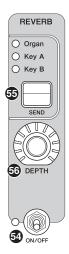
#### **❷** [STOP] button

For stopping the rotation of the rotary speaker. Pressing and holding the button for a few seconds immediately stops the rotary speaker, and resets the position.

#### **39** [ROTARY SPEAKER] lamp

This lamp gives you visual indication of the rotation speed of the rotary speaker, by flashing in time with the speed.

#### **REVERB Section**



The REVERB Section applies a reverb effect to all Voice Sections, creating a rich, special ambience as if you are playing in a concert hall or other performance space.

#### **50** Section [ON/OFF] switch

For enabling (turning on) or disabling (turning off) the REVERB Section. The lamp is lit up when effects are applied.

#### **⑤** [SEND] button

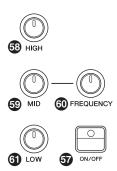
Determines the Section for adjusting the Send level of the reverb effect. When all three lamps are lit up, you can equally adjust the send level for each Section.

#### **5** [DEPTH] knob

For adjusting the send level (effect depth) of the reverb effect for the Section selected with the [SEND] button.

#### **Master EQ**

MASTER EQUALIZER



Master EQ adjusts the tone of the overall sound.

#### **3 MASTER EQUALIZER [ON/OFF] button**

To enable (turn on) or disable (turn off) the Master EQ. The lamp is lit up when Master EQ is applied.

#### NOTE

The Master EQ settings cannot be stored in Live Set Sound.

#### **58** [HIGH] knob

For setting the gain (-12 to +12) of the high range (5 kHz).

#### **59** [MID] knob

For setting the gain (-12 to +12) of the middle range (100 to 10 kHz).

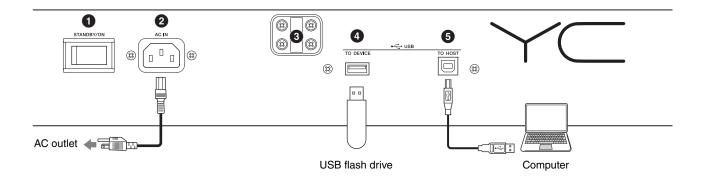
#### **(iii)** [FREQUENCY] knob

For setting the center frequency of the middle range.

#### (1) [LOW] knob

For setting the gain (-12 to +12) of the low range (80 Hz).

#### Rear Panel



#### 1 [STANDBY/ON] switch

For switching the instrument to standby or turning it on.

#### 2 [AC IN] jack

For connecting the supplied AC power cord.

#### Music stand attachment holes

Use these two holes to attach a music stand (sold separately).

#### 4 USB [TO DEVICE] terminal

For connecting a USB flash drive to this instrument, allowing you to use the device to save data you have created and load data you want to restore.

#### NOTE

Only a USB flash drive can be recognized by this instrument. No other USB devices (such as a hard disk drive, CD-ROM drive or USB hub) can be used.

#### **5** USB [TO HOST] terminal

For connecting this instrument to a computer, iPhone or iPad via a USB cable, allowing you to transfer MIDI data and audio data between the devices. Unlike the communication via the MIDI [IN]/[OUT] terminals, this terminal can handle two MIDI ports via a single cable. For more information on these two MIDI ports, see page 28.

#### NOTE

- Audio data sending capability for the instrument is a maximum two channels (one stereo channel) at a sampling rate of 44.1 kHz, 24 bit.
- For details on connecting an iPhone or iPad, refer to page 29.

#### 6 MIDI [IN]/[OUT] terminals

With a standard MIDI cable (commercially available), you can connect an external MIDI instrument, and control it from this instrument. Likewise, you can use an external MIDI device (such as a keyboard or sequencer) to control the sounds on this instrument.

#### **7** FOOT SWITCH [SUSTAIN] jack

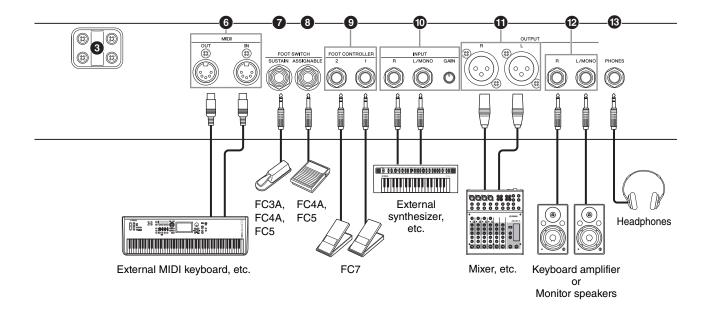
For connecting an FC3A Foot Switch (provided) for use as a dedicated Sustain pedal.

You can also switch assignments to use the same function as the ROTARY SPEAKER [Slow Fast] button (page 18) instead of the Sustain function. Function assignment can be set from the [SETTINGS] button → "Controllers" → "Sustain Pedal."

#### **3** FOOT SWITCH [ASSIGNABLE] jack

For connecting a separately sold foot switch (FC4A or FC5) in order to perform a range of freely assignable functions such as a soft pedal, sostenuto pedal, and switching Live Set Sounds. In the default settings, "Live Set+" is assigned.

You can assign functions from the [MENU] button → "General" → "Keyboard/Pedal" → "Foot Switch Assign" (page 38). Refer to page 60 for a list of the parameters that can be assigned to this instrument.



#### 9 FOOT CONTROLLER [1]/[2] jacks

For connecting a separately sold foot controller (FC7), which conveniently lets you continuously control one of various different assignable functions with your foot—such as volume and the tone of Voice Sections. In the default settings, "Expression" is assigned to FOOT CONTROLLER [1], and "Pedal Wah" is assigned to FOOT CONTROLLER [2].

You can assign functions to the foot controller from the [SETTINGS] button  $\Rightarrow$  "Controllers"  $\Rightarrow$  "Foot Controller 1" / "Foot Controller 2"  $\Rightarrow$  "Assign." Refer to page 60 for a list of the parameters that can be assigned.

#### 1 INPUT [L/MONO]/[R] jacks/[GAIN] knob

These jacks allow you to connect an external audio devices and mix the output of that device with that of this instrument. Use the [GAIN] knob to adjust the volume balance with this instrument.

#### 1 OUTPUT [L]/[R] jacks

Use these two XLR-type jacks together to output balanced audio signals.

#### **OUTPUT** [L/MONO]/[R] jacks

Use these two 1/4" standard mono phone (unbalanced) jacks together to output stereo audio signals. When using mono output, connect only to the [L/MONO] jack.

#### **NOTE**

- Select either jack 1 or 2 depending on the external audio devices to be connected.
- In case both 1 and 2 jacks are connected to external audio devices, the audio signals will be output from the both jacks simultaneously.

#### (B) [PHONES] jack

Use this 1/4" standard stereo phone jack to connect a pair of headphones.



#### **CAUTION**

- To prevent hearing loss, avoid using headphones at high volumes for extended periods of time.
- Whenever connecting other audio equipment, ensure that all devices are turned off.

#### NOTE

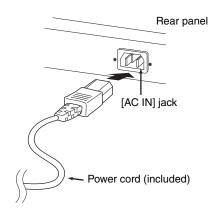
The sound output via the headphones is identical to that output via the OUTPUT [L]/[R] jacks and the OUTPUT [L/MONO]/[R] jacks. Furthermore, plugging in or disconnecting a set of headphones has no effect on whether the sound is output via these jacks.

### Setting Up

### **Power Supply**

Connect the respective ends of the supplied AC power cord in the following order. Make sure the [STANDBY/ON] switch on the instrument is set to the STANDBY position.

- 1. Connect the supplied power cord to the [AC IN] jack on the instrument's rear panel.
- 2. Connect the other end of the power cord to an AC outlet.



#### NOTE

Follow this procedure in reverse order when disconnecting the power cord.



#### **WARNING**

- Use only the AC power cord supplied with your instrument. The use of an inappropriate replacement can lead to overheating or electric shock.
- The power cord supplied with your instrument must not be used with other electrical equipment. Failure to observe this precaution can result in damage to the equipment or fire.
- Make sure your instrument the voltage requirement for the country or region in which it is being used.

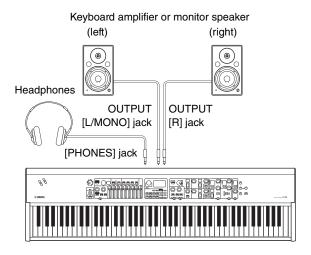


#### **CAUTION**

The instrument remains charged and draws a small amount of power even when the [STANDBY/ON] switch is set to the STANDBY position. If you intend not to use it for an extended period of time, therefore, make sure to unplug the power cord from the wall outlet.

## Connecting Speakers or Headphones

Since the instrument has no built-in speakers, you will need to monitor the sound of the instrument by using external equipment. Connect a set of headphones, monitor speakers, or other playback equipment as illustrated below. When making connections, be sure that your cables have the appropriate ratings.



#### **Turning On and Off**

Make sure the volume settings of the instrument and external devices such as powered speakers are turned to the minimum before turning the power on. When connecting the instrument to monitor speakers, turn on the power switch of each device in the following order.

#### ■ Turning on

Turn the [MASTER VOLUME] knob of this instrument to its minimum (left-most setting)  $\rightarrow$  set the [STANDBY/ON] switch to ON  $\rightarrow$  turn the amplifier or speaker power on.

#### **■** Turning off

Turn the [MASTER VOLUME] knob of this instrument to its minimum (left-most setting)  $\rightarrow$  turn the amplifier or speaker power off  $\rightarrow$  set the [STANDBY/ON] switch to STANDBY.

#### **Auto Power Off Function**

The Auto Power Off function automatically turns off this instrument after 30 minutes of inactivity. By default, this is set to "Disable."

#### ■ Setting the Auto Power Off function

[MENU] button → "General" → "Auto Power Off" → "Enable" (page 38).

#### **NOTICE**

- Since any unsaved data will be lost when the Auto Power Off function turns off this instrument. Make sure to store your work before this occurs.
- Depending on the instrument status, the power may not turn off automatically, even after the specified period of time elapses. Always turn off the power manually when the instrument is not in use.

## Restoring the Factory Default Settings (Factory Reset)

The Factory Reset function allows you to restore this instrument to its initial condition. To execute the factory Reset function, press the [MENU] button → "Job" → "Factory Reset."

#### **NOTICE**

When the Factory Reset function is executed, all the Live Set Sounds and the settings of MENU screens and SETTINGS screens will be overwritten with their defaults. It is wise, therefore, to regularly create backup copies of important data on a USB flash drive or the like.

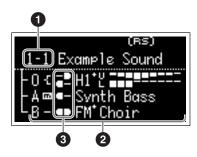
#### **NOTE**

Refer to page 56 for information on detailed settings of preset Live Set Sounds.

## **Basic Structure & Display Content**

### **Top Screen Configuration**

This section explains the Top (Live Set Sound) screen which appears when this instrument is turned on with its default settings (factory settings).



#### 1 Live Set Sound number

Displays the currently selected Live Set Sound number. The "1-1" is selected automatically when this instrument is turned on. You can also change which number is automatically selected when turned on, by changing the "Power On Sound" setting (page 40).

#### 2 Voice Sections

Indicates the status of each Section.

The sound of this instrument is divided into three Voice Sections: Organ, Key A, and Key B. The Organ (O) area shows the organ type and the approximate drawbar settings, while the Key A (A) and Key B (B) areas show the Voice names.

Voices having "FM" in the name are those using FM tone generation.

The Sections set to on will sound simultaneously in a layer. The Sections set to off are not displayed on the Top Screen and will not sound.

#### Split

Indicates the current split status of each Voice Section/part.

indicates that the Section/part sounds when the keyboard is played in a range below the Split Point.

indicates that the Section/part sounds when the keyboard is played in a range above the Split Point.

In addition, following special icons may appear on the Top screen depending on the Live Set Sound settings.

HI.	"Organ Settings" (page 42) are customized.	
FM*	"FM Unison" → "Mode" (page 43) is set.	
"Mono/Poly" (page 43) is set to "Mono."		
(RS)	"Rotary Speaker" settings (page 44) are customized.	

#### **Selecting Voice Sections**

To enable (ON) or disable (OFF) each Voice Section, use the corresponding Section [ON/OFF] switch. When the indicator lamp of the Section [ON/OFF] switch is lit, the corresponding Voice Section will sound when you play the keyboard. When multiple Sections are set to on, those Sections will sound simultaneously in a layer.



## **Exiting from the Current Screen**

The MENU screens and the SETTINGS screens are arranged in a hierarchical structure. To move one step back to the previous hierarchy, press the [EXIT] button. Pressing the [EXIT] button several times will return you to the Top (Live Set Sound) screen.



## **Editing File Names/Live Set Sound Names**

#### **■** Editing File Names

[MENU] button  $\rightarrow$  "File"  $\rightarrow$  "File Utility"  $\rightarrow$  "Rename"  $\rightarrow$  Select the desired file for which you wish to edit the name  $\rightarrow$  Edit the name  $\rightarrow$  [ENTER] button to save the file.

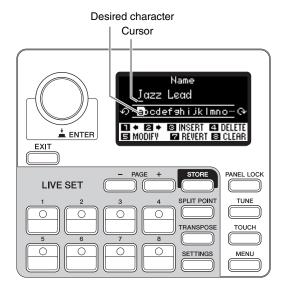
#### **■** Editing Live Set Sound Names

Select the desired Live Set Sound for which you wish to edit the name → [SETTINGS] button → "Name" → Edit the name → [ENTER] button → Select "Store"/ "Do not store now."

#### NOTE

If "Do not store now" is selected, the Live Set Sound will not be stored, but the edited name will remain.

#### ■ Operations During Name Edit



Use the Live Set Sound [1]/[2] buttons to move the cursor to the position of the character you wish to edit. Use the Encoder dial to select characters, and then use the following buttons to edit the name.

Button/Indication	Functions
Live Set Sound [1]	Moves the cursor to left.
Live Set Sound [2]	Moves the cursor to right.
Live Set Sound [3]	Inserts a desired character at the cursor position.
Live Set Sound [4]  DELETE	Deletes the character at the cursor position.
Live Set Sound [5]	Changes the character at the cursor position to the desired one.
Live Set Sound [7]	Reverts all characters to the unedited name.
Live Set Sound [8]	Deletes all characters.
[ENTER]	Terminates the edit operation, and then stores the data or saves the file.
[EXIT]	Terminates the edit operation.

### Saving / Loading Data

In the File screens ([MENU] button  $\rightarrow$  "File"), you can save/load the data of this instrument, including the entire system settings, entire Live Set, or each Live Set Sound to/from a USB flash drive.

#### NOTE

Before using a USB flash drive, be sure to read "Precaution when using the USB [TO DEVICE] terminal" (page 26).

## Saving the settings to a USB flash drive

- 1. Connect a USB flash drive to the USB [TO DEVICE] terminal of this instrument.
- **2.** Call up the File screen. Select the [MENU] button → "File."
- 3. Select the contents you wish to save.

The following file types can be saved to a USB flash drive.

File type	Description
Back Up File	All data including the system settings.
Live Set All File	All the Live Set Pages.
Live Set Page File	Currently selected Live Set Page.
Live Set Sound File	Currently selected Live Set Sound.

#### **4.** Perform the save operation.

Select "Save" and press the [ENTER] button to call up the screen for selecting the destination.

#### ■ When overwriting the existing file

Select the desired file from the displayed list.

#### ■ When saving as a new file

Select "New File."

The "Save \*\*\* File" screen for editing file name appears. For details on name editing operations, refer to "Operations During Name Edit" (page 24).



File name edit screen

Press the [ENTER] button to execute saving. The messages "Saving.." → "Completed." will appear on the screen, and then return to the Top screen.

## Loading the settings from a USB flash drive

#### **NOTICE**

The Load operation overwrites any data previously existing in this instrument. Important data should always be saved to a USB flash drive connected to the USB [TO DEVICE] terminal.

- 1. Connect a USB flash drive to the USB [TO DEVICE] terminal of this instrument.
- **2.** Call up the File screen.
  Select the [MENU] button → "File."
- 3. Select the contents you wish to load from the USB flash drive.

File type	Description
Back Up File (Extension: .Y0A)	All data including system settings.
Live Set All File (Extension: .Y0L)	All Live Set Pages.
Live Set Page File (Extension: .Y0P)	One Live Set Page. The file will be loaded to the currently selected Live Set Page.
Live Set Sound File (Extension: .Y0S)	One Live Set Sound. The file will be loaded to the currently selected Live Set Sound.

- 4. Select "Load" and press the [ENTER] button.
- 5. Select the file in the USB flash drive.

To cancel the loading operation, select "Cancel" and press the [ENTER] button.

#### **6.** Perform the load operation.

Select "Load All"/ "Load to \*\*\*" and then press the [ENTER] button. The messages "Loading.." → "Completed." will appear on the screen, and then return to the Top screen.

#### NOTE

For file types other than a Live Set Sound file, you can select and load the one desired Live Set Sound included in the file. In that case, select "Load Live Set Sound" in step 6 to call up the screen for selecting the Live Set Sound in the file. Then select the desired data, and execute loading. The data is loaded into the currently selected Live Set Sound.

## Precautions when using the USB [TO DEVICE] terminal

This instrument features a built-in USB [TO DEVICE] terminal. When connecting a USB device to the USB [TO DEVICE] 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, refer to the owner's manual of the USB device.

#### **■** Compatible USB devices

· USB flash drive

Other USB devices such as a USB hub, computer keyboard or mouse cannot be used.

The instrument does not necessarily support all commercially available USB devices. Yamaha cannot guarantee operation of USB devices that you purchase. Before purchasing a USB device for use with this instrument, please visit the following web page:

https://download.yamaha.com/

Although USB devices 2.0 to 3.0 can be used on this instrument, 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 instrument.

#### NOTICE

The rating of the USB [TO DEVICE] terminal is a maximum of 5V/500mA. Do not connect USB devices having a rating above this, since this can cause damage to the instrument 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 "freezing" of the operation of the instrument or corruption of the USB device and the data.
- When connecting then disconnecting the USB device (and vice versa), make sure to wait a few seconds between the two operations.
- Do not use an extension cable when connecting a USB device.

#### ■ Using USB flash drives

By connecting the instrument to a USB flash drive, you can save data you've created to the connected device, as well as read data from the connected device.

• Number of USB flash drives that can be used Only one USB flash drive can be connected to the [USB TO DEVICE] terminal.

#### ■ Formatting a USB flash drive

You should format the USB flash drive only with this instrument (page 41). A USB flash drive formatted on another device may not operate properly.

#### NOTICE

The format operation overwrites any previously existing data. Make sure that the drive you are formatting does not contain important data.

#### ■ To protect your data (write-protect)

To prevent important data from being inadvertently erased, apply the write-protect provided with each USB flash drive. If you are saving data to the USB flash drive, make sure to disable write-protect.

#### **■** Turning off the instrument

When turning off the instrument, make sure that the instrument is NOT accessing the USB flash drive by file management (such as during Save, Copy, Delete and Format operations). Failure to do so may corrupt the USB flash drive and the data.

## Precautions when using the USB [TO HOST] terminal

When connecting the computer to the USB [TO HOST] terminal, make sure to observe the following points to avoid freezing the computer and corrupting or losing the data.

#### NOTICE

- Use an AB type USB cable. USB 3.0 cables cannot be used.
- Execute the following before turning the power to the instrument on/off or plugging/unplugging the USB cable to/from the USB [TO HOST] terminal.
  - Quit any open application software on the computer.
  - Make sure that data is not being transmitted from the instrument. (Data is transmitted only by playing notes on the keyboard.)
- While the computer is connected to the instrument, 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 or the instrument freezes, restart the application software or the computer OS, or turn the power to the instrument off then on again.

### Using with External Devices

By using the MIDI [IN]/[OUT] terminals and the USB [TO HOST] terminal, you can connect various kinds of external devices to this instrument.

- MIDI [IN]/[OUT] terminals: Connecting the instrument to an external MIDI device (synthesizer, tone generator module, etc.), and transmit/receive MIDI data.
- USB [TO HOST] terminal: Connecting the instrument to a computer or iPhone/iPad, and transmit/receive MIDI and audio data.

These can be combined for use with the instrument in various ways.

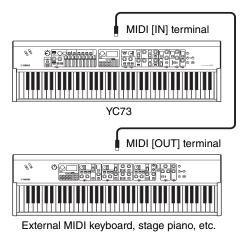
#### NOTE

Before connecting the USB [TO HOST] terminal to a computer or the like, be sure to read "Precautions when using the USB [TO HOST] terminal" on page 26.

# Controlling this instrument from an external MIDI keyboard or stage piano

You can use the external MIDI keyboard instead of the keyboard of this instrument to play and control each Section of this instrument. To specify which Section/part will sound when you play an external MIDI keyboard, make settings via the [SETTINGS] button → "External Keyboard" (page 45).

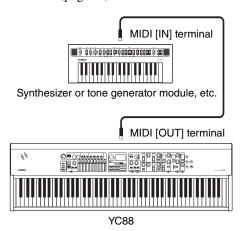
You can also use these to recreate a two-manual organ, by setting only one of the UPPER/LOWER parts in the Organ Section to be controlled from an external MIDI keyboard. For example, if you want to play the UPPER part of the Organ Section with the keyboard of this instrument and play the LOWER part with an external MIDI keyboard, set "External Keyboard" to "2manualLo."



# Controlling a synthesizer or tone generator module from this instrument

You can play the sounds of an external MIDI tone generator by playing on this instrument's keyboard.

You can also use the controllers of the Sections that is turned off to control external devices by setting the "MIDI Control" (page 37) to "Invert."



## Using by connecting to a computer or an iPhone/iPad

By connecting to a computer or an iPhone/iPad, you can use this instrument for following usages:

## ■ Controlling this instrument from a computer or iPhone/iPad

You can play or control the Sections of this instrument from a DAW software etc. on your computer or iPhone/iPad. Audio data can also be transmitted/received.

## ■ Controlling a synthesizer or tone generator module from a computer or iPhone/iPad

By using the YC88/YC73 as a USB-MIDI interface, you can play the sound of other MIDI tone generator from a DAW software etc. on your computer or iPhone/iPad via this instrument. To do this, turn the setting of "MIDI Port" > "MIDI" to "Off" (page 36).

## Setting the MIDI transmit and receive channels

To control a device using MIDI data, you must match the transmit channel on the controlling device and the receive channel on the controlled device.

You can change the transmit channel (Tx) and receive channel (Rx) on this instrument to any number. Make changes as necessary from the [MENU] button  $\rightarrow$  "General"  $\rightarrow$  "MIDI Settings"  $\rightarrow$  "MIDI Channel"  $\rightarrow$  "Tx"/"Rx."

#### **NOTE**

- For details on setting the transmit channel of an external MIDI keyboard or the receive channel of an external MIDI tone generator, refer to the owner's manual of that product.
- · For details about MIDI channels, refer to page 30.

#### Setting the internal tone generator to not produce sound when the built-in keyboard is played

If you want for only the external tone generator connected to the MIDI [OUT] terminal or USB [TO HOST] terminal to produce sound when the keyboard of this instrument are played, you can lower the instrument's volume, or turn off all the Sections, or set the value for Local Control under the [MENU] button → "General" → "Local Control" to "Off" (page 38).

# Setting how the MIDI [IN]/[OUT] terminals are used (MIDI Port settings)

This instrument provides two MIDI ports with different purposes.

- **Port 1:** For communication between this instrument and an external device
- **Port 2:** For communication between a computer or the like and an external device

You can set whether the MIDI [IN]/[OUT] terminals are used as Port 1 or Port 2, from the [MENU] button → "General" → "MIDI Setting" → "MIDI Port" → "MIDI."

## ■ Port 1: For communication between this instrument and an external device

Use this Port to control the tone generator of this instrument from an external device, or to control an external tone generator from this instrument. If using the MIDI [IN]/[OUT] terminals as Port 1, set the value under the [MENU] button  $\Rightarrow$  "General"  $\Rightarrow$  "MIDI Setting"  $\Rightarrow$  "MIDI Port"  $\Rightarrow$  "MIDI" to "On."

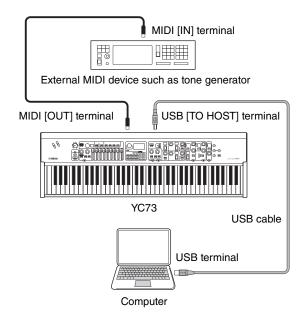
#### NOTE

By default, "MIDI Port" → "MIDI" is set to "On." There is no need to change the settings except when using as Port 2 as shown below.

On the other hand, if you want to perform MIDI communication between this instrument and a computer connected to the USB [TO HOST] terminal, set the MIDI IN/OUT settings on the computer to "YC Series" (Port 1).

## ■ Port 2: For communication between a computer or the like and an external device

This Port is for using this instrument as a USB-MIDI interface. Use this port when you want to connect an external MIDI device without a USB terminal to a computer via this instrument.



When using the MIDI [IN]/[OUT] terminals as Port 2, set the values under the [MENU] button  $\Rightarrow$  "General"  $\Rightarrow$  "MIDI Setting"  $\Rightarrow$  "MIDI Port" as follows.

USB: OnMIDI: Off

In addition, set the MIDI IN/OUT settings of a computer connected to the USB [TO HOST] terminal to the "MIDI IN 2 (YC Series)" and "MIDI OUT 2 (YC Series)" (Port 2).

#### Connecting to a computer

By connecting this instrument to your computer, you can use musical production applications such as DAW software to expand your musical possibilities. Here are some of the creative options you can explore.

- Using this instrument as an external tone generator or MIDI keyboard for DAW software.
- Recording your performance on this instrument in MIDI or audio format by DAW software on your computer.

A USB cable and the Yamaha Steinberg USB Driver are necessary to connect this instrument to the computer. Follow the instructions below to make the connection.

#### NOTE

Before connecting the USB [TO HOST] terminal to a computer, be sure to read "Precautions when using the USB [TO HOST] terminal" on page 26.

## **1.** Download the latest Yamaha Steinberg USB Driver from the URL below.

https://download.yamaha.com/

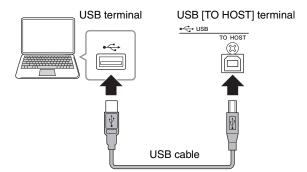
Open "Manual Library," select your language, and then input the model name in the "Model Name or Keyword" field and then click "Search." Download the resulting file, and then extract it.

#### **NOTE**

- For details about the system requirements, refer to the URL above.
- The Yamaha Steinberg USB Driver may be revised and updated without prior notice. For details and the latest information, refer to the URL above.

## **2.** Install the Yamaha Steinberg USB Driver on your computer.

Refer to the Installation Guide included in the downloaded file. When connecting the USB [TO HOST] terminal of this instrument and the computer by USB cable, refer to the figure below.



## **3.** Set this instrument to send and receive MIDI data through the USB [TO HOST] terminal.

Set the value under the [MENU] button → "General" → "MIDI Settings" → "MIDI Port" → "USB" to "On."

#### Connecting an iPhone or iPad

Connecting this instrument to an iPhone or iPad and using compatible apps allows you to more conveniently enjoy using this instrument. For details about how to connect the devices, refer to the "Smart Device Connection Manual," which is available from the Yamaha website.

#### **NOTICE**

Be sure to place your iPhone or iPad on a stable surface to prevent it from falling over and being damaged.

#### NOTE

If using this instrument with an iPhone or iPad app, we recommend first putting the iPhone or iPad in Airplane mode and then turning the Wi-Fi on to avoid noise due to transmissions.

#### **Smart Device Connection Manual**

Access the website below and then open "Manual Library." Select your language, and then input "iPhone/iPad" or the like in the "Model Name or Keyword" field and then click "Search."

https://download.yamaha.com/

For details about smart devices and applications compatible with this instrument, refer to the following website.

https://www.yamaha.com/kbdapps/

#### **USB Audio**

There are two channels (one stereo channel) capable of handling USB audio for input and output, with a sampling rate of 44.1 kHz, 24 bit.

The audio input signal via the USB [TO HOST] terminal is output via the OUTPUT [L]/[R] jacks (XLR type connector), the OUTPUT [L/MONO]/[R] jacks, and the [PHONES] jack. The input level can be adjusted from the [MENU] button  $\rightarrow$  "General"  $\rightarrow$  "I/O Volume"  $\rightarrow$  "USB Audio."

The audio output signal via the USB [TO HOST] terminal is identical to the audio signal output via the OUTPUT [L]/[R] jacks (XLR type connector), the OUTPUT [L/MONO]/[R] jacks, and the [PHONES] jack.

#### NOTE

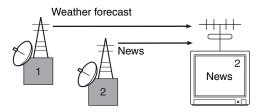
The audio signal input via the INPUT [L/MONO]/[R] jacks is output only from the OUTPUT [L]/[R] jacks (XLR type connector), the OUTPUT [L/MONO]/[R] terminal, and the [PHONES] jack of this instrument, and is not sent via the USB [TO HOST] terminal.

#### **MIDI**

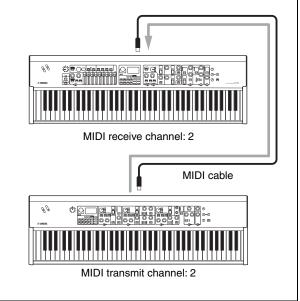
Musical Instrument Digital Interface (MIDI) is a global standard designed to allow performance, Voice, and other data to be transferred between musical instruments. As such, reliable data communication is assured even between musical instruments and equipment from different manufacturers. In addition to data generated by playing the keyboard or selecting a Live Set Sound, a wide range of other data types can also be exchanged via MIDI. Using the powerful functionality provided by this technology, you can not only play other instruments using this instrument's keyboard and controllers, but you can also adjust the volume or the tone of each Section and adjust effect settings. In fact, practically all of the parameters that can be set using the instrument's control panel can also be remotely controlled from another MIDI device.

#### **MIDI Channels**

MIDI data can be transmitted and received on one of sixteen MIDI channels. Therefore, performance data for up to sixteen different instrument parts can be simultaneously exchanged over a single MIDI cable. MIDI channels are very similar in nature to TV channels, in that each TV station transmits its broadcasts over a specific channel. Your TV, for example, receives many different programs at the same time from different broadcasters, and you select which program to watch by choosing the corresponding channel.



In much the same way, multiple transmitting devices in a MIDI system can each be set to send data on a separate channel (i.e., a MIDI transmit channel), which link with the system's receiving devices via MIDI cables. If a receiving device's MIDI channel (i.e., a MIDI receive channel) matches a MIDI Transmit channel, the receiving device will produce sound in response to the data sent by the corresponding transmitting device.



## **Special Operations List**

The Special Operations are convenient shortcuts that help you quickly set important functions and parameters, especially for Live Set Sounds. To use them, hold down the [EXIT] button and operate the relevant controls listed below.

Location	Operation	Description
Center area of the panel	[EXIT] + [SETTINGS] button	Resets only those sound settings being edited to their default state. This operation does not overwrite the stored data of the Live Set Sound. You can create a new Live Set Sound from the initial value without erasing the stored settings.  NOTE  Unlike this special operation, the operation on [MENU] button → "Job" → "Live Set Manager" → "Initialize" initializes both the settings of being edited and the settings stored in the selected Live Set Sound (page 40).
	[EXIT] + [TOUCH] button	Calls up the Fixed Velocity setting screen directly.  This is the same screen called up via the [MENU] button → "General" → "Keyboard / Pedal" → "Fixed Velocity."
Organ	[EXIT] + LOWER/UPPER [L U] button	Reflects the actual position of all drawbars to the display of the LEDs (current setting) of the selected part (UPPER or LOWER).
	[EXIT] + VIBRATO/CHORUS type selection button	Switches the VIBRATO/CHORUS type in reverse order. This is useful when you want to return to the previous type.
Keys	[EXIT] + Keys [A B] button	Swaps the settings of the Key A and Key B Sections of the selected Live Set Sound.  This is the same effect as [MENU] button $\rightarrow$ "Job" $\rightarrow$ "Section Manager" $\rightarrow$ "Swap Key A & Key B."
	[EXIT] + Voice selection switch	Moves to the beginning of the next/previous subcategory, within the selected Voice category. This is useful when you want to select desired Voice in a category that contains many Voices, such as the "Others" category. For details on the Voice subcategories, refer to Voice List (page 58).
	[EXIT] + [EG FILTER] knob	Changes the "EG Control" or "Filter Control" of the selected Section (Key A or Key B) directly. This operation changes the "EG Control" if the "EG" lamp is lit, and the "Filter Control" if the "FILTER" lamp is lit.  These are the same settings as the [SETTINGS] button → "Sound" → "Key A Settings"/"Key B Settings" → "EG Control"/"Filter Control."
	[EXIT] + Effect type selection switch	Moves to the beginning of the next/previous category. This is useful when you want to quickly switch to the desired type. For details on categories of the Insertion Effects, see the "Insertion Effect Type List" (page 32).
	[EXIT] + EFFECT 1 [ON/OFF] button, or [EXIT] + EFFECT 2 [ON/OFF] button	Swaps the settings of the EFFECT 1 and EFFECT 2 in the selected Section (Key A or Key B). This is useful when you want to change the order in which the two insertion effects are applied.  This is the same effect as the [MENU] button > "Job" > "Section Manager" > "Swap EFFECT 1/2."
EFFECT	[EXIT] + Effect type selection switch	Moves to the beginning of the next/previous category. This is useful when you want to quickly switch to the desired type.
	[EXIT] + [RATE] knob	The "Tempo Delay Time" are changed directly only when this operation is performed while the "Tempo Delay" type is selected.  This is the same setting as the [SETTINGS] button → "Sound" → "Tempo Delay Time."
SPEAKER/ AMP	[EXIT] + Effect type switching button	Switches the effect type of SPEAKER/AMP in reverse order. This is useful when you want to return to the previous type.

## Insertion Effect Type List

Category	Type Name	Display	Description	Stereo/ Mono
Chorus	G Chorus	[ [	Chorus effect that produces a deep sound with complex modulation. Turn the [DEPTH] knob to adjust the depth, and the [RATE] knob to adjust the speed.	Stereo
	SPX Chorus	[2	Chorus effect that uses a three-phase LFO to give more complex swell and spread. Turn the [DEPTH] knob to adjust the depth, and the [RATE] knob to adjust the speed.	Stereo
	Symphonic	[3	Chorus effect that features multiple sound modulation to give a greater sense of spaciousness. Turn the [DEPTH] knob to adjust the depth, and the [RATE] knob to adjust the speed.	Stereo
	816 Chorus	[4	Chorus effect that reproduces the detuned chorus effect characteristic of multiple FM tone generators on the famed TX816. Turn the [DEPTH] knob to adjust the depth, and the [RATE] knob to adjust the speed.	Stereo
Flanger	VCM Flanger	F (	Vintage flanger featuring a warm analog sound. Turn the [DEPTH] knob to adjust the depth and feedback amount, and the [RATE] knob to adjust the speed.	Stereo
	Cross FB Flanger	FZ	Vintage flanger featuring a complex sound by cross feedback. Turn the [DEPTH] knob to adjust the depth and feedback amount, and the [RATE] knob to adjust the speed.	Stereo
Phaser	VCM Stereo Phaser	P!	Vintage phaser featuring a warm analog sound. Turn the [DEPTH] knob to adjust the depth and feedback amount, and the [RATE] knob to adjust the speed.	Stereo
	Small Phaser	<i>P2</i>	Vintage phaser that features a smooth and unique sweeping effect. Turn the [DEPTH] knob to switch the modulation type—which differs depending on whether the knob is set to the left or the right—and turn the [RATE] knob to adjust the speed.	Mono
	Max90	P3	Classic vintage phaser. Turn the [DEPTH] knob to adjust the effect strength, and the [RATE] knob to adjust the speed.	Mono
	Dual Phaser	рч	Vintage phaser that features two phasers with different characteristics. Turn the [DEPTH] knob to adjust the speed of the phaser 1, and the [RATE] knob to adjust the speed of the phaser 2.	Mono
Trem/Rtr	Tremolo	Er	Effect that changes the volume cyclically. Turn the [DEPTH] knob to adjust the depth, and the [RATE] knob to adjust the speed.	Stereo
	Auto Pan	RP	Effect that moves the sound in the stereo field cyclically left and right. Turn the [DEPTH] knob to adjust the depth, and the [RATE] knob to adjust the speed.	Stereo
	Simple Rotary	5r	Simple rotary speaker. Turn the [DEPTH] knob to adjust the volume and drive level, and the [RATE] knob to switch the rotation speed. The rotation speed is set to "Slow" when the [RATE] knob is turned to the left from center, and set to "Fast" when the knob is turned to the right from center.	Mono
Dist	British Combo	d (	Crunch distortion. Turn the [DEPTH] knob to adjust the amount of distortion, and the [RATE] knob to adjust the brightness.	Mono
	British Lead	dZ	Hard rock type distortion. Use the [DEPTH] knob to adjust the amount of distortion, and the [RATE] knob to adjust the presence.	Mono
	Small Stereo	dЗ	Stereo distortion. Use the [DEPTH] knob to adjust the amount of distortion, and the [RATE] knob to adjust the presence.	Stereo
Comp	Compressor	[a	Stereo compressor. Use the [DEPTH] knob to adjust the depth, and the [RATE] knob to adjust the volume.	Stereo
Wah	Auto Wah	Ru	Wah that changes characteristics cyclically. Turn the [DEPTH] knob to adjust the amount of resonance, and the [RATE] knob to adjust the speed.	Stereo
	Touch Wah	Ło	Wah that changes characteristics in response to volume changes by keyboard touch. Turn the [DEPTH] knob to adjust the strength of the effect, and the [RATE] knob to adjust the amount of resonance.	Stereo

<sup>\*</sup>Keys: These effect types can only be used in the EFFECT 1 and EFFECT 2 on the Key A and Key B Sections. \*EFFECT: These effect types can only be used in the EFFECT Section.

Category	Type Name	Display	Description	Stereo/ Mono
Wah	Pedal Wah	PE	Wah that is controlled by the pedal. Turn the [DEPTH] knob to adjust the amount of distortion, and the [RATE] knob to adjust the amount of resonance. By default, pedal wah control is assigned to FOOT CONTROLLER [2].	Stereo
Delay	Cross Delay	Ld	Delay that alternates the delayed repeats between the left and right sides of the stereo image. Turn the [DEPTH] knob to adjust the depth and feedback amount, and the [RATE] knob to adjust the speed.	Stereo
	Tempo Delay (*EFFECT)	Ed	Delay that can be applied to match the tempo of the song. Specify the Tempo and the note length ("Tempo Delay Time"), and delay will be applied at that length. The default setting of the Tempo Delay Time is 1/4 (quarter note). Turn the [DEPTH] knob to adjust the feedback level, and the [RATE] knob to adjust the tempo. You can also set the tempo by tapping the [TAP] button several times.  NOTE  You can set the note length by [EXIT] button + [RATE] knob operation, or from the [SETTINGS] → "Sound" → "Tempo Delay Time."	Stereo
	Digital Delay (*Keys)	<b>ದ</b> ದ	Clean digital delay. Turn the [DEPTH] knob to adjust the depth and feedback amount, and the [RATE] knob to adjust the delay time. The maximum delay time is 1,486 ms.	Stereo
	Analog Delay	Rd	Delay featuring a warm analog sound. Turn the [DEPTH] knob to adjust the feedback amount, and the [RATE] knob to adjust the delay time. The delay time is a maximum of 800 ms.	Stereo
	Looper Delay (*EFFECT)	Ld	A special delay that provides a multiple echo/delay effect, repeating the sound for a short time for you to improvise with, like an audio looper. Turn the [DEPTH] knob to adjust the depth and feedback amount, and the [RATE] knob to adjust the delay time. The maximum delay time is 1,486 ms.	Stereo
			When this type is selected, the EFFECT Section behaves differently from normal.  • The "Looper Delay" effect is applied after the SPEAKER/AMP Section. In addition, the effect of the REVERB Section is not applied to the delay sound.  • Pressing the [SELECT] button alternates between the two following states.  All lit: The delay effect is applied to all the Organ, Key A, and Key B Sections.  All off: The delay effect is not applied to any of the Sections. You can play without a delay effect, while keeping the delay sounds you played before switching this setting.	
Reverb	Room Reverb	r 1	Simulates the reverberation of a room. Turn the [DEPTH] knob to adjust the dry/wet balance, and the [RATE] knob to adjust the duration of the reverb effect.	Stereo
	Hall Reverb	رح	Simulates the reverberation of a hall. Turn the [DEPTH] knob to adjust the dry/wet balance, and the [RATE] knob to adjust the duration of the reverb effect.	Stereo
	Reverse Reverb	гB	Effect that simulates reverse playback of the Gate Reverb. Turn the [DEPTH] knob to adjust the dry/wet balance, and the [RATE] knob to adjust the duration of the effect.	Stereo
Lo-Fi	Lo-Fi	La	Effect that re-samples and degrades the input sound. Turn the [DEPTH] knob to adjust the volume threshold, and the [RATE] knob to adjust the sampling frequency. Turn each knob clockwise to make the sound more degraded and less clear.	Mono
Tech	Ring Modulator	<b>~</b> 1	Effect that changes the input sound to a metallic sound. Turn the [DEPTH] knob to adjust the depth, and the [RATE] knob to adjust the frequency.	Stereo
	Slicer	<i>5L</i>	Effect that slices the input sound. Turn the [DEPTH] knob to adjust the gate time length, and the [RATE] knob to adjust the fineness of slicing.	Stereo
	LP Filter	LF	Filter that cuts sounds at frequencies higher than the cutoff frequency. Turn the [DEPTH] knob to adjust the cutoff frequency, and the [RATE] knob to adjust the resonance.	Stereo
Misc	Damper Resonance (*Keys)	dr	Effect that reproduces the sound spread produced by open strings while the damper pedal of a piano is pressed. Turn the [DEPTH] knob to adjust the dry/wet balance, and the [RATE] knob to adjust the damper opening degree.	Stereo
	Harmonic Enhancer	HE	Effect that adds harmonic overtones to the input sound to give the sound a little "sparkle" or an airy brightness. Turn the [DEPTH] knob to adjust the cutoff frequency of the high-pass filter, and the [RATE] knob to adjust the strength of the effect.	Stereo

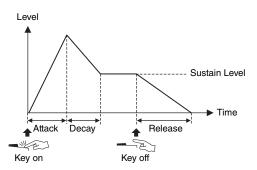
## EG/Filter Control Type List

You can change the expression of the sound in real time by operating the [EG FILTER] knob while playing phrases. This list explains the control types of each EG and Filter.

#### **EG** (Envelope Generator)

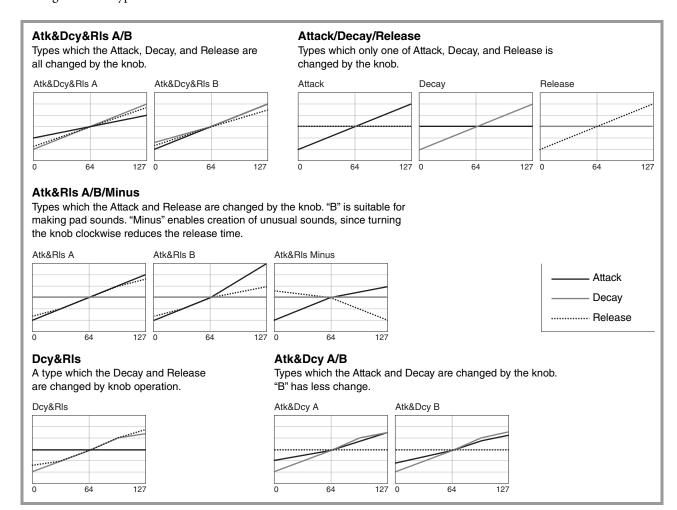
EG allows you to determine how the level of the sound changes in time. This lets you to reproduce a variety of sound characteristics of natural acoustic instruments—such as the quick attack and decay of percussion sounds, or the long release of sustained piano sound. This instrument controls the following three characteristics with a single knob.

Attack	Determines the time which the sound reaches its maximum level after the key is played. The lower the value, the quicker the attack.
Decay	Determines the time it takes for the sound reaches its sustain level (a slightly lower level than maximum). The lower the value, the quicker the decay.
Release	Determines the time it takes for the sound decays to silence after the key is released. The lower the value, the quicker the release.



How these three characteristics change with a single knob operation is referred to as EG control type. This instrument has 11 types. The type can be set using the [EXIT] button + [EG FILTER] knob operation, or from the "EG Control" (page 43).

Graphs below show how the Attack, Decay, and Release change when the knob is turned from the center (= 64) to the left and right in each type.

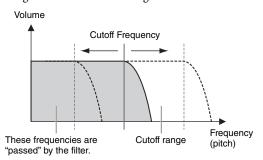


#### **Filter**

Filter is a function that changes the tone of a sound by passing or only a specific frequency range and cutting signals in other frequency ranges. This instrument controls the following two characteristics with a single knob.

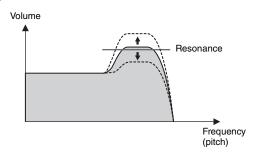
#### Cutoff

Determines the cutoff frequency of the filter (which frequency band signal or higher is cut), adjusting the brightness of the sound. Higher values result in a brighter sound.



#### Resonance

Determines the amount of the resonance which raises the volume around the cutoff frequency. Higher values result in a more pronounced effect.



How these two characteristics change with a single knob operation is referred to as Filter control type. This instrument has seven types. The type can be set using the [EXIT] button + [EG FILTER] knob operation, or from the "Filter Control" (page 43).

Graphs below show how the two parameters change when the knob is turned from the center (= 64) to the left and right in each type.

#### Flat Reso

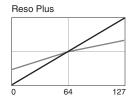
A type which uses the knob to change only the Cutoff.

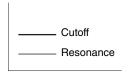


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#### **Reso Plus**

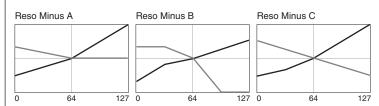
A type which increases the Resonance by turning the knob to the right.





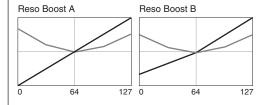
#### Reso Minus A/B/C

Types which reduce the Resonance by turning the knob to the right. Characteristics of the Filter function are strongly emphasized, letting you create synthesizer-like sounds.



#### Reso Boost A/B

Types which increase the Resonance regardless of whether the knob is turned left or right. Characteristics of the Filter function are strongly emphasized, and the sound gets brighter when turning the knob to the right compared to the Reso Minus types.



### **MENU LIST**

From the [MENU] button, you can configure various parameters and functions that affect the whole system of this instrument. The settings will be stored in this instrument.

#### **Operation**

- 1. Press the [MENU] button.
- 2. Use the Encoder dial and the [ENTER] button to select an item and display the settings screen. **NOTE**

You can also use the LIVE SET buttons [1] to [6] to select the items directly. The LIVE SET buttons [1] to [6] correspond to the items in order from the top. The lamps for selectable buttons light up.

- **3.** Use the Encoder dial to change and set the value or setting.
- **4.** Press the [ENTER] button to return to the Top screen (Live Set Sound).

#### General

Function name			Description
Master Tune			Determines the tuning for the entire instrument.  Settings: 414.72 Hz – 466.78 Hz  Default: 440.00 Hz
MIDI Settings	MIDI Port	USB	Determines whether to use (On) the USB [TO HOST] terminal for transmission/reception of MIDI messages, or not (Off).  Default: On
		MIDI	Determines whether to use (On) the MIDI [IN]/[OUT] terminals for the transmission/reception of MIDI messages with the tone generator of this instrument, or not (Off).  When this is set to "On," the terminals are used as Port 1 (message transmission/reception with the tone generator of this instrument).  When this is set to "Off," they are used as Port 2 (USB-MIDI interface). In this case, MIDI messages received by the MIDI [IN] terminal are output without alteration to USB Port 2 (MIDIOUT2 (YC Series)). MIDI messages received by the USB Port 2 (MIDIIN2 (YC Series)) are output without alteration to the MIDI [OUT] terminal.  Default: On
	MIDI Channel	Tx	Determines the MIDI transmit channel. When this is set to "Off," MIDI messages are not transmitted.  Settings: 1 – 16, Off Default: 1
		Rx	Determines the MIDI receive channel. When this is set to "All," MIDI messages will be received over all channels.  Settings: 1 – 16, All  Default: 1

Function name		Description
MIDI Settings	MIDI Control	Determines the transmission of MIDI control messages.  When this is set to "On," MIDI messages corresponding to the controls on the instrument are transmitted when a setting is changed using the controls (knobs, etc.), allowing you to receive and record the operation information on DAW software or an external MIDI device.  When this is set to "Invert," MIDI messages are transmitted only when you use the controls of a Section that has been turned off, allowing you to control DAW software or an external MIDI device. For example, when you have created a Live Set Sound combining this instrument's Organ Section and a DAW software's strings sound, you can use the operators of the Key A/Key B Sections to control the volume or filters of the software strings.  Default: Off  NOTE  • When MIDI messages corresponding to controls are received by DAW software or the like, the settings of the corresponding controls are changed.  • The assignment of MIDI messages to each control is fixed. If you want to control the parameters on DAW software from the instrument's controls, perform configurations on the computer side so that messages corresponding to the controls are appropriately received. For details about the controls and their corresponding MIDI messages, refer to page 58.  • MIDI messages for when the Modulation Lever and Bend Lever are operated are
		always sent, regardless of this setting.  ■ MIDI Control = Off  MIDI messages are not transmitted even when this instrument is operated.  ■ MIDI Control = On  Corresponding MIDI messages are transmitted when parameters are changed using the controls on this instrument.  NOTE  Even when the Section [ON/OFF] switch or EFFECT 1/2 [ON/OFF] button is off, MIDI messages are transmitted if the control lamps are lit for enabling parameter changes, by the settings of "Display Lights" (page 39).
		<ul> <li>MIDI Control = Invert</li> <li>Corresponding MIDI messages are transmitted only when controls in a Section where the Section [ON/OFF] switch is off are moved.</li> <li>NOTE</li> <li>When this is set to "Invert," control lamps automatically light up regardless of the status of the Section [ON/OFF] switch.</li> <li>When this is set to "Invert," settings for "Display Lights" (Section, Ins Effect) cannot be made.</li> </ul>
	Tx/Rx Pgm Change	Determines whether transmission/reception of Program Change messages between this instrument and external MIDI devices is enabled (On) or disabled (Off).  Default: On
	Tx/Rx Bank Select	Determines whether transmission/reception of Bank Select messages between this instrument and external MIDI devices is enabled (On) or disabled (Off). <b>Default:</b> On
	Controller Reset	Determines whether to keep (Hold) or initialize (Reset) the values of controllers (Modulation Lever, Foot Controller, etc.) when switching between Live Set Sounds.  When this is set to "Reset," the controllers are reset to the default states (below) when switching between Live Set Sounds.  • Pitch Bend: Center  • Modulation: Minimum  • Expression: Maximum  • Pedal Wah: Minimum  Default: Reset

Function name		Description
Keyboard/ Pedal	Octave	Shifts the octave range of the keyboard up or down.  Settings: -3 - +3  Default: +0
	Transpose	Transposes the pitch of the keyboard up or down in semitones.  Settings: -12 - +12  Default: +0
	Touch Curve	Determines how actual velocities will be generated according to the strength with which you play notes on the keyboard (page 11).  Settings: Normal, Soft, Hard, Wide, Fixed  Default: Normal
	Fixed Velocity	Set this parameter to produce the same velocity, regardless of how hard or soft you play the keyboard. This parameter is only used when "Touch Curve" is set to "Fixed."  Settings: 1 – 127  Default: 64
	Sustain Pedal Type	Determines which type of sustain pedal is connected to the FOOT SWITCH [SUSTAIN] jack. Select "FC3A (HalfOn)" when you want to use a pedal with a Half Damper function.  Settings: FC3A (HalfOn), FC3A (HalfOff), FC4A/FC5  Default: FC3A (HalfOn)
	Foot Switch Assign	Determines the Control Change number generated by using the Footswitch connected to the FOOT SWITCH [ASSIGNABLE] jack.  Default: Live Set +
Local Control		Determines whether Local Control is on or off.  When this is set to "Off," this instrument's tone generator is internally disconnected from the keyboard and controllers, and no sound will be produced when the keyboard is played. However, regardless of the setting here, performance information from this instrument's keyboard and controllers is transmitted as MIDI messages, and this instrument's tone generator will continue to produce sound in response to the MIDI messages received from MIDI input, depending on the MIDI settings.  Default: On
I/O Volume	USB Audio	Determines the volume of USB Audio input.  Settings: 0 – 127  Default: 64
	Output	Adjusts the final output sound level of the instrument. <b>Settings:</b> $-24 \text{ dB} - +0 \text{ dB} - +24 \text{ dB}$ <b>Default:</b> $0 \text{ dB}$
Auto Power Off		Determines whether to set the Auto Power Off function to "Enable" or "Disable." <b>Default:</b> Disable

# **Control Panel**

Function name		Description
Panel Lock	Live Set	Determines whether the panel lock for each of the categories listed at left are
Settings	Organ/Keys	enabled (On) or disabled (Off).  Default: On
	Effect/Sp Amp/Reverb	- Delault. On
	Master EQ	-
Display Lights	Section	Determines whether the indicator lamps of each Section are always lit ("On") regardless the status of the corresponding Section [ON/OFF] switch.  Default: Off  NOTE  When "MIDI Control" is set to "On" and the parameter is changed using the operator whose lamp is lit, the corresponding Control Change message is transmitted (page 37).
	Ins Effect	Determines whether the lamps in the EFFECT 1 and 2 areas of the Key A/Key B Sections are always lit ("On") regardless the status of each of the EFFECT 1/2 [ON/OFF] buttons.  Default: Off  NOTE  When "MIDI Control" is set to "On" and the parameter is changed using the operator whose lamp is lit, the corresponding Control Change message is transmitted (page 37).
	LCD SW	Determines whether to display (On) or not display (Off) the Top screen in the LCD. The various setting screens such as the MENU screens and the SETTINGS screens are always shown regardless of this setting.  Default: On
	LCD Contrast	For adjusting the contrast of the LCD.  Settings: 1 – 63  Default: 32
Advanced Settings	Drawbar Mode	Sets the conditions for a drawbar position to be reflected when the drawbar's actual position and the LED display (setting called up) do not match.  When this is set to "Jump," the position of a drawbar is unconditionally reflected when that drawbar is moved.  When this is set to "Catch," the current setting will be held until the drawbar's position matches (catches) the LED display. Once they have matched, the drawbar's position will be reflected.  Default: Jump
	Section Hold	When this is set to "Enable," you can select another Live Set Sound and still maintain (hold) the current settings of the desired Sections.  Push and hold the Section [ON/OFF] switch of a Section you want to maintain the settings of until the corresponding lamp flashes to put that Section in the Hold status. To release Section Hold, push the Section [ON/OFF] switch again. For example, to keep reverb settings during your performance regardless of the Live Set Sounds you change, set this item to "Enable" and then push and hold the REVERB Section [ON/OFF] switch.  Default: Disable
	Live Set View Mode	Determines whether to maintain the Live Set View (Keep) or automatically return to the Top screen (Close) when switching between Live Set Sounds. When this is set to "Keep," the names of eight sets of Live Set Sounds are always displayed.  Default: Close
	Value Indication	Determines whether to show (On) or not show (Off) the values on the LCD when the values for the knobs of each Section are changed.  Default: On
	SW Direction	Determines whether to operate the Voice selection switch and the Effect type selection switches in ascending order (Default) or in descending order (Reverse). <b>Default:</b> Default

Function name		Description
Advanced Settings	EG/Filter Reset	Determines whether to reset (On) or maintain without resetting (Off) the parameters of EG and FILTER when Voices are switched in the Key A/Key B Sections.  Default: On
System Settings	Power On Sound	Determines which Live Set Sound is shown when this instrument is turned on.  Default: 1-1
	MIDI Device Number	Determines the MIDI device numbers. The device number of this instrument must match the device number of the external MIDI device when transmitting/receiving Bulk Dump data, Parameter Changes, or other System Exclusive messages.  Settings: 1 – 16, All, Off Default: All
	MIDI Control Delay	Adjusts the transmission timing for MIDI control messages transmitted when switching between Live Set Sounds. You may need to make adjustments to this when the application on your computer does not receive messages correctly.  Settings: 0 – 1500 msec  Default: 0 msec

# Job

Function name			Description
Live Set Manager	Swap		Swaps the stored data of the currently selected Live Set Sound with another user-specified Live Set Sound.
	Сору		Copies the stored data of the currently selected Live Set Sound to another user-specified Live Set Sound.
	Initialize		Resets the stored data of the currently selected Live Set Sound to its default status.
Section Manager	Сору	Organ	Copies the settings of the Organ Section of the Live Set Sound currently being edited.
		Key A	Copies the settings of the Key A Section of the Live Set Sound currently being edited.
		Key B	Copies the settings of the Key B Section of the Live Set Sound currently being edited.
		Effect	Copies the settings of the EFFECT Section of the Live Set Sound currently being edited.
		Speaker Amp	Copies the settings of the SPEAKER/AMP Section of the Live Set Sound currently being edited.
	Paste	Organ	Pastes the copied settings. The paste function cannot be executed when nothing
		Key A	<ul> <li>has been copied.</li> <li>Pastes between different Sections are only possible when pasting from Key A to</li> </ul>
		Key B	Key B, or from Key B to Key A.
		Effect	_
	Speaker Amp		
	Swap Key	A & Key B	Swaps the settings of the Key A Section and the Key B Section of the currently being edited Live Set Sound.  NOTE  This job can also be executed using the [EXIT] button and the Keys [A B] button.

Function name			Description
Section Manager	Initialize	Organ	Initializes all the settings under [SETTINGS] $\rightarrow$ "Sound" $\rightarrow$ "Organ Settings" of the Live Set Sound currently being edited.
		Rotary Speaker	Initializes all the settings under [SETTINGS] $\rightarrow$ "Sound" $\rightarrow$ "Rotary Speaker" of the Live Set Sound currently being edited.
		FM Unison	<ul> <li>Initializes all the settings under "FM Unison" of the desired Section, of the Live Set Sound currently being edited.</li> <li>• Key A: [Settings] → "Sound" → "Key A Settings" → "FM Unison"</li> <li>• Key B: [Settings] → "Sound" → "Key B Settings" → "FM Unison"</li> </ul>
Edit Recall	Recall		Recalls the last edited state of the currently selected Live Set Sound. If, while editing a Live Set Sound you have not yet stored, you select a different Live Set Sound and then return to the one being edited, the latest stored version will be called up instead of the latest edited status. If this happens, execute this function to restore the latest edited status of the Live Set Sound.
			<b>NOTICE</b> The latest edited status for each Live Set Sound will be lost when this instrument is turned off.
Menu Initialize			Resets the settings of MENU screens to the default values.
Factory Reset			Restores this instrument to its default (factory) condition.

# File

Function name		Description
Back Up File	Save	Saves all the data stored in this instrument including the system settings to a USB flash drive as a "Back Up File" (with the extension: .Y0A).
	Load (*)	Loads the data saved as a "Back Up File" from a USB flash drive to this instrument.
Live Set All File	Save	Saves all the Live Set data stored in this instrument to a USB flash drive as a "Live Set All File" (with the extension: .Y0L).
	Load (*)	Loads the data saved as a "Live Set All File" from a USB flash drive to this instrument.
Live Set Page File	Save	Saves the currently selected Live Set Page stored in this instrument to a USB flash drive as a "Live Set Page File" (with the extension: .Y0P).
	Load (*)	Loads the data saved as a "Live Set Page File" from a USB flash drive to this instrument.
Live Set Sound File	Save	Saves the currently selected Live Set Sound stored in this instrument to a USB flash drive as a "Live Set Sound File" (with the extension: .Y0S).
	Load	Loads the data saved as a "Live Set Sound File" from a USB flash drive to this instrument.
File Utility	Rename	Changes the name of a file in a USB flash drive.
	Delete	Deletes a file in a USB flash drive.
	Format	Formats (initializes) a USB flash drive. Formatting is required to use a new USB flash drive for the File-related functions of this instrument.
		<b>NOTICE</b> When a USB flash drive is formatted, all of its content will be deleted. Make sure before formatting that the USB flash drive contains no irreplaceable data.

<sup>\*</sup> You can also load the desired single Live Set Sound from a file containing multiple Live Set Sounds such as the Backup file, Live Set file, and Live Set Page file (page 25).

# **Version Info**

Shows the versions of this instrument's software and firmware, as well as its copyright information.

# **SETTINGS LIST**

From the [SETTINGS] button, you can configure and store the various settings of the currently selected Live Set Sound. The settings made here will all be stored in the Live Set Sound.

# **Operation**

- **1.** Press the [SETTINGS] button.
- 2. Use the Encoder dial and the [ENTER] button to select an item and display the settings screen.

#### NOTE

If there are six or fewer items displayed on the screen, you can also use the LIVE SET buttons [1] to [6] to select the items directly. The LIVE SET buttons [1] to [6] correspond to the items in order from the top. The lamps for selectable buttons light up.

- **3.** Use the Encoder dial to change and set the value or setting.
- **4.** Press the [ENTER] button to return to the Top screen (Live Set Sound).

# Sound

Function nan	ne	Description
Organ Settings		Determines the detailed settings for the Organ Section.  Items marked with an asterisk (*) can be configured only when the VCM Organ type (H1–H3) is selected. If at least one of the items marked with (*) is changed from the default, a "+" will be displayed on the upper right of "H1"– "H3" on the Top screen.
	Leak Level*	Adjusts the volume of the leakage sound (sound leaked from the tonewheel to the electric circuit).  Settings: 0 – 127  Default: 64
	KeyClick Level*	Determines the volume of the key click sound produced when you press a key.  Settings: 0 – 127  Default: 64
	Perc. Link to 1feet*	Determines the operation of the [1'] (one foot) drawbar when switching the PERCUSSION on or off.  • On: When PERCUSSION is turned on, the sound of the [1'] drawbar stops.  • Off: The [1'] drawbar generates sound regardless of whether PERCUSSION is on or off.  Default: On
	Expression Type	Determines the position in the organ's signal path where the expression pedal is applied.  • Drive+Vol: The pedal effect is applied to the pre-amplifier in the Organ. Operating the pedal changes both the volume and the distortion of the Organ sound. If the VCM Organ type is selected, this faithfully reproduces the effect of the expression pedal on a vintage organ.  • Volume: The pedal effect is applied directly before the REVERB Section after the Organ sound is generated. Operating the pedal changes the volume, but not the distortion, of the Organ sound.  Default: Drive+Vol

Function name			Description
Key A Settings/ Key B Settings	Mono/Poly		Selects whether to play the Section as monophonic (Mono) or polyphonic (Poly). When set to "Mono," the 📠 icon is displayed to the right of the Section name (A, B) on the Top screen. <b>Default:</b> Poly
	Portamento		Determines settings regarding the portamento function, which continuously changes the sound from one played note to the next.  This can only be set when "Mono/Poly" is set to "Mono."
		Switch	Determines whether the portamento effect is applied (On) or not (Off).  Default: Off
		Time	Determines the time (speed) that it takes for the portamento effect to shift in pitch between notes.  Settings: 0 – 127  Default: 64
		Mode	Determines how the portamento effect should be applied depending on how you play the keys.  • Full-time: The portamento effect is always applied.  • Fingered: The portamento effect is applied only when you play legato performances (playing a key while still holding the previous key).
			Default: Full-time
		Time Mode	Determines the time standard for portamento pitch shifts.  • Rate: The pitch shifts at a speed corresponding to the distance between sounds (notes). The further the pitches between the two sounds, the more
			<ul> <li>time it takes.</li> <li>Time: The pitch shifts over a particular amount of time, regardless of how far apart the pitches between the two sounds are.</li> <li>Default: Rate</li> </ul>
	FM Unison		Determines the settings for creating a sense of thickness and spaciousness in an FM tone generator Voice. This setting is available only when a Voice having "FM" in its name is selected.
		Mode	Selects whether, when one note is played, to generate one note (Off), two notes simultaneously (2 Unison), or four notes simultaneously (4 Unison). When set to "2 Unison" or "4 Unison," a "+" will be displayed on the upper right of "FM" in the Voice name on the Top screen.  Default: Off
		Detune	Determines the difference in pitch between the two or four notes, which affects the degree of thickness of to the sound.  Settings: 0 – 15  Default: 0
		Spread	Determines the difference in panning between the two or four notes, which affects the degree of widening of to the sound.  Settings: 0 – 15  Default: 0
	EG Control		Selects the EG control type. For details on the types that can be selected, see "EG/Filter Control Type List" (page 34).  Default: AtkД&Rls A
	Filter Control		Selects the Filter control type. For details on the modes that can be selected, see "EG/Filter Control Type List" (page 34).  Default: Flat Reso

Function name			Description
Rotary Speaker			Determines the detailed operations of the VCM Rotary Speaker types (RtrA and RtrB types of the SPEAKER/AMP Section).
	Level	Horn	Determines the volume of the horn (treble).  Settings: 0 – 127  Default: 64
		Rotor	Determines the volume of the rotor (bass).  Settings: 0 – 127  Default: 64
	Background Noise	Switch	Determines whether to include (On) or not include (Off) simulated background noise.  Default: On
		Level	Determines the volume of the background noise.  Settings: 0 – 127  Default: 64
	Stereo/Mono		Determines whether to use stereo or monaural output for RtrA and RtrB.  Default: Stereo
	Speed		Determines the speed for the horn (treble) and rotor (bass) for the Slow and Fast states of the rotary speaker.
		Horn Fast	<b>Settings:</b> 209.4 – 817.6 rpm <b>Default:</b> 413.8 rpm
		Rotor Fast	<b>Settings:</b> 189.3 – 736.8 rpm <b>Default:</b> 373.5 rpm
		Horn Slow	<b>Settings:</b> 23.0 – 89.6 rpm <b>Default:</b> 45.4 rpm
		Rotor Slow	<b>Settings:</b> 22.7 – 88.3 rpm <b>Default:</b> 44.8 rpm
	Acceleration		Determines the speed of acceleration and deceleration for the horn (treble) and rotor (bass) of the rotary speaker.
		Horn Acceleration	<b>Settings:</b> 0.21 – 2.00 <b>Default:</b> 1.30
		Rotor Acceleration	<b>Settings:</b> 0.21 – 2.00 <b>Default:</b> 1.00
		Horn Deceleration	<b>Settings:</b> 0.21 – 2.00 <b>Default:</b> 1.30
		Rotor Deceleration	<b>Settings:</b> 0.21 – 2.00 <b>Default:</b> 1.00
Function	Transpose		Transposes the pitch in semitone steps.  Settings: -12 - +12  Default: +0  NOTE  This setting does not affect MIDI output data.
	Split Point		Determines the key position when splitting the keyboard into left hand and right hand sections. The set value becomes the lowest note of the right hand section.  Settings: C#-2 – G8  Default: G2

Function name	Description
Tempo Delay Time	Determines the delay time in note lengths relative to the tempo for the "Tempo Delay" effect.  Settings: 1/32 Tri. – 1/2  Default: 1/4
	NOTE You can change the tempo used for calculating the delay time by setting it with the [TAP] button or the [RATE] knob in the EFFECT Section.

# **External Keyboard**

Determines the generation of sound for each Section when the YC88/YC73 receives performance information (key-on, key-off) MIDI messages from an external MIDI device. You can make settings so that combine this instrument with an external keyboard for a two-manual organ, or performing only the Key A and/or Key B Sections on an external keyboard, etc.

#### NOTE

For Sections/parts that are set to generate sound only when playing an external keyboard, display of the Split on the Top screen changes from to x

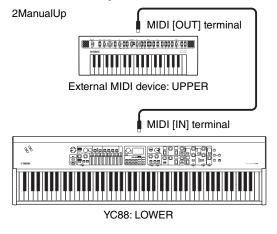
### Function name Description

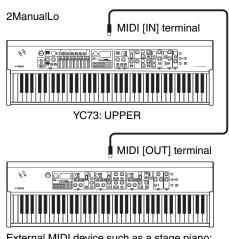
#### Organ

- Ext+Int: Sound is generated for both key-on signals received from an external MIDI device and performance on this instrument's keyboard.
- ExtOnly: Sound is generated only for key-on signals received from an external MIDI device. Sound is not generated when the keyboard on this instrument is played.
- 2ManualUp: This setting is for performances on a two-manual organ. The UPPER part generates sound for key-on signals received from an external MIDI device, and the LOWER part generates sound when the keyboard on this instrument is played.
- 2ManualLo: This setting is for performances on a two-manual organ. The LOWER part generates sound for key-on signals received from an external MIDI device, and the UPPER part generates sound when the keyboard on this instrument is played.
- Off: Sound is not generated for key-on signals received from an external MIDI device. Sound is generated when the keyboard on this instrument is played.

Default: Ext+Int

#### **Connection examples**





External MIDI device such as a stage piano: LOWER

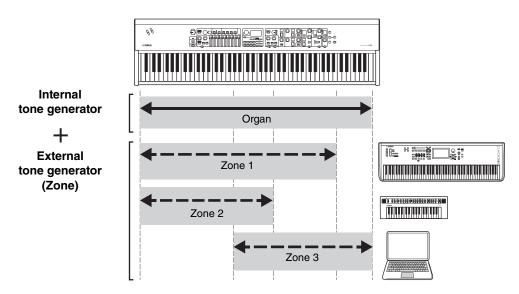
#### NOTE

When "2ManualUp" or "2ManualLo" is set, the settings of the Organ Section Split become invalid, and the lamps for the SPLIT [L U] button both automatically light.

# **Function name Description** Key A • Ext+Int: Sound is generated for both key-on signals received from an external MIDI device and performance on this instrument's keyboard. • ExtOnly: Sound is generated only for key-on signals received from an external MIDI device. Sound is not generated when the keyboard on this instrument is played. • Off: Sound is not generated for key-on signals received from an external MIDI device. Sound is generated when the keyboard on this instrument is played. Default: Ext+Int Connection example Organ = Off, Key A = Off, Key B = ExtOnly MIDI [IN] terminal Key B YC73: Organ (UPPER/LOWER) + Key A MIDI [OUT] terminal External MIDI device such as a stage piano: Key B

# **Master Keyboard**

This function is for using the YC88/YC73 as a master keyboard. It allows the keyboard to be split into as many as four different zones, each of which can control separate sounds of an external tone generator. For example, you can make a Live Set Sound combining Voices from this instrument and the connected external tone generators, or a Live Set Sound composed with Voices of external tone generators only.



Mode SW  Advanced Zone SW		Description	
		Switches the Master Keyboard Mode settings. When "On" is selected, the Master Keyboard Mode is enabled, and the MST indication appears on the Top screen.  Default: Off	
		Switches the setting range of Master Keyboard Mode. When "On" is selected, you can make detailed settings.  Default: Off  NOTE  When "Off" is selected, the detailed settings items marked with asterisk (*) will not be displayed.	
Zone Settings  → Zone 1–4  ** Detailed settings	Zone SW	Determines whether to enable (On) or disable (Off) the currently selected zone. <b>Default:</b> Zone $1 = On$ , Zone $2 - 4 = Off$	
*: Detailed settings	Tx Channel	Determines the MIDI transmit channel for the currently selected zone.  Settings: 1 – 16  Default: Zone 1 = 1, Zone 2 = 2, Zone 3 = 3, Zone 4 = 4	
	Octave Shift	Shifts the pitch of the currently selected zone in units of one octave.  Settings: -3 - +3  Default: +0	
	Transpose	Transposes the pitch of the currently selected zone in semitone steps.  Settings: -11 - +11  Default: +0	
	Note Limit Low	Determines the lowest key that generates sound in the currently selected zone.  Default: C -2	
	Note Limit High	Determines the highest key that generates sound in the currently selected zone.  Default: G8	
	Bank MSB*	Determines the Bank Select MSB to be sent as a MIDI message to the external tone generator played by the currently selected zone upon selection of a Live Set Sound.  Default: 0	

Function name		Description
Zone Settings  → Zone 1–4 *: Detailed settings	Bank LSB*	Determines the Bank Select LSB to be sent as a MIDI message to the external tone generator played by the currently selected zone upon selection of a Live Set Sound.  Default: 0
	Program Change*	Determines the Program Change Number to be sent as a MIDI message to the external tone generator played by the currently selected zone upon selection of the Live Set Sound.  Default: 1
	Volume*	Determines the volume to be sent as a MIDI message to the external tone generator played by the currently selected zone upon selection of a Live Set Sound. <b>Default:</b> 100
	Pan*	Determines the panning to be sent as a MIDI message to the external tone generator played by the currently selected zone upon selection of a Live Set Sound.  Default: C
	Tx SW Note*	Determines whether to transmit (On) or not transmit (Off) MIDI note messages to the external tone generator played by the currently selected zone.  Default: On
	Tx SW Bank*	Determines whether to transmit (On) or not transmit (Off) MIDI Bank Select messages to the external tone generator played by the currently selected zone.  Default: On
	Tx SW Program*	Determines whether to transmit (On) or not transmit (Off) MIDI Program Change messages to the external tone generator played by the currently selected zone. <b>Default:</b> On
	Tx SW Volume*	Determines whether to transmit (On) or not transmit (Off) MIDI volume messages to the external tone generator played by the currently selected zone.  Default: On
	Tx SW Pan*	Determines whether to transmit (On) or not transmit (Off) MIDI Pan messages to the external tone generator played by the currently selected zone.  Default: On
	Tx SW PB*	Determines whether to transmit (On) or not transmit (Off) MIDI Pitch Bend messages to the external tone generator played by the currently selected zone. <b>Default:</b> On
	Tx SW Mod*	Determines whether to transmit (On) or not transmit (Off) MIDI Modulation messages to the external tone generator played by the currently selected zone. <b>Default:</b> On
	Tx SW Sustain*	Determines whether to transmit (On) or not transmit (Off) MIDI Sustain messages to the external tone generator played by the currently selected zone.  Default: On
	Tx SW FS*	Determines whether to transmit (On) or not transmit (Off) MIDI Footswitch messages to the external tone generator played by the currently selected zone. <b>Default:</b> On
	Tx SW FC1*	Determines whether to transmit (On) or not transmit (Off) MIDI messages for FOOT CONTROLLER [1] to the external tone generator played by the currently selected zone.  Default: On
	Tx SW FC2*	Determines whether to transmit (On) or not transmit (Off) MIDI messages for FOOT CONTROLLER [2] to the external tone generator played by the currently selected zone.  Default: On

# **Controllers**

Function name			Description			
Bend Lever	Mode		Switches the operation mode of the Bend Lever.  • Pitch Bend: Operates as a Pitch Bend controller.  • Rotary S/F: Switches between slow and fast for the rotary speaker of the SPEAKER/AMP Section. Moving the lever in either direction produces the same effect as pressing the ROTARY SPEAKER [Slow Fast] button.  Default: Pitch Bend			
	Pitch Bend	Organ	Determines the pitch bend range in semitone steps. This can be set individually for			
	Range	Key A	each Voice Section. <b>Settings:</b> -24 - +0 - +24			
		Key B	Default: +2			
Modulation Lever	Assign		Determines the function to be assigned to the Modulation Lever. You can assign Control Change numbers 1 to 119 as well as the USB Audio volume. <b>Settings:</b> Off, 1 – 63, 65, 67 – 119, USB Audio Volume <b>Default:</b> 1			
	Limit Low		Determines the lower limit for the Modulation Lever values.  Settings: 0 – 127  Default: 0			
	Limit High		Determines the higher limit for the Modulation Lever values.  Settings: 0 – 127  Default: 0			
	P.Mod Depth	Organ	Determines the depth of the vibrato effect applied to keyboard notes. This can be set individually for each Voice Section.			
		Key A	Settings: 0 – 127  Default: 10  NOTE			
		Key B	This can be set for the Organ Section only when the FM tone generator organ type (F1 to F3) is selected.			
	P.Mod Speed	Organ	Determines the speed of the vibrato effect applied to keyboard notes. This can be set individually for each Voice Section.			
		Key A	Settings: +64 - +0 - +63  Default: +0  NOTE			
		Key B	This can be set for the Organ Section only when the FM tone generator organ type (F1 to F3) is selected.			
Foot Controller 1	Assign		Determines the Control Change number to be assigned to a foot controller (sold separately) connected via the FOOT CONTROLLER [1] jack.			
			Settings: Off, 1 – 63, 65, 67 – 119, USB Audio Volume  Default: 11 (Expression)			
	Limit Low		Determines the lower limit value for a foot controller (sold separately) connected to the FOOT CONTROLLER $[1]$ jack. <b>Settings:</b> $0-127$			
	Limit High		Default: 0  Determines the upper limit value for a foot controller (sold separately) connected to the FOOT CONTROLLER [1] jack.  Settings: 0 – 127  Default: 127			

Function n	Function name		Description		
Foot Controller 2	Assign Limit Low		Determines the Control Change number to be assigned to a foot controller (sold separately) connected to the FOOT CONTROLLER [2] jack.  Settings: Off, 1 – 63, 65, 67 – 119, USB Audio Volume  Default: 4 (Pedal Wah)  Determines the lower limit value for a foot controller (sold separately) connected to the FOOT CONTROLLER [2] jack.  Settings: 0 – 127  Default: 0		
	Limit High		Determines the upper limit value for a foot controller (sold separately) connected to the FOOT CONTROLLER [2] jack.  Settings: 0 – 127  Default: 127		
Sustain Pedal	Mode		Switches the operation mode of a sustain pedal (sold separately) connected to the FOOT SWITCH [SUSTAIN] jack.  • Sustain: Operates as a sustain pedal.  • Rotary S/F: Switches between slow and fast for the rotary speaker of the SPEAKER/AMP Section. Pressing the pedal produces the same effect as pressing the ROTARY SPEAKER [Slow Fast] button.  Default: Sustain		
Receive	Expression	Organ	Determines whether each Voice Section receives (On) or ignores (Off) the		
SW		Key A	corresponding MIDI messages received from external devices or the messages generated by operating the footswitch or foot controller.		
		Key B	Default: On		
	Sustain	Organ	<del></del>		
		Key A	<del></del>		
		Key B	<del></del>		
	Sostenuto	Organ	<del></del>		
		Key A			
		Key B			
	Soft	Key A			
		Key B			

# **Drawbar Color**

Function name	Description
Upper	Determines the color of the drawbar LEDs. This can be set individually for the UPPER and LOWER parts.
Lower	Settings: White, Red, Yellow, Green, Cyan, Blue, Magenta  Default: Upper = White, Lower = Red

# Name

Determines the names of Live Set Sounds. For details on editing Live Set Sound names, refer to "Editing File Names/Live Set Sound Names" (page 24).

### **NOTE**

To store the edited names, you'll need to use the Store operation (page 12).

# Appendix

# **Display Messages**

LCD indication	Description
Auto power off disabled.	This message appears when Auto Power Off is disabled.
Completed.	The specified load, save, format, or other Job has been completed.
Connecting to USB device	Currently recognizing the USB flash drive connected to the USB [TO DEVICE] terminal.
Device number is off.	Bulk data cannot be transmitted/received because the device number is off.
Device number mismatch.	Bulk data cannot be received because the device numbers do not match.
File or folder already exists.	A file/folder having the same name as the one you are about to save already exists.
File or folder path is too long.	The file or folder you tried to access cannot be accessed because the maximum amount of characters indicating the path has been exceeded.
Illegal bulk data.	An error occurred while receiving a Bulk data or Bulk Request message.
Illegal file name.	The specified file name is invalid. Try entering a different name.
Illegal file.	The specified file is unusable by this instrument or cannot be loaded.
Incompatible USB device.	USB device which cannot be used with this instrument has been connected to the USB [TO DEVICE] terminal.
MIDI buffer full.	Failed to process the MIDI data because too much data was received at one time.
MIDI checksum error.	An error occurred when receiving bulk data.
No device.	Device is not connected.
No read/write authority to the file.	Indicates that you do not have the authority to read/write the file.
Now receiving MIDI bulk data	Indicates this instrument is receiving MIDI bulk data.
Now transmitting MIDI bulk data	Indicates this synthesizer is transmitting MIDI bulk data.
Please reboot to maintain internal memory.	Reboot this instrument to restore the internal memory.
Push [PANEL LOCK] Button.	Push the [PANEL LOCK] button to disengage panel lock.
Unsupported USB device.	This message appears if the plugged-in USB flash drive is either unformatted or formatted in a way that this instrument does not support. Please format the USB device using this instrument.
USB connection terminated.	Communication with the USB device has been shut down because of the overcurrent to the USB device. Disconnect the device from the USB [TO DEVICE] terminal, and then turn on the power of the instrument.
USB device is full.	The USB flash drive is full and no more data can be saved. Use a new USB flash drive, or make space by erasing unwanted data from the storage device.
USB device is write-protected.	This message appears when you have attempted to write to a protected USB flash drive.
USB device read/write error.	An error occurred while reading or writing to/from a USB flash drive.

# **Troubleshooting**

No sound? Wrong sound? When a problem like this occurs, please check the following points before assuming that the product is faulty. Many problems can be solved by executing the Factory Reset operation (page 23). If the problem persists, consult your Yamaha dealer.

Issue	Suspected cause	Solution
The instrument turns off unexpectedly.	This is normal when the Auto Power Off function is enabled.	If necessary, you can deactivate the Auto Power Off function to prevent it from turning off the instrument again (page 23).
No sound is produced.	Related external equipment (e.g., amplifier, speaker, headphones) is not properly connected to this instrument via audio cables.	Since this instrument has no built-in speakers, you will need an external audio system or a set of stereo headphones to properly monitor it (page 22).
	Power to this instrument or the connected external audio equipment are not turned on.	Check the power to this instrument and the connected external audio equipment are turned on.
	The volume of this instrument and the connected external audio equipment are turned fully down.	Adjust the volume. Use the [MASTER VOLUME] knob to adjust the volume. If a foot controller has been connected to the FOOT CONTROLLER [1]/[2] jacks, try using it to increase the volume.
	All the Voice Section [ON/OFF] switches are set to OFF.	Set the desired Voice Section [ON/OFF] switch(es) to ON.
	The volume of the Voice Sections are turned fully down.	Use the [VOLUME] knobs of each Voice Section to adjust the volume.
	Local Control is set to "Off."	When Local Control is set to "Off," the internal tone generator will not sound even if you play the keyboard. Set Local Control to "On" (page 38).
	MIDI volume or expression has been set to a very low level by an external MIDI controller.	Select other Live Set Sound. If a foot controller has been connected to the FOOT CONTROLLER [1]/[2] jacks, try using it to increase the volume.
A sound continues to play indefinitely.	Effect sounds such as delay continue.	Lower the [DEPTH] knob value, or set the EFFECT1/2 [ON/OFF] button or the Section [ON/OFF] switch to OFF. If another Live Set Sound is selected during a sound continues to play, press the currently selected Live Set Sound button once more.
Sounds are distorted.	Effect settings are not appropriate.	Sound will be distorted depending on the effect types and the settings. Change the effect types and the settings.
	Volume is set too high.	Adjust the volume. To adjust the overall volume, adjust the "I/O Volume" → "Output" (page 38).
	Volume of this instrument and the connected external audio source are set too high.	Adjust the volume of the connected external audio device, or use the INPUT [GAIN] knob of this instrument. You can also adjust the volume from the "I/O Volume" → "USB Audio" (page 38).
Sound output is intermittent and stuttered.	The entire sound has exceeded the maximum polyphony (128 notes).	Be careful not to exceed the maximum polyphony.
No effect is applied.	The depth is turned to the minimum level.	Use the [DEPTH] knob to adjust the effect depth.

Issue	Suspected cause	Solution		
Data communication between the computer and this instrument does not work properly.	The Port settings on the computer are not appropriate.	Check the port settings on the computer.		
MIDI bulk data transmission	Use of the wrong terminals (MIDI, USB).	Check the connections.		
does not work properly.	Wrong MIDI device number.	Check the MIDI device number.		
Cannot save data to the external	The USB flash drive is write protected.	Unlock the write protect.		
USB flash drive.	The USB flash drive is not formatted properly.	Format again.		
A pedal has no effect.	The pedal is not correctly connected.	Make sure that the pedal's plug is fully and firmly inserted.		
Nothing is displayed on the	"Display Lights" → "LCD SW" is set to "Off".	Set the "LCD SW" to "On" (page 39).		
LCD, even the instrument's power is on.	"Display Lights" → "LCD Contrast" value is set too low.	Adjust the contrast from "LCD Contrast" (page 39).		

# **Specifications**

Item		Details				
		YC88	YC73			
Keyboard		88-key NW-GH3 (Natural Wood Graded Hammer) keyboard: synthetic ebony and ivory keytops	73-key BHS (Balanced Hammer Standard) keyboard: matte black keytops			
Tone Generation	Tone Generation Technology	VCM Organ	n, AWM2, FM			
	Polyphony (max.)	S S	VM2: 128*, FM: 128 Drgan and AWM2			
Voices	Number of Live Set Sounds	160 (Preset Live	e Set Sounds: 80)			
	Number of Voices	145 (Organ:	6 / Keys: 139)			
	es) es) ypes, Amp: 4 types) nid)					
Display	Туре	Full Dot LCD	(128 × 64 dots)			
Connectors		OUTPUT [L/MONO]/[R] (6.3 mm, standard proutput [L]/[R] (XLR jacks, BALANCED) [PHONES] (6.3 mm, standard stereo phone INPUT [L/MONO]/[R] (6.3 mm, standard phoreotropy foot controller [1]/[2] FOOT SWITCH [SUSTAIN]/[ASSIGNABLE] MIDI [IN]/[OUT] USB [TO HOST]/[TO DEVICE] [AC IN]	jack)			
Size/Weight	Dimensions (W × D × H)	1298 mm × 364 mm × 142 mm (51-1/8" × 14-5/16" × 5-9/16")	1086 mm × 355 mm × 145 mm (42-3/4" × 14" × 5-11/16")			
	Weight	18.6 kg (41 lb, 0 oz)	13.4 kg (29 lb, 9 oz)			
Included Acce	ssories	Owner's Manual (this book) × 1 Power cord × 1 Foot pedal (FC3A) × 1	.1			

The contents of this manual apply to the latest specifications as of the printing date.

Since Yamaha makes continuous improvements to the product, this manual may not completely apply to the specifications of your particular product. To obtain the latest manual, access the Yamaha website then download the manual file.

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# DATA LIST

# **Live Set Sound List**

# **YC88**

Bank	No	Name	Split Point	Section	Voice Name	MSB	LSB	PC
1	1	Natural CFX	G2	Organ	-	63	0	1
				Key A	CFX			
				Key B	-			
1	2	Soulful Rd	G2	Organ	-	63	0	2
				Key A	78Rd			
				Key B	-			
1	3	FM EP 1	G2	Organ	-	63	0	3
				Key A	FM Piano DA			
1	4	FM Lead	G2	Key B	-	63	0	4
'	4	rivi Leau	u2	Organ Key A	FM Syn Lead 2	03	U	4
				Key B	-			
1	5	Jazz Lead	G2	Organ	H1	63	0	5
				Key A	-			
				Key B	-			
1	6	Rock Organ 1	G2	Organ	H2	63	0	6
				Key A	-			
				Key B	-			
1	7	Gospel Shout!	G2	Organ	H1	63	0	7
				Key A	-			
1	0	Day Direct	00	Key B	- F2	60	0	0
1	8	Rex Direct	G2	Organ Key A	-	63	0	8
				Key B	-			
2	1	One Ear Upright	G2	Organ	-	63	1	1
_		ono zar oprigni	- C	Key A	U1	00		
				Key B	-			
2	2	67 Trem EP	G2	Organ	-	63	1	2
				Key A	67Rd Dark			
				Key B	-			
2	3	80s Piano Layer	G2	Organ	-	63	1	3
				Key A	CFX			
		F. I. OD D	00	Key B	FM The EP	00		
2	4	Fat OB Brass	G2	Organ Key A	OD Dropp 1	63	1	4
				Key B	OB Brass 1 OB Brass 2			
2	5	Jazz Swish	G2	Organ	H1	63	1	5
_	Ü	GUZZ GWIGH	G.E.	Key A	-	00		
				Key B	-			
2	6	Prog 1	G2	Organ	H2	63	1	6
				Key A	-			
				Key B	-			
2	7	Gospel Worship	G2	Organ	H1	63	1	7
				Key A	-			
				Key B	-			_
2	8	Italian Organ 1	G2	Organ	F3	63	1	8
				Key A	-			
3	1	C7 w/Pad	G2	Organ	-	63	2	1
J	'	57 W/1 αU	UZ	Key A	C7	00		'
				Key B	Analog Pad			
3	2	Wr Trem	G2	Organ	-	63	2	2
				Key A	Wr Bright			
				Key B	-			
3	3	FM EP+Pad 1	G2	Organ	-	63	2	3
				Key A	FM The EP			
				Key B	Lite Strings			
3	4	Motion Pad	G2	Organ	-	63	2	4
				Key A	Mystic Pad			
_	_	Court	000	Key B	Analog Pad	00	_	_
3	5	Squabble	G2	Organ	H1	63	2	5
				Key A Key B	-			
3	6	Casino Fire	G2	Organ	- H2	63	2	6
	J	540110 1110	J.	Key A	-	- 55		,
				Key B	-			
		1	<u> </u>		1			

Bank	No	Name	Split Point	Section	Voice Name	MSB	LSB	PC
3	7	H Split Ld/Ba	G2	Organ	H1	63	2	7
				Key A	-			
				Key B	-			
3	8	Church	G2	Organ	F1	63	2	8
				Key A	-			
				Key B	-			

# **YC73**

Bank	No	Name	Split Point	int Section Voice Name		MSB	LSB	PC
1	1	Soulful Rd	G2	Organ	-	63	0	1
				Key A	78Rd			
				Key B	-			
1	2	Natural CFX	G2	Organ	-	63	0	2
				Key A	CFX			
				Key B	-			
1	3	FM EP 1	G2	Organ	-	63	0	3
				Key A	FM Piano DA			
				Key B	-			
1	4	FM Lead	G2	Organ	-	63	0	4
				Key A	FM Syn Lead 2			
				Key B	-			_
1	5	Jazz Lead	G2	Organ	H1	63	0	5
				Key A	-			
	•	D. I O	00	Key B	-	00	•	
1	6	Rock Organ 1	G2	Organ	H2	63	0	6
				Key A	-			
1	7	Coopel Chout!	G2	Key B	- H1	63	0	7
	1	Gospel Shout!	GZ	Organ Key A	nı -	03	U	,
				Key B	-			
1	8	Rex Direct	G2	Organ	F2	63	0	8
'	0	nex bliect	UZ.	Key A	-	03	U	0
				Key B	-			
2	1	67 Trem EP	G2	Organ	_	63	1	1
2	'	07 Helli Li	uz	Key A	67Rd Dark	00	'	'
				Key B	-			
2	2	One Ear Upright	G2	Organ	-	63	1	2
_	-	One Ear Oprignt	GL.	Key A	U1	00	ı.	_
				Key B	-			
2	3	80s Piano Layer	G2	Organ	_	63	1	3
-		ooo i iano zayoi	0.2	Key A	CFX		,	
				Key B	FM The EP			
2	4	Fat OB Brass	G2	Organ	-	63	1	4
			-	Key A	OB Brass 1			
				Key B	OB Brass 2			
2	5	Jazz Swish	G2	Organ	H1	63	1	5
				Key A	-			
				Key B	-			
2	6	Prog 1	G2	Organ	H2	63	1	6
				Key A	-			
				Key B	-			
2	7	Gospel Worship	G2	Organ	H1	63	1	7
				Key A	-			
				Key B	-			
2	8	Italian Organ 1	G2	Organ	F3	63	1	8
				Key A	-			
				Key B	-			
3	1	Wr Trem	G2	Organ	-	63	2	1
				Key A	Wr Bright			
				Key B	-			
3	2	C7 w/Pad	G2	Organ	-	63	2	2
				Key A	C7			
				Key B	Analog Pad			
3	3	FM EP+Pad 1	G2	Organ	-	63	2	3
				Key A	FM The EP			
				Key B	Lite Strings			
3	4	Motion Pad	G2	Organ	-	63	2	4
				Key A	Mystic Pad			
				Key B	Analog Pad			

Bank	No	Name	Split Point	Section	Voice Name	MSB	LSB	PC
3	5	Squabble	G2	Organ	H1	63	2	5
				Key A	-			
				Key B	-			
3	6	Casino Fire	G2	Organ	H2	63	2	6
				Key A	-			
				Key B	-			
3	7	H Split Ld/Ba	G2	Organ	H1	63	2	7
				Key A	-			
				Key B	-			
3	8	Church	G2	Organ	F1	63	2	8
				Key A	-			
				Key B	-			

# YC88/YC73

Bank	No	Name	Split Point	Section	Voice Name	MSB	LSB	PC
4	1	Clean Amp	G2	Organ	H3	63	3	1
				Key A	-			
				Key B	-			
4	2	H Split Ld/Chd	C3	Organ	H1	63	3	2
				Key A	-			
				Key B	-			
4	3	F1 Jazz	G2	Organ	F1	63	3	3
				Key A	-			
				Key B	-			
4	4	Rex Rotary	G2	Organ	F2	63	3	4
				Key A	-			
	_			Key B	-			_
4	5	Rex Amp	G2	Organ	F2	63	3	5
				Key A	-			
				Key B	-			
4	6	Italian Organ 2	G2	Organ	F3	63	3	6
				Key A	-			
	_			Key B	-		_	_
4	7	Italian Organ 3	G2	Organ	F3	63	3	7
				Key A	-			
		50 / 0 / 0		Key B	-		_	
4	8	F2 / RdBa	G2	Organ	F2	63	3	8
				Key A	78Rd			
-		OEA D : 11	00	Key B	-	00		_
5	1	CFX Bright	G2	Organ	-	63	4	1
				Key A	CFX			
-		07	00	Key B	-	00		_
5	2	C7	G2	Organ	-	63	4	2
				Key A	C7			
_		701. 07	00	Key B	-	63		2
5	3	3 70's C7	G2	Organ	-	63	4	3
				Key A	C7			
-	4	Ohambia Hasiaht	00	Key B	-	co		4
5	4	Showbiz Upright	G2	Organ	-	63	4	4
				Key A	U1 -			
5	5	AD. Ctrings	G2	Key B	-	63	4	5
5	5	AP+Strings	GZ.	Organ		03	4	5
				Key A	CFX East Strings			
-	6	Dage Stave Home	G2	Key B	Fast Strings	62	4	6
5	0	Bass Stays Home	GZ.	Organ Key A	Unright Page	63	4	0
				Key B	Upright Bass C7			
5	7	78Rd Chorus	G2	Organ	-	63	4	7
Э	′	7 onu Cilorus	GZ.	Key A	78Rd	00	4	· /
					7 onu			
5	8	67Rd Overdrive	G2	Key B	-	63	4	8
5	0	o/nu overunve	GZ.	Organ Kev A	67Rd Bright	03	4	0
				Key B	-			
6	1	Wr Dist	G2	Organ	_	63	5	1
U	'	MI DIST	uz	Key A	- Wr Warm	UJ	J	'
				Key B	-41 440(111			
6	2	FM EP 2	G2	Organ	-	63	5	2
U		I IVI LI Z	uz	Key A	FM The EP	UJ	J	
				Key B	- IN THE EF			
6	3	FM EP 3	G2		-	63	5	3
6	3	FIVI ET 3	G2	Organ		ರಿತ	Э	3
				Key A	FM Pf's Heart			
6	4	EM ED 4	CO	Key B	-	60	F	4
6	4	FM EP 4	G2	Organ	- FM Urban EP	63	5	4
	l	1		Key B	FM DX EP	1		1

Bank	No	Name	Split Point	Section	Voice Name	MSB	LSB	PC
6	5	FM EP 5	G2	Organ	-	63	5	5
				Key A	FM The EP			
6	6	Magic Piano	G2	Key B Organ	FM DX Road	63	5	6
0	U	Iviagic i iailo	uz	Key A	67Rd Dark	00	J	0
				Key B	FM Pf's Heart			
6	7	80s Soundtrack	G2	Organ	-	63	5	7
				Key A	78Rd			
6	8	FM EP+Pad 2	G2	Key B Organ	Analog Pad	63	5	8
Ů	Ü	- W. E. T. dd 2	uz.	Key A	FM Pf's Heart	00		
				Key B	Analog Pad			
7	1	Swell Backgrnd	C3	Organ	-	63	6	1
				Key A Key B	FM Saw Pad 67Rd Dark			
7	2	Bass and 73Rd	G2	Organ	-	63	6	2
				Key A	Finger Bass			
				Key B	73Rd			
7	3	Analog Pad	G2	Organ	- Analan Dad	63	6	3
				Key A Key B	Analog Pad Noble Pad			
7	4	Fat Pad	G2	Organ	-	63	6	4
				Key A	JP Strings			
				Key B	Analog Pad			
7	5	Massive FM	G2	Organ Key A	- EM Cow Dad	63	6	5
				Key B	FM Saw Pad FM BellSquare			
7	6	Smooth Strings	G2	Organ	-	63	6	6
		_		Key A	FM Syn Str			
				Key B	JP Strings			
7	7	Stringy Octaves	G2	Organ Key A	- Oat Cun Ctr	63	6	7
				Key B	Oct Syn Str Unison Str			
7	8	Synth Brass	G2	Organ	-	63	6	8
				Key A	Synth Brass 1			
				Key B	Synth Brass 4			
8	1	Analog Lead	G2	Organ Key A	- Classis Mini	63	7	1
				Key B	Classic Mini			
8	2	Expressive Lead	G2	Organ	-	63	7	2
				Key A	Sine Lead			
				Key B	Classic Mini		_	
8	3	Monster Lead	G2	Organ Key A	- FM Syn Lead 1	63	7	3
				Key B	FM Syn Lead 2			
8	4	Ep/Lead Split 1	G2	Organ	-	63	7	4
				Key A	73Rd			
_	-	5. // 1 0 . !!! 0	00	Key B	Soft Square	00	-	-
8	5	Ep/Lead Split 2	G2	Organ Key A	FM DX EP	63	7	5
				Key B	Mini Lead			
8	6	Pad/Lead	G2	Organ	-	63	7	6
				Key A	Analog Pad			
0	7	lov Cnlit	00	Key B	Funky Mini	60	7	7
8	7	Icy Split	C3	Organ Key A	- Digi Pad	63	7	7
				Key B	Mini Lead			
8	8	Sticky Bass	G2	Organ	-	63	7	8
				Key A	101 Bass			
0	-1	Aggregative Page	CO	Key B	Analog Bass	60	0	4
9	1	Aggressive Bass	G2	Organ Key A	101 Bass	63	8	1
				Key B	Analog Bass			
9	2	Dual Bass	G2	Organ	-	63	8	2
				Key A	FM Saw Pad			
0	2	EM Harmonia D-	CO	Key B	Unison Bass	60	0	2
9	3	FM Harmonic Ba	G2	Organ Key A	- Mini Sub Bass	63	8	3
				Key B	FM Tear Bass			
9	4	Syn Bell 1	G2	Organ	-	63	8	4
				Key A	Heaven Bell			
		0 . D. II 0		Key B	-	00		_
9	5	Syn Bell 2	G2	Organ Key A	- Far Away FM	63	8	5
				Key B	- ui Away FIVI			
9	6	Concerto Goldo	G2	Organ	-	63	8	6
				Key A	Slow Strings			
				Key B	Violin			

Bank	No	Name	Split Point	Section	Voice Name	MSB	LSB	PC
9	7	String Ensemble	G2	Organ	-	63	8	7
				Key A	Fast Strings			
				Key B	Violin			
9	8	Big Fanfare	G2	Organ	-	63	8	8
				Key A	Marcato Str			
				Key B	Brass 3			
10	1	Classic Gt.	G2	Organ	-	63	9	1
				Key A	Classic Gt			
				Key B	-			
10	2	Steel Gt.	G2	Organ	-	63	9	2
				Key A	Steel Gt			
				Key B	-			
10	10 3	Clean Gt.	G2	Organ	-	63	9	3
				Key A	Clean Gt 1			
				Key B	-			
10	4	Brass Section	G2	Organ	-	63	9	4
				Key A	Brass 1			
				Key B	-			
10	5	Brass w/Sax	G2	Organ	-	63	9	5
				Key A	Brass 1			
				Key B	Brass 2			
10	6	Upright Bass	G2	Organ	-	63	9	6
				Key A	Upright Bass			
				Key B	-			
10	7	Fingered Bass	G2	Organ	-	63	9	7
				Key A	Finger Bass			
				Key B	-			
10	8	Slap Bass	G2	Organ	-	63	9	8
				Key A	Slap Bass			
				Key B	-	1		

# **Voice List**

Section	Category	Sub Category	No.	Name	Parameter Value(*)
Organ	-	-	-	H1	0
			-	H2	1
			-	Н3	2
			-	F1	3
			-	F2	4
			-	F3	5
Keys A/B	Piano	Grand	01	CFX	6
			02	\$700	7
		Unright	03 04	C7 U1	8
		Upright CP	05	CP80 1	10
		OI .	06	CP80 2	11
		Layer	07	Piano Strings	12
		,	08	Piano Synth	13
	E.Piano	Rd	01	78Rd	14
			02	75Rd Funky	15
			03	73Rd	16
			04	67Rd Dark	17
			05	67Rd Bright	18
		Wr	06	Wr Warm	19
			07	Wr Bright	20
			08	Wr Wide	21
		Clavi	09	Clavi B	22
			10	Clavi S	23
		EN4	11	Harpsichord	24
		FM	12	FM Piano DA FM DX Road	25 26
			14	FM The EP	27
			15	FM DX EP	28
			16	FM Pf's Heart	29
			17	FM Urban EP	30
			18	FM PowerClavi	31
	Synth	Pad	01	FM Saw Pad	32
			02	Analog Pad	33
			03	Dark Light	34
			04	Digi Pad	35
			05	Noble Pad	36
			06	Pop Pad	37
			07	Fat Saw	38
			08	Angel Pad	39
			09	FM BellSquare	40
			10	FM Cloud Pad	41
			11	FM Bow RM Pad	42
			12	Itopia Mystic Pad	43 44
			14	Nowhere	45
			15	FM Choir	46
			16	Lite Strings	47
		Strings	17	JP Strings	48
			18	FM Syn Str	49
			19	Pop Syn Str	50
			20	Unison Str	51
			21	Oct Syn Str	52
		Brass	22	Synth Brass 1	53
			23	Synth Brass 2	54
			24	Synth Brass 3	55
			25	Synth Brass 4	56
			26	OB Brass 1	57
			27	OB Brass 2	58
			28	OB Brass 3	59 60
			29 30	FM Brass FM Brass Ens	60 61
		Lead	31	FM Syn Lead 1	62
		Loud	32	FM Syn Lead 2	63
			33	Classic Mini	64
			34	Mini Lead	65
			35	Funky Mini	66
	ш	1			-1

Section	Category	Sub Category	No.	Name	Parameter Value(*)
Keys A/B	Synth	Lead	36	Sine Lead	67
			37 38	Square Lead Soft Square	68
			39	Dirty Hook	70
			40	Sync Saw Lead	71
			41	Nu Mini	72
			42	5th Lead	73
			43	Calliope Lead	74
		Bass	44	Mini Sub Bass	75
			45	Analog Bass	76
			46	1o1 Bass	77
			47	Synth Bass	78
			48	FM Tear Bass	79
			49	FM DX E.Bass	80 81
			50 51	FM BoogieBass FM SuperBass	82
			52	Unison Bass	83
			53	FM Owl Bass	84
		ChromPerc	54	FM Glocken	85
			55	FM Far Away	86
			56	Digi Bell	87
			57	FM Brite Comp	88
			58	Heaven Bell	89
			59	FM Tbir Bells	90
	Others	Strings	01	Slow Strings	91
			02	Marcato Str	92
			03	Fast Strings	93
			04	Tremolo Str	94 95
			05 06	Pizzicato Tape Strings	96
			07	Violin	97
			08	Cello	98
		Guitar	09	Classic Gt	99
			10	Steel Gt	100
			11	12Strings Gt	101
			12	FM Jazz Gt	102
			13	Clean Gt 1	103
			14	Clean Gt 2	104
			15	Clean Gt 3	105
			16	Banjo	106
			17	Sitar	107
			18	Shamisen	108
		Brass	19	Koto Brass 1	109
		DIdSS	21	Brass 2	111
			22	Brass 3	112
			23	Sf. Brass	113
			24	Trumpet	114
			25	Trombone	115
			26	Horn 1	116
			27	Horn 2	117
		Sax / Winds	28	Sax Section 1	118
			29	Sax Section 2	119
			30	Soprano Sax	120
			31	Alto Sax	121
			32	Tenor Sax	122 123
			33	Baritone Sax Jazz Flute	123
			35	Alto Flute	125
			36	Tape Flute	126
			37	Harmonica	127
			38	FM Harmonica	128
			39	Pan Flute	129
			40	Bag Pipe	130
			41	Shakuhachi	131
		Bass	42	Upright Bass	132
			43	Finger Bass	133
			44	Pick Bass	134
			45	Fretless Bass	135
	1	1	46	Slap Bass	136

Section	Category	Sub Category	No.	Name	Parameter Value(*)
Keys A/B	Others	ChromPerc	47	Glocken	137
			48	Jazz Vibes	138
			49	Marimba	139
			50	Xylophone	140
			51	Tubular Bell	141
			52	Kalimba	142
		Others	53	Accordion	143
			54	Musette	144

<sup>\*</sup>This is the number used for the "Voice Number" parameters (pages 67, 68).

# **Control Change Number List**

- 0: = Organ, U: = Organ UPPER, L: = Organ LOWER, A: = Key A, B: = Key B, E: = EFFECT, S: = SPEAKER/AMP
  \*1: Parameter Value/Controller Value Correspondence Table (page 61)
  \*2: Assignable only to the foot switch.
  \*3: Assignable only to the foot controller 1/2 and modulation lever.

Parameters shown within parentheses do not affect the sound of this instrument.

	CC N	lo. (LCD indication)		Panel controls	Table (*1)
Organ	13	O: Volume	2	[VOLUME] knob	Α
	14	O: Pre Drive	<b>3</b>	[PRE DRIVE] knob	А
	102	U: Drawbar 16'	29	Drawbar	Α
	103	U: Drawbar 5 1/3'	29	Drawbar	Α
	104	U: Drawbar 8'	29	Drawbar	Α
	105	U: Drawbar 4'	29	Drawbar	Α
	106	U: Drawbar 2 2/3'	29	Drawbar	Α
	107	U: Drawbar 2'	29	Drawbar	Α
	108	U: Drawbar 1 3/5'	29	Drawbar	Α
	109	U: Drawbar 1 1/5'	29	Drawbar	Α
	110	U: Drawbar 1'	29	Drawbar	Α
	111	L: Drawbar 16'	29	Drawbar	Α
	112	L: Drawbar 5 1/3'	2	Drawbar	Α
	113	L: Drawbar 8'	29	Drawbar	Α
	114	L: Drawbar 4'	2	Drawbar	Α
	115	L: Drawbar 2 2/3'	29	Drawbar	Α
	116	L: Drawbar 2'	29	Drawbar	Α
	117	L: Drawbar 1 3/5'	29	Drawbar	Α
	118	L: Drawbar 1 1/5'	29	Drawbar	Α
	119	L: Drawbar 1'	29	Drawbar	Α
Key A	18	A: Volume	2	[VOLUME] knob	Α
	19	A: Tone	<b>3</b>	[TONE] knob	Α
	20	A: EG	<b>©</b>	[EG FILTER] knob	Α
	21	A: Filter	<b>®</b>	[EG FILTER] knob	Α
	22	A: Effect 1 Depth	49	[DEPTH] knob	Α
	23	A: Effect 1 Rate	49	[RATE] knob	Α
	24	A: Effect 2 Depth	<b>®</b>	[DEPTH] knob	Α
	25	A: Effect 2 Rate	49	[RATE] knob	Α
Key B	27	B: Volume	2	[VOLUME] knob	Α
	28	B: Tone	<b>6</b> 3	[TONE] knob	Α
	29	B: EG	<b>®</b>	[EG FILTER] knob	Α
	30	B: Filter	<b>®</b>	[EG FILTER] knob	Α
	31	B: Effect 1 Depth	<b>®</b>	[DEPTH] knob	Α
	68	B: Effect 1 Rate	<b>4</b> 3	[RATE] knob	Α
	69	B: Effect 2 Depth	<b>®</b>	[DEPTH] knob	Α
	70	B: Effect 2 Rate	<b>4</b> 9	[RATE] knob	Α
EFFECT	94	E: Depth	<b>®</b>	[DEPTH] knob	Α
	79	E: Rate	<b>4</b> 9	[RATE] knob	Α
SPEAKER/	93	S: Drive	49	[DRIVE] knob	Α
AMP	80	S: Tone	60	[TONE] knob	Α
			<u> </u>	[STOP] button	D
	85	Rotary Slow/Fast	<b>3</b>	[Slow Fast] button	D
REVERB	91	All Reverb Depth	69	[DEPTH] knob	А
	81	O: Reverb Depth	60	[DEPTH] knob	А
	82	A: Reverb Depth	60	[DEPTH] knob	A
	83	B: Reverb Depth	60	[DEPTH] knob	A
MASTER	87	Master EQ High	69	[HIGH] knob	В
EQUALIZER	88	Master EQ Mid	69	[MID] knob	В
	89	Master EQ Freq	60	[FREQUENCY] knob	С
	90	Master EQ Low	60	[LOW] knob	В

	CC	No. (LCD indication)		Panel controls	Table (*1)
Foot Switch,	1	Modulation			
Foot Controller 1,	4	Pedal Wah			
Foot	5	(Portamento Time)			
Controller 2, Modulation	6	(Data Entry MSB)			
Lever	7	All Volume			
	10	(Pan)			
	11	Expression			
	13	O: Volume	2	[VOLUME] knob	А
	14	O: Pre Drive	<b>3</b>	[PRE DRIVE] knob	A
	18	A: Volume	2	[VOLUME] knob	А
	19	A: Tone	<b>3</b>	[TONE] knob	А
	20	A: EG	<b>6</b> 9	[EG FILTER] knob	А
	21	A: Filter	<b>©</b>	[EG FILTER] knob	А
	22	A: Effect 1 Depth	<b>1</b>	[DEPTH] knob	A
	23	A: Effect 1 Rate	49	[RATE] knob	A
	24	A: Effect 2 Depth	<b>1</b>	[DEPTH] knob	A
	25	A: Effect 2 Rate	43	[RATE] knob	A
	27	B: Volume	2	[VOLUME] knob	A
				· · · · · · · · · · · · · · · · · · ·	
	28	B: Tone	<b>®</b>	[TONE] knob	A
	29	B: EG	<u> </u>	[EG FILTER] knob	A
	30	B: Filter	<u> </u>	[EG FILTER] knob	A
	31	B: Effect 1 Depth	<b>®</b>	[DEPTH] knob	A
	32	(Bank LSB)			
	38	(Data Entry LSB)			
	64	Sustain		(*2)	
	65	(Portamento)			
	66	Sostenuto		(*2)	
	67	Soft			
	68	B: Effect 1 Rate	€3	[RATE] knob	Α
	69	B: Effect 2 Depth	<b>₽</b>	[DEPTH] knob	A
	70	B: Effect 2 Rate	€9	[RATE] knob	А
	71	(Resonance)			
	72	(Release)			
	73	(Attack)			
	74	(Cutoff)			
	79	E: Rate	49	[RATE] knob	A
	80	S: Tone	60	[TONE] knob	A
	81	O: Reverb Depth	60	[DEPTH] knob	A
	82	A: Reverb Depth	60	[DEPTH] knob	A
	83	B: Reverb Depth	69	[DEPTH] knob	A
	84	(Portamento Ctrl)	•	[DEI III] KIIOD	
	04	(ו טוגמוויפוונט טנוו)	<u> </u>	[QTOD] button	n
	85	Rotary Slow/Fast		[STOP] button	D
	07	Moster FO 18:1	<b>3</b>	[Slow Fast] button	D
	87	Master EQ High	<u> </u>	[HIGH] knob	В
	88	Master EQ Mid	69	[MID] knob	В
	89	Master EQ Freq	60	[FREQUENCY] knob	С
	90	Master EQ Low	<b>3</b>	[LOW] knob	В
	91	All Reverb Depth	69	[DEPTH] knob	A
	92	(Effect 2 Depth)			
	93	S: Drive	49	[DRIVE] knob	A
	94	E: Depth	€	[DEPTH] knob	A
	95	(Effect 5 Depth)			
	96	(Data Increment)			
	97	(Data Decrement)			
	98	(NRPN LSB)			
	99	(NRPN MSB)			
	100	(RPN LSB)			
	101	(RPN MSB)			
	102	U: Drawbar 16'	29	Drawbar	A
	103	U: Drawbar 5 1/3'	29	Drawbar	A
	103	U: Drawbar 8'	29		A
			29	Drawbar	
	105	U: Drawbar 4'	3	Drawbar	A

	CC N	lo. (LCD indication)		Panel controls	Table (*1)
Foot Switch,	106	U: Drawbar 2 2/3'	29	Drawbar	Α
Foot Controller 1,	107	U: Drawbar 2'	2	Drawbar	Α
Foot	108	U: Drawbar 1 3/5'	29	Drawbar	Α
Controller 2, Modulation	109	U: Drawbar 1 1/3'	29	Drawbar	Α
Lever	110	U: Drawbar 1'	29	Drawbar	Α
	111	L: Drawbar 16'	29	Drawbar	Α
	112	L: Drawbar 5 1/3'	29	Drawbar	Α
	113	L: Drawbar 8'	29	Drawbar	Α
	114	L: Drawbar 4'	29	Drawbar	Α
	115	L: Drawbar 2 2/3'	29	Drawbar	Α
	116	L: Drawbar 2'	29	Drawbar	Α
	117	L: Drawbar 1 3/5'	29	Drawbar	Α
	118	L: Drawbar 1 1/3'	29	Drawbar	Α
	119	L: Drawbar 1'	29	Drawbar	Α
		Live Set Sound +		(*2)	
		Live Set Sound -		(*2)	
		USB Audio Volume		(*3)	

# Parameter Value/Controller Value Correspondence Table

Α

Parameter	Controller		
r didilicici	Transmitted	Recognized	
0-127	0-127	0-127	

В

		Cont	roller
Paramet	ter	Transmitted	Recognized
-12dB	52	0-5	0-5
-11dB	53	6-10	6-10
-10dB	54	11-15	11-15
-9dB	55	16-20	16-20
-8dB	56	21-25	21-25
-7dB	57	26-30	26-30
-6dB	58	31-35	31-35
-5dB	59	36-40	36-40
-4dB	60	41-46	41-46
-3dB	61	47-51	47-51
-2dB	62	52-56	52-56
-1dB	63	57-61	57-61
0dB	64	62-66	62-66
1dB	65	67-71	67-71
2dB	66	72-76	72-76
3dB	67	77-81	77-81
4dB	68	82-87	82-87
5dB	69	88-92	88-92
6dB	70	93-97	93-97
7dB	71	98-102	98-102
8dB	72	103-107	103-107
9dB	73	108-112	108-112
10dB	74	113-117	113-117
11dB	75	118-122	118-122
12dB	76	123-127	123-127

С

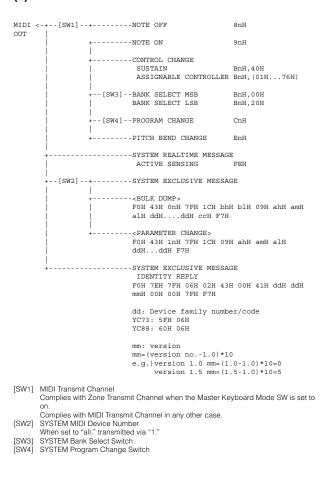
Transmitted   Recognized			Controller			
110Hz 15 4-6 4-6 125Hz 16 7-9 7-9 140Hz 17 10-12 10-12 160Hz 18 13-15 13-15 180Hz 19 16-18 16-18 200Hz 20 19-21 19-21 225Hz 21 22-24 22-24 2250Hz 22 25-28 25-28 280Hz 23 29-31 29-31 315Hz 24 32-34 32-34 355Hz 25 35-37 35-37 400Hz 26 38-40 38-40 450Hz 27 41-43 41-43 500Hz 28 44-46 44-46 560Hz 29 47-49 47-49 630Hz 30 50-53 50-53 700Hz 31 54-56 54-56 800Hz 32 57-59 57-59 900Hz 33 60-62 60-62 1.0kHz 34 63-65 63-65 1.1kHz 35 66-68 66-68 1.2kHz 36 69-71 69-71 1.4kHz 37 72-74 72-74 1.6kHz 38 75-78 75-78 1.8kHz 39 79-81 79-81 2.2kHz 41 85-87 85-87 2.5kHz 42 88-90 88-90 2.2kHz 43 91-93 91-93 3.2kHz 44 94-96 94-96 3.6kHz 45 97-99 97-99 4.0kHz 46 100-102 100-102 4.5kHz 47 103-106 103-106 5.0kHz 48 107-109 17-109 5.6kHz 49 110-112 110-112 6.3kHz 50 113-115 113-115 7.0kHz 51 116-118 116-118	Parameter		Transmitted	Recognized		
125Hz         16         7-9         7-9           140Hz         17         10-12         10-12           160Hz         18         13-15         13-15           180Hz         19         16-18         16-18           200Hz         20         19-21         19-21           225Hz         21         22-24         22-24           250Hz         22         25-28         25-28           280Hz         23         29-31         29-31           315Hz         24         32-34         32-34           355Hz         25         35-37         35-37           400Hz         26         38-40         38-40           450Hz         27         41-43         41-43           450Hz         29         47-49         47-49           47-49         47-49         47-49           630Hz         30         50-53         50-53           700Hz         31         54-56         54-56           800Hz         32         57-59         57-59           900Hz         33         60-62         60-62           1.0kHz         34         63-65         63-65	100Hz	14	0-3	0-3		
140Hz         17         10-12         10-12           160Hz         18         13-15         13-15           180Hz         19         16-18         16-18           200Hz         20         19-21         19-21           225Hz         21         22-24         22-24           250Hz         22         25-28         25-28           280Hz         23         29-31         29-31           315Hz         24         32-34         32-34           355Hz         25         35-37         35-37           400Hz         26         38-40         38-40           450Hz         27         41-43         41-43           500Hz         28         44-46         44-46           560Hz         29         47-49         47-49           630Hz         30         50-53         50-53           700Hz         31         54-56         54-56           800Hz         32         57-59         57-59           900Hz         33         60-62         60-62           1.0kHz         34         63-65         63-65           1.1kHz         35         66-68         66-68	110Hz	15	4-6	4-6		
160Hz         18         13-15         13-15           180Hz         19         16-18         16-18           200Hz         20         19-21         19-21           225Hz         21         22-24         22-24           250Hz         22         25-28         25-28           280Hz         23         29-31         29-31           315Hz         24         32-34         32-34           355Hz         25         35-37         35-37           400Hz         26         38-40         38-40           450Hz         27         41-43         41-43           500Hz         28         44-46         44-46           560Hz         29         47-49         47-49           630Hz         30         50-53         50-53           700Hz         31         54-56         54-56           800Hz         32         57-59         57-59           900Hz         33         60-62         60-62           1.0kHz         34         63-65         63-65           1.1kHz         35         66-68         66-68           1.2kHz         36         69-71         69-71	125Hz	16	7-9	7-9		
180Hz         19         16-18         16-18           200Hz         20         19-21         19-21           225Hz         21         22-24         22-24           250Hz         22         25-28         25-28           280Hz         23         29-31         29-31           315Hz         24         32-34         32-34           355Hz         25         35-37         35-37           400Hz         26         38-40         38-40           450Hz         27         41-43         41-43           500Hz         28         44-46         44-46           560Hz         29         47-49         47-49           630Hz         30         50-53         50-53           700Hz         31         54-56         54-56           800Hz         32         57-59         57-59           900Hz         33         60-62         60-62           1.0kHz         34         63-65         63-65           1.1kHz         35         66-68         66-68           1.2kHz         36         69-71         69-71           1.4kHz         37         72-74         72-74 <td>140Hz</td> <td>17</td> <td>10-12</td> <td>10-12</td>	140Hz	17	10-12	10-12		
200Hz         20         19-21         19-21           225Hz         21         22-24         22-24           250Hz         22         25-28         25-28           280Hz         23         29-31         29-31           315Hz         24         32-34         32-34           355Hz         25         35-37         35-37           400Hz         26         38-40         38-40           450Hz         27         41-43         41-43           500Hz         28         44-46         44-46           560Hz         29         47-49         47-49           630Hz         30         50-53         50-53           700Hz         31         54-56         54-56           800Hz         32         57-59         57-59           900Hz         33         60-62         60-62           1.0kHz         34         63-65         63-65           1.1kHz         35         66-68         66-68           1.2kHz         36         69-71         69-71           1.4kHz         37         72-74         72-74           1.6kHz         38         75-78         75-78 <td>160Hz</td> <td>18</td> <td>13-15</td> <td>13-15</td>	160Hz	18	13-15	13-15		
225Hz         21         22-24         22-24           250Hz         22         25-28         25-28           280Hz         23         29-31         29-31           315Hz         24         32-34         32-34           355Hz         25         35-37         35-37           400Hz         26         38-40         38-40           450Hz         27         41-43         41-43           500Hz         28         44-46         44-46           560Hz         29         47-49         47-49           630Hz         30         50-53         50-53           700Hz         31         54-56         54-56           800Hz         32         57-59         57-59           900Hz         33         60-62         60-62           1.0kHz         34         63-65         63-65           1.1kHz         35         66-68         66-68           1.2kHz         36         69-71         69-71           1.4kHz         37         72-74         72-74           1.6kHz         38         75-78         75-78           1.8kHz         39         79-81         79-81 </td <td>180Hz</td> <td>19</td> <td>16-18</td> <td>16-18</td>	180Hz	19	16-18	16-18		
250Hz 22 25-28 25-28 25-28 280Hz 23 29-31 29-31 315Hz 24 32-34 32-34 32-34 32-34 33-35Hz 25 35-37 35-37 35-37 400Hz 26 38-40 38-40 38-40 450Hz 27 41-43 41-43 500Hz 28 44-46 44-46 560Hz 29 47-49 47-49 630Hz 30 50-53 50-53 50-53 700Hz 31 54-56 54-56 800Hz 32 57-59 57-59 900Hz 33 60-62 60-62 1.0kHz 34 63-65 63-65 1.1kHz 35 66-68 66-68 1.2kHz 36 69-71 69-71 1.4kHz 37 72-74 72-74 1.6kHz 38 75-78 75-78 1.8kHz 39 79-81 79-81 2.0kHz 40 82-84 82-84 2.2kHz 41 85-87 85-87 2.5kHz 42 88-90 88-90 2.8kHz 45 97-99 97-99 4.0kHz 46 100-102 100-102 4.5kHz 48 107-109 107-109 5.6kHz 49 110-112 110-112 6.3kHz 50 1kHz 51 116-118 116-118 8.0kHz 52 119-121 119-121 9.0kHz 53 122-124 122-124	200Hz	20	19-21	19-21		
280Hz 23 29-31 29-31 32-34 32-34 32-34 33-35Hz 24 32-34 32-34 32-34 32-34 33-35Hz 25 35-37 35-37 35-37 35-37 400Hz 26 38-40 38-40 38-40 450Hz 27 41-43 41-43 41-43 500Hz 28 44-46 44-46 560Hz 29 47-49 47-49 630Hz 30 50-53 50-53 50-53 700Hz 31 54-56 54-56 800Hz 32 57-59 57-59 900Hz 33 60-62 60-62 1.0kHz 34 63-65 63-65 1.1kHz 35 66-68 66-68 1.2kHz 36 69-71 69-71 1.4kHz 37 72-74 72-74 1.6kHz 38 75-78 75-78 1.8kHz 39 79-81 79-81 2.0kHz 40 82-84 82-84 2.2kHz 41 85-87 85-87 2.5kHz 42 88-90 88-90 2.8kHz 43 91-93 91-93 3.2kHz 44 94-96 94-96 3.6kHz 45 10-112 10-112 6.3kHz 49 10-112 110-112 6.3kHz 50 113-115 113-115 7.0kHz 51 116-118 8.0kHz 52 119-121 119-121 9.0kHz 52 119-121 119-121 9.0kHz 53 122-124 122-124	225Hz	21	22-24	22-24		
315Hz 24 32-34 32-34 32-34 355Hz 25 35-37 35-32	250Hz	22	25-28	25-28		
355Hz         25         35-37         35-37           400Hz         26         38-40         38-40           450Hz         27         41-43         41-43           500Hz         28         44-46         44-46           560Hz         29         47-49         47-49           630Hz         30         50-53         50-53           700Hz         31         54-56         54-56           800Hz         32         57-59         57-59           900Hz         33         60-62         60-62           1.0kHz         34         63-65         63-65           1.1kHz         35         66-68         66-68           1.2kHz         36         69-71         69-71           1.4kHz         37         72-74         72-74           1.6kHz         38         75-78         75-78           1.8kHz         39         79-81         79-81           2.0kHz         40         82-84         82-84           2.2kHz         41         85-87         85-87           2.5kHz         43         91-93         91-93           3.2kHz         44         94-96         94-	280Hz	23	29-31	29-31		
400Hz         26         38-40         38-40           450Hz         27         41-43         41-43           500Hz         28         44-46         44-46           560Hz         29         47-49         47-49           630Hz         30         50-53         50-53           700Hz         31         54-56         54-56           800Hz         32         57-59         57-59           900Hz         33         60-62         60-62           1.0kHz         34         63-65         63-65           1.1kHz         35         66-68         66-68           1.2kHz         36         69-71         69-71           1.4kHz         37         72-74         72-74           1.6kHz         38         75-78         75-78           1.8kHz         39         79-81         79-81           2.0kHz         40         82-84         82-84           2.2kHz         41         85-87         85-87           2.5kHz         42         88-90         88-90           2.8kHz         43         91-93         91-93           3.2kHz         44         94-96         94	315Hz	24	32-34	32-34		
450Hz 27 41-43 41-43 41-43 500Hz 28 44-46 44-46 44-46 560Hz 29 47-49 47-49 630Hz 30 50-53 50-53 700Hz 31 54-56 54-56 800Hz 32 57-59 57-59 900Hz 33 60-62 60-62 1.0kHz 34 63-65 63-65 1.1kHz 35 66-68 66-68 1.2kHz 36 69-71 69-71 1.4kHz 37 72-74 72-74 72-74 1.6kHz 38 75-78 75-78 1.8kHz 39 79-81 79-81 2.0kHz 40 82-84 82-84 82-84 2.2kHz 41 85-87 85-87 2.5kHz 42 88-90 88-90 2.8kHz 43 91-93 91-93 3.2kHz 44 94-96 94-96 3.6kHz 45 97-99 97-99 4.0kHz 46 100-102 100-102 4.5kHz 49 110-112 110-112 6.3kHz 50 113-115 7.0kHz 51 113-115 7.0kHz 51 113-115 7.0kHz 51 113-115 7.0kHz 51 113-115 7.0kHz 53 122-124 122-124	355Hz	25	35-37	35-37		
500Hz         28         44-46         44-46           560Hz         29         47-49         47-49           630Hz         30         50-53         50-53           700Hz         31         54-56         54-56           800Hz         32         57-59         57-59           900Hz         33         60-62         60-62           1.0kHz         34         63-65         63-65           1.1kHz         35         66-68         66-68           1.2kHz         36         69-71         69-71           1.4kHz         37         72-74         72-74           1.6kHz         38         75-78         75-78           1.8kHz         39         79-81         79-81           2.0kHz         40         82-84         82-84           2.2kHz         41         85-87         85-87           2.5kHz         42         88-90         88-90           2.8kHz         43         91-93         91-93           3.2kHz         44         94-96         94-96           3.6kHz         45         97-99         97-99           4.0kHz         46         100-102 <t< td=""><td>400Hz</td><td>26</td><td>38-40</td><td>38-40</td></t<>	400Hz	26	38-40	38-40		
560Hz         29         47-49         47-49           630Hz         30         50-53         50-53           700Hz         31         54-56         54-56           800Hz         32         57-59         57-59           900Hz         33         60-62         60-62           1.0kHz         34         63-65         63-65           1.1kHz         35         66-68         66-68           1.2kHz         36         69-71         69-71           1.4kHz         37         72-74         72-74           1.6kHz         38         75-78         75-78           1.8kHz         39         79-81         79-81           2.0kHz         40         82-84         82-84           2.2kHz         41         85-87         85-87           2.5kHz         42         88-90         88-90           2.8kHz         43         91-93         91-93           3.2kHz         44         94-96         94-96           3.6kHz         45         97-99         97-99           4.0kHz         46         100-102         100-102           4.5kHz         47         103-106	450Hz	27	41-43	41-43		
630Hz         30         50-53         50-53           700Hz         31         54-56         54-56           800Hz         32         57-59         57-59           900Hz         33         60-62         60-62           1.0kHz         34         63-65         63-65           1.1kHz         35         66-68         66-68           1.2kHz         36         69-71         69-71           1.4kHz         37         72-74         72-74           1.6kHz         38         75-78         75-78           1.8kHz         39         79-81         79-81           2.0kHz         40         82-84         82-84           2.2kHz         41         85-87         85-87           2.5kHz         42         88-90         88-90           2.8kHz         43         91-93         91-93           3.2kHz         44         94-96         94-96           3.6kHz         45         97-99         97-99           4.0kHz         46         100-102         100-102           4.5kHz         47         103-106         103-106           5.0kHz         48         107-109	500Hz	28	44-46	44-46		
700Hz         31         54-56         54-56           800Hz         32         57-59         57-59           900Hz         33         60-62         60-62           1.0kHz         34         63-65         63-65           1.1kHz         35         66-68         66-68           1.2kHz         36         69-71         69-71           1.4kHz         37         72-74         72-74           1.6kHz         38         75-78         75-78           1.8kHz         39         79-81         79-81           2.0kHz         40         82-84         82-84           2.2kHz         41         85-87         85-87           2.5kHz         42         88-90         88-90           2.8kHz         43         91-93         91-93           3.2kHz         44         94-96         94-96           3.6kHz         45         97-99         97-99           4.0kHz         46         100-102         100-102           4.5kHz         47         103-106         103-106           5.0kHz         48         107-109         107-109           5.6kHz         49         110-112<	560Hz	29	47-49	47-49		
800Hz         32         57-59         57-59           900Hz         33         60-62         60-62           1.0kHz         34         63-65         63-65           1.1kHz         35         66-68         66-68           1.2kHz         36         69-71         69-71           1.4kHz         37         72-74         72-74           1.6kHz         38         75-78         75-78           1.8kHz         39         79-81         79-81           2.0kHz         40         82-84         82-84           2.2kHz         41         85-87         85-87           2.5kHz         42         88-90         88-90           2.8kHz         43         91-93         91-93           3.2kHz         44         94-96         94-96           3.6kHz         45         97-99         97-99           4.0kHz         46         100-102         100-102           4.5kHz         47         103-106         103-106           5.0kHz         48         107-109         107-109           5.6kHz         49         110-112         110-112           6.3kHz         50         113	630Hz	30	50-53	50-53		
900Hz 33 60-62 60-62 1.0kHz 34 63-65 63-65 1.1kHz 35 66-68 66-68 1.2kHz 36 69-71 69-71 1.4kHz 37 72-74 72-74 1.6kHz 38 75-78 75-78 1.8kHz 39 79-81 79-81 2.0kHz 40 82-84 82-84 2.2kHz 41 85-87 85-87 2.5kHz 42 88-90 88-90 2.8kHz 43 91-93 91-93 3.2kHz 44 94-96 94-96 3.6kHz 45 97-99 97-99 4.0kHz 46 100-102 100-102 4.5kHz 47 103-106 103-106 5.0kHz 48 107-109 107-109 5.6kHz 49 110-112 110-112 6.3kHz 50 113-115 113-115 7.0kHz 51 116-118 8.0kHz 52 119-121 119-121	700Hz	31	54-56	54-56		
1.0kHz     34     63-65     63-65       1.1kHz     35     66-68     66-68       1.2kHz     36     69-71     69-71       1.4kHz     37     72-74     72-74       1.6kHz     38     75-78     75-78       1.8kHz     39     79-81     79-81       2.0kHz     40     82-84     82-84       2.2kHz     41     85-87     85-87       2.5kHz     42     88-90     88-90       2.8kHz     43     91-93     91-93       3.2kHz     44     94-96     94-96       3.6kHz     45     97-99     97-99       4.0kHz     46     100-102     100-102       4.5kHz     47     103-106     103-106       5.0kHz     48     107-109     107-109       5.6kHz     49     110-112     110-112       6.3kHz     50     113-115     113-115       7.0kHz     51     116-118     116-118       8.0kHz     52     119-121     119-121       9.0kHz     53     122-124     122-124	800Hz	32	57-59	57-59		
1.1.kHz     35     66-68     66-68       1.2kHz     36     69-71     69-71       1.4kHz     37     72-74     72-74       1.6kHz     38     75-78     75-78       1.8kHz     39     79-81     79-81       2.0kHz     40     82-84     82-84       2.2kHz     41     85-87     85-87       2.5kHz     42     88-90     88-90       2.8kHz     43     91-93     91-93       3.2kHz     44     94-96     94-96       3.6kHz     45     97-99     97-99       4.0kHz     46     100-102     100-102       4.5kHz     47     103-106     103-106       5.0kHz     48     107-109     107-109       5.6kHz     49     110-112     110-112       6.3kHz     50     113-115     113-115       7.0kHz     51     116-118     116-118       8.0kHz     52     119-121     119-121       9.0kHz     53     122-124     122-124	900Hz	33	60-62	60-62		
1.2kHz     36     69-71     69-71       1.4kHz     37     72-74     72-74       1.6kHz     38     75-78     75-78       1.8kHz     39     79-81     79-81       2.0kHz     40     82-84     82-84       2.2kHz     41     85-87     85-87       2.5kHz     42     88-90     88-90       2.8kHz     43     91-93     91-93       3.2kHz     44     94-96     94-96       3.6kHz     45     97-99     97-99       4.0kHz     46     100-102     100-102       4.5kHz     47     103-106     103-106       5.0kHz     48     107-109     107-109       5.6kHz     49     110-112     110-112       6.3kHz     50     113-115     113-115       7.0kHz     51     116-118     116-118       8.0kHz     52     119-121     119-121       9.0kHz     53     122-124     122-124	1.0kHz	34	63-65	63-65		
1.4kHz     37     72-74     72-74       1.6kHz     38     75-78     75-78       1.8kHz     39     79-81     79-81       2.0kHz     40     82-84     82-84       2.2kHz     41     85-87     85-87       2.5kHz     42     88-90     88-90       2.8kHz     43     91-93     91-93       3.2kHz     44     94-96     94-96       3.6kHz     45     97-99     97-99       4.0kHz     46     100-102     100-102       4.5kHz     47     103-106     103-106       5.0kHz     48     107-109     107-109       5.6kHz     49     110-112     110-112       6.3kHz     50     113-115     113-115       7.0kHz     51     116-118     116-118       8.0kHz     52     119-121     119-121       9.0kHz     53     122-124     122-124	1.1kHz	35	66-68	66-68		
1.6kHz     38     75-78     75-78       1.8kHz     39     79-81     79-81       2.0kHz     40     82-84     82-84       2.2kHz     41     85-87     85-87       2.5kHz     42     88-90     88-90       2.8kHz     43     91-93     91-93       3.2kHz     44     94-96     94-96       3.6kHz     45     97-99     97-99       4.0kHz     46     100-102     100-102       4.5kHz     47     103-106     103-106       5.0kHz     48     107-109     107-109       5.6kHz     49     110-112     110-112       6.3kHz     50     113-115     113-115       7.0kHz     51     116-118     116-118       8.0kHz     52     119-121     119-121       9.0kHz     53     122-124     122-124	1.2kHz	36	69-71	69-71		
1.8kHz     39     79-81     79-81       2.0kHz     40     82-84     82-84       2.2kHz     41     85-87     85-87       2.5kHz     42     88-90     88-90       2.8kHz     43     91-93     91-93       3.2kHz     44     94-96     94-96       3.6kHz     45     97-99     97-99       4.0kHz     46     100-102     100-102       4.5kHz     47     103-106     103-106       5.0kHz     48     107-109     107-109       5.6kHz     49     110-112     110-112       6.3kHz     50     113-115     113-115       7.0kHz     51     116-118     116-118       8.0kHz     52     119-121     119-121       9.0kHz     53     122-124     122-124	1.4kHz	37	72-74	72-74		
2.0kHz     40     82-84     82-84       2.2kHz     41     85-87     85-87       2.5kHz     42     88-90     88-90       2.8kHz     43     91-93     91-93       3.2kHz     44     94-96     94-96       3.6kHz     45     97-99     97-99       4.0kHz     46     100-102     100-102       4.5kHz     47     103-106     103-106       5.0kHz     48     107-109     107-109       5.6kHz     49     110-112     110-112       6.3kHz     50     113-115     113-115       7.0kHz     51     116-118     116-118       8.0kHz     52     119-121     119-121       9.0kHz     53     122-124     122-124	1.6kHz	38	75-78	75-78		
2.2kHz     41     85-87     85-87       2.5kHz     42     88-90     88-90       2.8kHz     43     91-93     91-93       3.2kHz     44     94-96     94-96       3.6kHz     45     97-99     97-99       4.0kHz     46     100-102     100-102       4.5kHz     47     103-106     103-106       5.0kHz     48     107-109     107-109       5.6kHz     49     110-112     110-112       6.3kHz     50     113-115     113-115       7.0kHz     51     116-118     116-118       8.0kHz     52     119-121     119-121       9.0kHz     53     122-124     122-124	1.8kHz	39	79-81	79-81		
2.5kHz     42     88-90     88-90       2.8kHz     43     91-93     91-93       3.2kHz     44     94-96     94-96       3.6kHz     45     97-99     97-99       4.0kHz     46     100-102     100-102       4.5kHz     47     103-106     103-106       5.0kHz     48     107-109     107-109       5.6kHz     49     110-112     110-112       6.3kHz     50     113-115     113-115       7.0kHz     51     116-118     116-118       8.0kHz     52     119-121     119-121       9.0kHz     53     122-124     122-124	2.0kHz	40	82-84	82-84		
2.8kHz     43     91-93     91-93       3.2kHz     44     94-96     94-96       3.6kHz     45     97-99     97-99       4.0kHz     46     100-102     100-102       4.5kHz     47     103-106     103-106       5.0kHz     48     107-109     107-109       5.6kHz     49     110-112     110-112       6.3kHz     50     113-115     113-115       7.0kHz     51     116-118     116-118       8.0kHz     52     119-121     119-121       9.0kHz     53     122-124     122-124	2.2kHz	41	85-87	85-87		
3.2kHz     44     94-96     94-96       3.6kHz     45     97-99     97-99       4.0kHz     46     100-102     100-102       4.5kHz     47     103-106     103-106       5.0kHz     48     107-109     107-109       5.6kHz     49     110-112     110-112       6.3kHz     50     113-115     113-115       7.0kHz     51     116-118     116-118       8.0kHz     52     119-121     119-121       9.0kHz     53     122-124     122-124	2.5kHz	42	88-90	88-90		
3.6kHz     45     97-99     97-99       4.0kHz     46     100-102     100-102       4.5kHz     47     103-106     103-106       5.0kHz     48     107-109     107-109       5.6kHz     49     110-112     110-112       6.3kHz     50     113-115     113-115       7.0kHz     51     116-118     116-118       8.0kHz     52     119-121     119-121       9.0kHz     53     122-124     122-124	2.8kHz	43	91-93	91-93		
4.0kHz     46     100-102     100-102       4.5kHz     47     103-106     103-106       5.0kHz     48     107-109     107-109       5.6kHz     49     110-112     110-112       6.3kHz     50     113-115     113-115       7.0kHz     51     116-118     116-118       8.0kHz     52     119-121     119-121       9.0kHz     53     122-124     122-124	3.2kHz	44	94-96	94-96		
4.5kHz     47     103-106     103-106       5.0kHz     48     107-109     107-109       5.6kHz     49     110-112     110-112       6.3kHz     50     113-115     113-115       7.0kHz     51     116-118     116-118       8.0kHz     52     119-121     119-121       9.0kHz     53     122-124     122-124	3.6kHz	45	97-99	97-99		
5.0kHz     48     107-109     107-109       5.6kHz     49     110-112     110-112       6.3kHz     50     113-115     113-115       7.0kHz     51     116-118     116-118       8.0kHz     52     119-121     119-121       9.0kHz     53     122-124     122-124	4.0kHz	46	100-102	100-102		
5.6kHz     49     110-112     110-112       6.3kHz     50     113-115     113-115       7.0kHz     51     116-118     116-118       8.0kHz     52     119-121     119-121       9.0kHz     53     122-124     122-124	4.5kHz	47	103-106	103-106		
6.3kHz     50     113-115     113-115       7.0kHz     51     116-118     116-118       8.0kHz     52     119-121     119-121       9.0kHz     53     122-124     122-124	5.0kHz	48	107-109	107-109		
7.0kHz     51     116-118     116-118       8.0kHz     52     119-121     119-121       9.0kHz     53     122-124     122-124	5.6kHz	49	110-112	110-112		
8.0kHz         52         119-121         119-121           9.0kHz         53         122-124         122-124	6.3kHz	50	113-115	113-115		
9.0kHz 53 122-124 122-124	7.0kHz	51	116-118	116-118		
	8.0kHz	52	119-121	119-121		
10kHz 54 125-127 125-127	9.0kHz	53	122-124	122-124		
	10kHz	54	125-127	125-127		

D

Parameter	Controller		
raiailletei	Transmitted	Recognized	
Slow	0	0-63	
Stop	64	64	
Fast	127	65-127	

# **MIDI Data Format**

### (1) TRANSMIT FLOW



### (2) RECEIVE FLOW

MIDI >-+[SW1]	+NOTE OFF	8nH
	NOTE ON/OFF	9nH
	+CONTROL CHANGE MODULATION	BnH,01H
i	PEDAL WAH	BnH,04H
i		BnH,07H
i		BnH,0BH
i	1	BnH,40H
i		BnH, 42H
i		BnH,43H
	PORTAMENTO CONTROL	
	+[SW3]BANK SELECT MSB	
	BANK SELECT LSB	BnH,20H
	+CHANNEL MODE MESSAGE	
i	ALL SOUND OFF	BnH.78H
i	RESET ALL CONTROLLERS	
i	ALL NOTE OFF	BnH,7BH
i	OMNI MODE OFF	BnH.7CH
		BnH,7DH
	+[SW4]PROGRAM CHANGE	CnH
	+PITCH BEND CHANGE	EnH
+	SYSTEM REALTIME MESSAGE ACTIVE SENSING	S FRH
	ACTIVE SENSING	FEH
+[SW2]	+SYSTEM EXCLUSIVE MESSAG	3E
	  SBULK DUMP>   F0H 43H 0nH 7FH 1CH bh   alH ddHddH ccH F7H	H blH 09H ahH amH
	FOH 43H 1nH 7FH 1CH 09H	H ahH amH alH

	+			EST> 1CH	09H	ahH	amH	alH	F7H
	+		~ .	EST>	09H	ahH	amH	alH	F7H
+		 	 			_	nH 0.6	SH 01	IH F7H

[SW1] Complies with MIDI Receive Channel. [SW2] SYSTEM MIDI Device Number [SW3] SYSTEM Bank Select Switch [SW4] SYSTEM Program Change Switch

#### (3) TRANSMIT/RECEIVE DATA

#### (3-1) CHANNEL VOICE MESSAGES

(3-1-1)	NOTE	OFF
(3-1-1)	NOIL	Oii

STATUS 1000nnnn (9nH) n=0-15 CHANNEL NUMBER k=0(C-2)-127(G8) v=64 Transmit 0kkkkkkk 0vvvvvv

#### (3-1-2) NOTE ON/OFF

STATUS 1000nnnn (8nH) n=0-15 CHANNEL NUMBER NOTE No. 0kkkkkk VELOCITY NOTE ON 0vvvvvvv(v≠0)

#### (3-1-3) CONTROL CHANGE

n=0-15 CHANNEL NUMBER CONTROL NUMBER 0cccccc CONTROL VALUE

#### \*TRANSMITTED CONTROL NUMBER BANK SELECT MSB

NOTE OFF OVVVVVV (v=0)

C=32	DAME DEFINE TOD	, = 0 12 /	
c=64	SUSTAIN	; v=0-127	,
c=1119	ASSIGNABLE CONTRO	LLER ; v=0-127	,
*RECEIVED	CONTROL NUMBER		
c=0	BANK SELECT MSB	;v=0-127	,
c=32	BANK SELECT LSB	:v=0-127	,

;v=0-127

c=1 MODULATION ;v=0-127 C=4 PEDAL WAH v=0-127c=7 c=11 CHANNEL VOLUME EXPRESSION ;v=0-127 ;v=0-127 c=64 SUSTAIN ;v=0-127 SOSTENUTO SOFT ;v=0-63:OFF, 64-127:ON ;v=0-127 c=84 PORTAMENTO CONTROL ;v=0-127

\*1 Relation between BANK SELECT and PROGRAM is as follows:

CATEGORY	MSB	LSB	PROGRAM No.
Live Set Page 1	63	0	07
:	:	:	
Live Set Page 20	63	19	07

\*2 The default CONTROL NUMBERs of ASSIGNABLE CONTROLLER are as

FOOT CONTROLLER 1 FOOT CONTROLLER 2 4
FOOT SWITCH Live Set Inc

\*3 When Sustain is set to something other than "FC3A (HalfOn)," operating the foot switch transmits only values of 0 (off) or 127 (on).

Bank Select will be actually executed when a Program Change message is received. Bank Select and Program Change numbers that are not supported by this instrument will be ignored.

#### (3-1-4) PROGRAM CHANGE

STATUS PROGRAM NUMBER 1100nnnn (CnH) n=0-15 CHANNEL NUMBER

ggg000000 p = 0 - 7

#### (3-1-5) PITCH BEND CHANGE

STATUS LSB n=0-15 CHANNEL NUMBER PITCH BEND CHANGE LSB PITCH BEND CHANGE MSB 1110nnnn (EnH) 0vvvvvv MSB Transmitted with a resolution of 7 bits.

### (3-2) CHANNEL MODE MESSAGES

1011nnnn (BnH) n=0-15 CHANNEL NUMBER STATUS CONTROL NUMBER 0cccccc c=CONTROL NUMBER

### (3-2-1) ALL SOUND OFF (CONTROL NUMBER = 78H, DATA VALUE = 0)

All the sounds currently being played, including channel messages such as note-on of a certain channel, are muted this message is received.

#### (3-2-2) RESET ALL CONTROLLERS (CONTROL NUMBER = 79H, DATA VALUE = 0)

Resets the values set for the following controllers.

PITCH BEND CHANGE 0 (center) MODULATION 0 (minimum) 0 (minimum) 127 (maximum) PEDAT, WAH EXPRESSION SUSTAIN 0 (off) SOSTENUTO 0 (off) (off)

PORTAMENTO CONTROL Clear the reserved note number

Doesn't reset the following data: PROGRAM CHANGE, BANK SELECT MSB/LSB, VOLUME

#### (3-2-3) ALL NOTE OFF (CONTROL NUMBER = 7BH, DATA VALUE = 0)

All the notes currently set to on in certain channel(s) are muted when receiving this message. However, if Sustain or Sostenuto is on, notes will continue sounding until these are turned off.

#### (3-2-4) OMNI MODE OFF (CONTROL NUMBER = 7CH, DATA VALUE = 0)

Performs the same function as when receiving ALL NOTES OFF

### (3-2-5) OMNI MODE ON (CONTROL NUMBER = 7DH, DATA VALUE = 0)

Performs the same function as when receiving ALL NOTES OFF

#### (3-3) SYSTEM REAL TIME MESSAGES

#### (3-3-1) ACTIVE SENSING

11111110 (FEH)

Transmitted every 200 msec

Once this code is received, the instrument starts sensing. When neither status messages nor data are received for more than approximately 350 ms, the MIDI receive buffer will be cleared, and the sounds currently being played are forcibly

#### (3-4) SYSTEM EXCLUSIVE MESSAGE

#### (3-4-1) UNIVERSAL NON REALTIME MESSAGE

#### (3-4-1-1) IDENTITY REQUEST (Receive only)

FOH 7EH 0nH 06H 01H F7H ("n" = Device No. However, this instrument receives under "omni.")

#### (3-4-1-2) IDENTITY REPLY (Transmit only)

FOH 7EH 7FH 06H 02H 43H 00H 41H ddH ddH mmH 00H 00H 7FH

dd: Device family number/code YC73: 5FH 06H YC88: 60H 06H

mm: version mm=(version no.-1.0)\*10 e.g.) version 1.0 mm=(1.0-1.0)\*10=0 version 1.5 mm=(1.5-1.0)\*10=5

#### (3-4-2) UNIVERSAL REALTIME MESSAGE

#### (3-4-3)PARAMETER CHANGE

#### (3-4-3-1) NATIVE PARAMETER CHANGE, MODE CHANGE

11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0001nnnn	1n	Device Number
01111111	7F	Group ID High
00011100	1C	Group ID Low
00001001	09	Model ID
0aaaaaaa	aaaaaaa	Address High
0aaaaaaa	aaaaaaa	Address Mid
0aaaaaaa	aaaaaaa	Address Low
0ddddddd	ddddddd	Data
11110111	F7	End of Exclusive

For parameters with data size of 2 or more, the appropriate number of data

bytes will be transmitted.
See the following MIDI Data Table for Address.

### (3-4-4) BULK DUMP

CIVII		
11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0000nnnn	0n	Device Number
01111111	7F	Group ID High
00011100	1C	Group ID Low
0bbbbbbb	bbbbbbb	Byte Count
0bbbbbbbb	bbbbbbb	Byte Count
00001001	09	Model ID
0aaaaaaa	aaaaaaa	Address High
0aaaaaaa	aaaaaaa	Address Mid
0aaaaaaa	aaaaaaa	Address Low
0	0	Data
0cccccc	cccccc	Check-sum
11110111	F7	End of Exclusive

See the following MIDI Data Table for Address and Byte Count. Checksum is the value that results in a value of 0 for the lower 7 bits when the Byte Count, Start Address, Data and Checksum itself are added.

#### (3-4-5) DUMP REQUEST

11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0010nnnn	2n	Device Number
01111111	7F	Group ID High
00011100	1C	Group ID Low
00001001	09	Model ID
0aaaaaaa	aaaaaaa	Address High
0aaaaaaa	aaaaaaa	Address Mid
0aaaaaaa	aaaaaaa	Address Low
11110111	F7	End of Exclusive

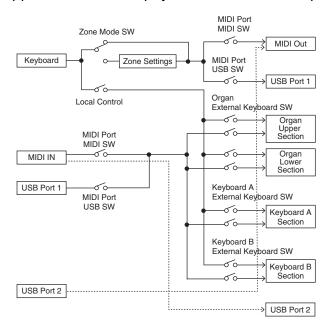
See the following MIDI Data Table for Address.

#### (3-4-6) PARAMETER REQUEST

11110000	F0	Exclusive status
01000011	43	YAMAHA ID
0011nnnn	3n	Device Number
01111111	7F	Group ID High
00011100	1C	Group ID Low
00001001	09	Model ID
0aaaaaaa	aaaaaaa	Address High
0aaaaaaa	aaaaaaa	Address Mid
0aaaaaaa	aaaaaaa	Address Low
11110111	F7	End of Exclusive

See the following MIDI Data Table for Address.

# (4) SYSTEM OVERVIEW (Keyboard and Tone Generator)



USB Port 2 is enabled when 'MIDI Port MIDI SW = OFF' and 'MIDI Port USB SW = ON'

ALL SOUND OFF clears all the sounds in the specific channel(s) played by both the keyboard and the data via MIDI.

ALL NOTES OFF received via MIDI clears the sounds in the specific channel(s) played via

# **MIDI Data Table**

# **Bank Select**

MS	SB	LS	SB	Program	Tuno	Memory	Description
DEC	HEX	DEC	HEX	No.	Type	Welliory	Description
63	3F	0	00	0 – 7	Live Set	User	Live Set Page 1
		1	01	0 – 7	Sound	User	Live Set Page 2
		2	02	0 – 7		User	Live Set Page 3
		3	03	0 – 7		User	Live Set Page 4
		4	04	0 – 7		User	Live Set Page 5
		5	05	0 – 7		User	Live Set Page 6
		6	06	0 – 7		User	Live Set Page 7
		7	07	0 – 7		User	Live Set Page 8
		8	08	0 – 7		User	Live Set Page 9
		9	09	0 – 7		User	Live Set Page 10
		10	0A	0 – 7		User	Live Set Page 11
		11	0B	0 – 7		User	Live Set Page 12
		12	0C	0 – 7		User	Live Set Page 13
		13	0D	0 – 7		User	Live Set Page 14
		14	0E	0 – 7		User	Live Set Page 15
		15	0F	0 – 7		User	Live Set Page 16
		16	10	0 – 7		User	Live Set Page 17
		17	11	0 – 7		User	Live Set Page 18
		18	12	0 – 7		User	Live Set Page 19
		19	13	0 – 7		User	Live Set Page 20

# **Parameter Base Address**

Group Number = 7F 1C, Model ID = 09

Parame	eter Bloc	k		
	To	op Addre	ss	Description
	High	Mid	Low	1
System	20	00	00	System
	20	40	00	Master EQ
	00	7F	00	Soundmondo Format Version
BULK CONTROL	0E	00	00	Header
	0F	00	00	Footer
STORE TO FLASH	0D	00	00	Store To Flash
Live Set Sound	46	00	00	Common
Zone	4A	ZZ	00	Zone (zz: 00 – 03)
Organ Section	50	00	00	Common
	50	1p	00	Part (p: 0 - 1 (0: UPPER, 1: LOWER))
Keys Sections	60	0s	00	Section (s: 0 - 1 (0: A, 1: B))

# **Bulk Dump Block**

"Top Address" indicates the top address of each block designated by the bulk dump operation. 
"Byte Count" indicates the data size contained in each block designated by the bulk dump operation. 
The block from the Bulk Header to the Bulk Footer of the Live Set Sound can be received regardless of their order; however, they cannot be received if an irrelevant Block is included. 
To execute 1 Live Set Sound bulk dump request, designate its corresponding Bulk Header address.

For information about "mm" and "nn" shown in the following list, refer to the MIDI PARAMETER CHANGE TABLE (BULK CONTROL).

Group Number = 7F 1C, Model ID = 09

Doron	neter Block	Deparintion	Byte	Count	To	p Addre	SS
raiaii	iletet block	Description	DEC	HEX	High	Mid	Low
System		System	48	30	20	00	00
		Master EQ	20	14	20	40	00
Live Set	t Sound	Bulk Header	0	00	0E	pp	0n
		Soundmondo Format Version	4	04	00	7F	00
	Common		1	01	46	00	00
	Zone	Zone 1	16	10	4A	00	00
		:				:	
		Zone 4				03	
	Organ	Organ Section Common	36	24	50	00	00
	Section	Organ Section Part Upper	20	14	50	10	
		Organ Section Part Lower	20	14	50	11	
	Keys	Key A Section	58	3A	60	00	00
	Sections	Key B Section	58	3A		01	
		Bulk Footer	0	00	0F	pp	0n

Message Type	Data
Parameter Change	F0, 43, 1n, gh, gl, id, ah, am, al, dt, F7
Parameter Request	F0, 43, 3n, gh, gl, id, ah, am, al F7
Bulk Dump	F0, 43, 0n, gh, gl, bh, bl, id, ah, am, al, dt,, cc, F7
Bulk Request	F0, 43, 2n, gh, gl, id, ah, am, al, F7

Device Number

Group Number High Group Number Low

gh: gl: bh: bl: id: ah:

Byte Count High Byte Count Low Model ID Parameter Address High

am: Parameter Address Middle al: Parameter Address Low

dt: Data cc: Data Checksum

# MIDI PARAMETER CHANGE TABLE (BULK CONTROL)

Group Number = 7F 1C, Model ID = 09

A	Address			Data	Parameter		Default	
High	Mid	Low	Size	Range (HEX)	Name	Description	(HEX)	Notes
0E	pp	0n	1	-	Bulk Header	Live Set Sound User $(pp = 0 - 19, n = 0 - 7)$	-	
	7F	00	1	-		Current Sound Buffer	-	
0F	pp	0n	1	-	Bulk Footer	Live Set Sound User $(pp = 0 - 19, n = 0 - 7)$	-	
	7F	00	1	-		Current Sound Buffer	-	

# **SYSTEM**

## **System Common**

Group Number = 7F 1C, Model ID = 09

А	Address Mid Lov		Size	Data	Parameter	Description	Default	Notes
High	Mid	Low	Size	Range	Name	Description	(HEX)	Notes
20	00	00	1		reserved			
		01	1		reserved			
		02	4	00 - 00 00 - 07 00 - 0F 00 - 0F	Master Tune	414.72 – 466.78 [Hz] 1st bit3-0: bit15-12 2nd bit3-0: bit11-8 3rd bit3-0: bit 7-4 4th bit3-0: bit 3-0	00 04 00 00	
		06	1	3D – 43	Keyboard Octave Shift	-3 - 0 - +3	40	
		07	1	34 – 4C	Keyboard Transpose	-12 - +12 [semitones]	40	
		08	1	00 - 01	Controller Reset	Hold, Reset	01	
		09	1	00 - 01	Local Control	Off, On	01	
		0A	1	00 – 0F, 7F	Tx Channel	1 – 16, Off	00	
		0B	1	00 – 10	Rx Channel	1 – 16, All	00	
		0C	1	00 - 03	MIDI Control	Off, On, Invert	00	
		0D	1		reserved			
		0E	1	38 – 48	Output Gain	-24 - 0 - +24 [dB]	3E	
		0F	1		reserved			
		10	1	00 – 04	Keyboard Touch Curve	Normal, Soft, Hard, Wide, Fixed	00	
		11	1	01 – 7F	Keyboard Fixed Velocity	1 – 127	40	
		12	1	00 – 01	Transmit/Receive Bank Select	Off, On	01	
		13	1	00 – 01	Transmit/Receive Program Change	Off, On	01	
		14	1		reserved			
		15	1	00 – 01	MIDI In/Out	Off, On	01	
		16	1	00 – 01	USB In/Out	Off, On	01	
		17	1		reserved			
		18	1		reserved			
		19	1	00 – 01	Display Lights Section	Off, On	01	
		1A	1	00 – 01	Display Lights Ins Effect	Off, On	01	
		1B	1	00 – 01	Display Lights LCD	Off, On	01	
		1C	1		reserved			
		1D	1		reserved			
		1E	1	00 – 01	Value Indication	Off, On	01	
		1F	1	00 – 01	Drawbar Mode	Jump, Catch	00	
		20	1	00 – 01	SW Direction	Default, Reverse	00	
		21	1		reserved			
		22	1	00 – 3F	LCD Contrast	1 – 63	20	
		23	1	00 – 01	Panel Lock Live Set	Off, On	01	
		24	1	00 – 01	Panel Lock Organ/ Keys	Off, On	01	
		25	1	00 – 01	Panel Lock Effect/ Sp Amp/Reverb	Off, On	01	
		26	1	00 – 01	Panel Lock Master EQ	Off, On	01	

А	ddres	s	Size	Data	Parameter	Description	Default	Notes
High	Mid	Low	Size	Range	Name	Description	(HEX)	MUICS
		27	1		reserved			
		28	1	00 – 01	Section Hold	Disable, Enable	00	
		29	1	00 – 01	Live Set View Mode	Close, Keep	00	
		2A	1	00 – 13	Power On Page	1 – 20	00	
		2B	1	00 – 07	Power On Sound	1 – 8	00	
		2C	1	00 – 79	FS Control Number	Off, 1 – 119, 120 (Live Set +), 121 (Live Set -)	78	
		2D	1	00 – 01	EG/Filter Reset	Off, On	01	
		2E	1		reserved			
		2F	1	00 – 7F	USB Audio Volume	0 – 127	40	
		30	1	00 – 02	Sustain Pedal Select	FC3A (Half On), FC3A (Half Off), FC4A/5	00	

TOTAL SIZE = 49

31 (HEX)

### System MEQ

А	ddres	s	Size	Data	Parameter	Description	Default	Notes
High	Mid	Low	Size	Range	Name	Description	(HEX)	Notes
20	40	00	1	34 - 4C	High Gain	-12dB - +12dB	40	
		01	1		reserved			
		02	1		reserved			
		03	1		reserved			
		04	1		reserved			
		05	1		reserved			
		06	1		reserved			
		07	1		reserved			
		08	1	34 - 4C	Mid Gain	-12dB - +12dB	40	
		09	1	0E - 36	Mid Frequency	100Hz – 10kHz	1C	
		0A	1		reserved			
		0B	1		reserved			
		0C	1		reserved			
		0D	1		reserved			
		0E	1		reserved			
		0F	1		reserved			
		10	1	34 - 4C	Low Gain	-12dB - +12dB	40	
		11	1		reserved			
		12	1		reserved			
		13	1	00 - 01	EQ On/Off	Off, On	01	

TOTAL SIZE = 20

14 (HEX)

### **Soundmondo Format Version**

А	Address		Size	Data	Parameter Name	Description	Default	Notes
High	Mid	Low	3126	Range	raiailletei Naille	Description	(HEX)	MOLES
00	7F	00	1	00 – 7F	Soundmondo Format Version Major		01	
			1	00 – 7F	Soundmondo Format Version Minor		00	
			1	00 – 7F	Soundmondo Format Version Bugfix		00	
			1		reserved		00	

TOTAL SIZE = 4

4 (HEX)

# LIVE SET SOUND

### Common

Group Number = 7F 1C, Model ID = 09

A	ddres	s	Size	Data	Parameter Name	Description	Default	Notes
High	Mid	Low	SIZE	Range	rafailleter Name	Description	(HEX)	Notes
46	00	00	1	20 – 7F	Live Set Sound Name 1	32 – 127 (ASCII)	40	Т
		01	1	20 – 7F	Live Set Sound Name 2	32 – 127 (ASCII)	6E	'n'
		02	1	20 – 7F	Live Set Sound Name 3	32 – 127 (ASCII)	69	T
		03	1	20 – 7F	Live Set Sound Name 4	32 – 127 (ASCII)	74	't'
		04	1	20 – 7F	Live Set Sound Name 5	32 – 127 (ASCII)	20	1.1
		05	1	20 – 7F	Live Set Sound Name 6	32 – 127 (ASCII)	53	'S'
		06	1	20 – 7F	Live Set Sound Name 7	32 – 127 (ASCII)	6F	'0'
		07	1	20 – 7F	Live Set Sound Name 8	32 – 127 (ASCII)	75	'u'
		08	1	20 – 7F	Live Set Sound Name 9	32 – 127 (ASCII)	6E	'n'
		09	1	20 – 7F	Live Set Sound Name 10	32 - 127 (ASCII)	64	'd'
		0A	1	20 – 7F	Live Set Sound Name 11	32 - 127 (ASCII)	20	
		0B	1	20 – 7F	Live Set Sound Name 12	32 - 127 (ASCII)	20	
		0C	1	20 – 7F	Live Set Sound Name 13	32 – 127 (ASCII)	20	
		0D	1	20 – 7F	Live Set Sound Name 14	32 - 127 (ASCII)	20	
		0E	1	20 – 7F	Live Set Sound Name 15	32 - 127 (ASCII)	20	
		0F	1		reserved			
		10	1	00 01	reserved	0# 0-	00	
		11 12	1	00 – 01 00 – 01	Zone Mode Switch Advanced Zone Mode Switch	Off, On Off, On	00	
		13	2	00 - 12 00 - 60	Tempo	42.0 – 240.0	0704	
		15	1	34 – 4C	Sound Transpose	-12 - +12	40	
		16	1	01 – 7F	Split Point	C#-2 – G8	37	
		17	1		reserved			
		18	1	00 – 01	Bend Lever Mode	Pitch Bend, Rotary S/F	00	
		19	1	00 – 3F, 41, 43 – 77	Modulation Lever Assign	Off, 1 – 63, 65, 67 – 119, 120 (USB Audio Volume)	01	Sustain (= 64), and Sostenuto (= 66) cannot be assigned.
		1A	1	00 – 7F	Modulation Lever Limit Low	0 – 127	00	
		1B	1	00 – 7F	Modulation Lever Limit High	0 – 127	7F	
		10	1	00-3F, 41, 43-78	FC1 Assign	Off, 1 – 63, 65, 67 – 119, 120 (USB Audio Volume)	0B	Sustain (= 64), and Sostenuto (= 66) cannot be assigned.
_								1
		1D	1	00 – 7F	FC1 Limit Low	0 – 127	00	
		1E	1	00 – 7F	FC1 Limit High	0 – 127	7F	
						-		Sustain (= 64), and Sostenuto (= 66) cannot be assigned.
		1E	1	00 – 7F 00 – 3F, 41,	FC1 Limit High	0 – 127 Off, 1 – 63, 65, 67 – 119, 120 (USB Audio	7F	64), and Sostenuto (= 66) cannot be
		1E 1F	1	00 – 7F 00 – 3F, 41, 43 – 78	FC1 Limit High FC2 Assign	0 - 127 Off, 1 - 63, 65, 67 - 119, 120 (USB Audio Volume)	7F 04	64), and Sostenuto (= 66) cannot be
		1E 1F 20 21 22	1 1 1 1	00 - 7F 00 - 3F, 41, 43 - 78 00 - 7F 00 - 7F	FC1 Limit High FC2 Assign  FC2 Limit Low FC2 Limit High Sustain Pedal Mode	0 - 127 Off, 1 - 63, 65, 67 - 119, 120 (USB Audio Volume) 0 - 127 0 - 127	7F 04 00 7F	64), and Sostenuto (= 66) cannot be
		1E 1F 20 21 22 23	1 1 1 1 1	00 - 7F 00 - 3F, 41, 43 - 78 00 - 7F 00 - 7F	FC1 Limit High FC2 Assign  FC2 Limit Low FC2 Limit High Sustain Pedal Mode reserved	0 - 127 Off, 1 - 63, 65, 67 - 119, 120 (USB Audio Volume) 0 - 127 0 - 127 Sustain,	7F 04 00 7F	64), and Sostenuto (= 66) cannot be
		1E 1F 20 21 22 23 24	1 1 1 1 1 1	00 – 7F 00 – 3F, 41, 43 – 78 00 – 7F 00 – 7F	FC1 Limit High FC2 Assign  FC2 Limit Low FC2 Limit High Sustain Pedal Mode reserved reserved	0 – 127 Off, 1 – 63, 65, 67 – 119, 120 (USB Audio Volume) 0 – 127 0 – 127 Sustain, Rotary S/F	7F 04 00 7F 00	64), and Sostenuto (= 66) cannot be
		1E 1F 20 21 22 23 24 25	1 1 1 1 1 1	00 - 7F 00 - 3F, 41, 43 - 78 00 - 7F 00 - 7F 00 - 01	FC1 Limit High FC2 Assign  FC2 Limit Low FC2 Limit High Sustain Pedal Mode reserved reserved Keys A/B Select	0 – 127 Off, 1 – 63, 65, 67 – 119, 120 (USB Audio Volume) 0 – 127 0 – 127 Sustain, Rotary S/F	7F 04 00 7F 00	64), and Sostenuto (= 66) cannot be
		1E 1F 20 21 22 23 24	1 1 1 1 1 1	00 – 7F 00 – 3F, 41, 43 – 78 00 – 7F 00 – 7F	FC1 Limit High FC2 Assign  FC2 Limit Low FC2 Limit High Sustain Pedal Mode reserved reserved	0 – 127 Off, 1 – 63, 65, 67 – 119, 120 (USB Audio Volume) 0 – 127 0 – 127 Sustain, Rotary S/F	7F 04 00 7F 00	64), and Sostenuto (= 66) cannot be

	ddres		Size	Data	Parameter Name	Description	Default	Notes
High	Mid	Low	_	Range		·	(HEX)	
		29 2A	1	00 – 01	reserved Effect Switch	Off, On	00	
		2B	1	00 – 01		*1	00	For LED
		ZD		00 – 15, 17 – 1F, 21	Effect Type		00	display, see "Insertion Effect Type List" (page 32).
		2C	1	00 – 02	Effect Section Select	Organ, Keys A, Keys B	00	
		2D	1	00 – 7F	Effect Depth	0 – 127	40	
		2E	1	00 – 7F	Effect Rate	0 – 127	40	
		2F	1	00 – 0E	Effect Tempo Delay Time	1/32 Tri., 1/64 Dot., 1/32, 1/16 Tri., 1/32 Dot., 1/16, 1/8 Tri., 1/16 Dot., 1/8, 1/4 Tri., 1/8 Dot., 1/4, 1/2 Tri., 1/4 Dot., 1/2	OB	
		30	1	00 – 01	Effect Looper Delay Rec Switch	Off, On	01	
		31	1	00 – 01	Speaker/Amp Switch	Off, On	01	
		32	1	00 – 05	Speaker/Amp Type	Rotary Speaker A, Rotary Speaker B, UK Lead, UK Crunch, US Double, US Case	00	
		33	1	00 – 02	Speaker/Amp Section Select	Organ, Keys A, Keys B	00	
		34	1	00 – 7F	Speaker/Amp Drive	0 – 127	40	
		35	1	00 – 7F	Speaker/Amp Tone	0 – 127	40	
		36	1	00 – 01	Rotary Speaker Slow/Fast	Slow, Fast	00	
		37	1	00 – 01	Rotary Speaker Rotation Switch	Off, On	01	
		38	1	00 – 7F	Rotary Speaker Horn Level	0 – 127	40	
		39	1	00 – 7F	Rotary Speaker Rotor Level	0 – 127	40	
		3A	1	01 – 7F	Rotary Speaker Horn Speed Fast	209.4 – 817.6 [rpm]	40	
		3B	1	01 – 7F	Rotary Speaker Rotor Speed Fast	189.3 – 736.8 [rpm]	40	
		3C	1	01 – 7F	Rotary Speaker Horn Speed Slow	23.0 – 89.6 [rpm]	40	
		3D	1	01 – 7F	Rotary Speaker Rotor Speed Slow	22.7 – 88.3 [rpm]	40	
		3E	1	0E – 7F	Rotary Speaker Horn Acceleration	0.21 - 1.00 - 2.00	53	
		3F	1	0E – 7F	Rotary Speaker Rotor Acceleration	0.21 - 1.00 - 2.00	40	
		40	1	0E – 7F	Rotary Speaker Horn Deceleration	0.21 - 1.00 - 2.00	53	
		41	1	0E – 7F	Rotary Speaker Rotor Deceleration	0.21 - 1.00 - 2.00	40	
		42	1	00 – 01	Rotary Speaker Stereo/Mono	Stereo, Mono	00	
		43	1	00 – 01	Background Noise Switch	Off, On	01	
		44	1	00 – 7F	Background Noise Level	0 – 127	40	
		45	1		reserved			
		46	1		reserved			
		47	1		reserved			

TOTAL SIZE = 72 48 (HEX)

<sup>\*1:</sup> G Chorus, SPX Chorus, Symphonic, 816 Chorus, VCM Flanger, Cross FB Flanger, VCM Stereo Phaser, Small Phaser, Max90, Dual Phaser, Tremolo, Auto Pan, Simple Rotary, British Combo, British Lead, Small Stereo, Compressor, Auto Wah, Touch Wah, Pedal Wah, Cross Delay, Tempo Delay, Analog Delay, Looper Delay, Room Reverb, Hall Reverb, Reverse Reverb, Lo-Fi, Ring Modulator, Slicer, LP Filter, Harmonic Enhancer

# **ZONE**

**Zone 1-4** 

zz: Zone Number, 00 - 03 (HEX)

Group Number = 7F 1C, Model ID = 09

A	ddres	s	Size	Data	Parameter	Description	Default	Notes
High	Mid	Low	Size	Range	Name	Description	(HEX)	Notes
4A	ZZ	00	1	00 – 01	Zone Switch	Off, On	00 – 01	With the default settings, only the Zone 1 is set to "on."
		01	1	00 – 0F	Transmit Channel	1 – 16	00 – 03	Default settings: Zone 1 (0), Zone 2 (1), Zone 3 (2), Zone 4 (3)
		02	1	3D – 43	Transpose (Octave)	-3 - +3	40	
		03	1	35 – 4B	Transpose (Semitone)	-11 +11	40	
		04	1	00 – 7F	Note Limit Low	C-2 – G8	00	The upper limit will be determined with "Note Limit High."
		05	1	00 – 7F	Note Limit High	C-2 – G8	7F	The lower limit will be determined with "Note Limit Low."
		06	1		reserved			
		07	1	00 – 7F	MIDI Volume	0 – 127	7F	
		08	1	00 – 7F	MIDI Pan	L64 - C - R63	40	
		09	1	00 – 7F	MIDI Bank MSB	0 – 127	00	
		0A	1	00 – 7F	MIDI Bank LSB	0 – 127	00	
		0B	1	00 – 7F	MIDI Program Number	1 – 128	00	
		OC	1	00 – 1F	Transmit Bank Select Transmit Program Change Transmit Volume Transmit Pan Transmit Note	bit0: Off, On Bank Select bit1: Off, On Program Change bit2: Off, On Volume bit3: Off, On Pan bit4: Off, On Note	1F	CC#11 (Expression) will not be transmitted when the Volume is set to "off."
		OD	1	00 – 3F	Transmit PB Transmit Mod Transmit FC1 Transmit FC2 Transmit FS Transmit Sus	bit0: Off, On PB bit1: Off, On Mod bit2: Off, On FC1 bit3: Off, On FC2 bit4: Off, On FS bit5: Off, On Sus	3F	
		0E	1		reserved			
		0F	1		reserved			

TOTAL SIZE = 16

10 (HEX)

# **Organ Section**

### **Organ Section Common**

Group Number = 7F 1C, Model ID = 09

Α	Address		Size Data		Parameter	Description	Default	Notes
High	Mid	Low	3126	Range	Name	Description	(HEX)	MOIG2
50	00	00	2	00 – 00 00 – 05	Voice Number	H1, H2, H3, F1, F2, F3 1st bit6-0 → bit13-7 2nd bit6-0 → bit6-0	00 00	
		02	1	00 – 01	Section Switch	Off, On	01	
		03	1	00 – 01	Part Select	Upper, Lower	00	
		04	1	00 – 03	Split Mode	Off, L&U, Upper, Lower	00	
		05	1	00 – 7F	Section Volume	0 – 127	7F	
		06	1	00 – 7F	Pre Drive	0 – 127	00	
		07	1		reserved			
		08	1	28 – 58	Pitch Bend Range	-24 - 0 - +24	42	
		09	1	00 – 7F	Pitch Modulation Depth	0 – 127	0A	*1
		0A	1	00 – 7F	Pitch Modulation Speed	-64 - +63	40	*1
		0B	1		reserved			

А	ddres	s	0:	Data	Parameter	Danadatia.	Default	Notes
High	Mid	Low	Size	Range	Name	Description	(HEX)	Notes
		00	1	00 – 01	Receive Expression	Off, On	01	
		0D	1	00 – 01	Receive Sustain	Off, On	01	
		0E	1	00 – 01	Receive Sostenuto	Off, On	01	
		0F	1		reserved			
		10	1	00 – 04	External Keyboard	External + Internal, External Only, 2 manual (Upper), 2 manual (Lower), Off	00	
		11	1		reserved			
		12	1		reserved			
		13	1	00 – 01	Percussion Switch	Off, On	00	*2
		14	1	00 – 01	Percussion Type	3rd, 2nd	00	*2
		15	1	00 – 01	Percussion Decay	Slow, Fast	00	*2
		16	1	00 – 01	Percussion Volume	Soft, Normal	01	*2
		17	1	00 – 01	Percussion Link to 1feet	Off, On	01	*2
		18	1		reserved			
		19	1		reserved			
		1A	1	00 – 05	Vibrato/Chorus Type	V1, C1, V2, C2, V3, C3	05	*2
		1B	1		reserved			
		1C	1	00 – 7F	Leak Level	0 – 127	40	*2
		1D	1	00 – 7F	Key Click Level	0 – 127	40	*2
		1E	1		reserved			
		1F	1	00 – 01	Expression Type	Drive+Volume, Volume	00	*2
		20	1		reserved			
		21	1		reserved			
		22	1		reserved			
		23	1	00 – 7F	Reverb Depth	0 – 127	00	

TOTAL SIZE = 36

24 (HEX)

# Organ Section Part Upper/Lower p: Part number, 0-1 (0: Upper, 1: Lower)

Address		Size	Data	Parameter B	Description	Default	Note	
High	Mid	Low	3126	Range Name Description		Description	(HEX)	NOTE
50	1p	00	1		reserved			
		01	1		reserved			
		02	1	3E – 42	Octave Shift	-2 - 0 - +2	40	
		03	1		reserved			
		04	1	00 – 7F	Drawbar 16'	0 – 127	7F	Correspon-
		05	1	00 – 7F	Drawbar 5 1/3'	0 – 127	7F	dence between drawbar posi-
		06	1	00 – 7F	Drawbar 8'	0 – 127	7F	tion and
		07	1	00 – 7F	Drawbar 4'	0 – 127	00	parameter
		08	1	00 – 7F	Drawbar 2 2/3'	0 – 127	00	value 0: 0
		09	1	00 – 7F	Drawbar 2'	0 – 127	00	1: 1 - 18
		0A	1	00 – 7F	Drawbar 1 3/5'	0 – 127	00	2: 19 - 36 3: 37 - 54
		0B	1	00 – 7F	Drawbar 1 1/3'	0 – 127	00	4: 55 - 72
		0C	1	00 – 7F	Drawbar 1'	0 – 127	00	5: 73 - 90 6: 91 - 108 7: 109 - 126 8: 127
		OD	1	00 - 06	Drawbar Color	1: White, 2: Red, 3: Yellow, 4: Green, 5: Cyan, 6: Blue, 7: Magenta	06	
		0E	1		reserved			
		0F	1		reserved			
		10	1		reserved			
		11	1		reserved			
		12	1	00 – 01	Vibrato/Chorus Switch	Off, On	00	
		13	1		reserved			

TOTAL SIZE = 20 14 (HEX)

<sup>\* 1:</sup> Effective only when the FM organ type (F1-F3) is selected.
\* 2: Effective only when the VCM organ type (H1-H3) is selected.

# **Keys Sections**

# **Key A/Key B Section**

s: Section number, 0-1 (0: A, 1: B)

Group Number = 7F 1C, Model ID = 09

A	ddres	s	Size	Data	Parameter	Description	Default	Notes
High	Mid	Low		Range	Name		(HEX)	NUICS
60	0s	00	1	00 – 03	Current Category	Piano, E.Piano, Synth, Others	A: 00, B: 02	
		01	2	00 – 00 06 – 0D	Category 1 Voice Number	$6-13$ 1st bit6-0 $\rightarrow$ bit13-7 2nd bit6-0 $\rightarrow$ bit6-0	00 06	
		03	2	00 – 00 0E – 1F	Category 2 Voice Number	$14 - 31$ 1st bit6-0 $\rightarrow$ bit13-7 2nd bit6-0 $\rightarrow$ bit6-0	00 0E	
		05	2	00 – 00 20 – 5A	Category 3 Voice Number	$32 - 90$ 1st bit6-0 $\rightarrow$ bit13-7 2nd bit6-0 $\rightarrow$ bit6-0	00 20	
		07	2	00 – 01 00 – 7F	Category 4 Voice Number	90 – 144 1st bit6-0 → bit13-7 2nd bit6-0 → bit6-0	00 5B	
		09	1		reserved			
		0A	1	00 – 01	Section Switch	Off, On	00	
		0B	1	00 – 02	Split Mode	L&R, L, R	00	
		00	1	3E – 42	Octave Shift	-2 - 0 - +2	40	
		OD	1	00 75	reserved	0 107	75	
		0E	1	00 – 7F	Section Volume	0 – 127	7F	
		0F	1	00 – 7F	Tone EG/Filter Select	0 – 127 EG, Filter	40	
		10	1	00 – 01 00 – 7F	EG/Filter Select	0 – 127	00 40	
		12	1	00 – 7F 00 – 0A	EG Control	0 – 127  AtkД&Ris A, AtkД&Ris B, Attack, Decay, Release, Atk&Ris A, Atk&Ris B, Atk&Ris Minus, Dcy&Ris, AtkД A, AtkД B	00	
		13	1	00 – 7F	Filter	0 – 127	40	
		14	1	00 – 06	Filter Control	Flat Reso, Reso Plus, Reso Minus A, Reso Minus B, Reso Minus C, Reso Boost A, Reso Boost B	00	
		15	1		reserved			
		16	1		reserved			
		17	1	00 – 02	FM Unison	Off, 2 Unison, 4 Unison	00	*1
		18	1	00 – 0F	FM Detune	0 – 15	00	*1
		19	1	00 – 0F	FM Spread	0 – 15	00	*1
		1A	1		reserved			
		1B	1		reserved			
		1C	1	00 – 01	Mono/Poly	Mono, Poly	01	**
		1D	1	00 – 01	Portamento Switch	Off, On	00	*2
		1E	1	00 – 7F	Portamento Time	0 – 127	40	*2
		1F	1	00 – 01	Portamento Mode	Fingered, Full-time	01	*2
		20	1	00 – 01	Portamento Time Mode	Rate, Time	00	*2
		21	1	28 – 58	Pitch Bend Range	-24 - 0 - +24	42	
		22	1	00 – 7F	Pitch Modulation Depth	0 – 127	0A	
		23	1	00 – 7F	Pitch Modulation Speed	-64 - +63	40	
		24	1		reserved			
		25 26	1	00 – 01	reserved Receive Expression	Off, On	01	
		27	1	00 – 01	Receive Sustain	Off, On	01	
		28	1	00 - 01	Receive Sostenuto	Off, On	01	
		29	1	00 - 01	Receive Soft	Off, On	01	
			1	00 - 02	External Keyboard	External + Internal,	00	
		2A	'	00 - 02	External ney board	External Only Off		
			1	00 - 02	_	External Only, Off		
		2B 2C		00 - 02	reserved reserved	External Only, Off		

А	ddres	s	Size	Data Parameter	Description	Default	Notes	
High	Mid	Low	3126	Range	Name	Description	(HEX)	NOTES
		2E	1	00 – 14, 16 – 17, 19 – 21	Effect 1 Type	*3	00	For LED dis- play, see "Inser- tion Effect Type List" (page 32).
		2F	1	00 – 7F	Effect 1 Depth	0 – 127	40	
		30	1	00 – 7F	Effect 1 Rate	0 – 127	40	
		31	1	00 – 01	Effect 2 Switch	Off, On	00	
		32	1	00 – 14, 16 – 17, 19 – 21	Effect 2 Type	*3	00	For LED dis- play, see "Inser- tion Effect Type List" (page 32).
		33	1	00 – 7F	Effect 2 Depth	0 – 127	40	
		34	1	00 – 7F	Effect 2 Speed	0 – 127	40	
		35	1		reserved			
		36	1		reserved			
		37	1		reserved			
		38	1		reserved			
		39	1	00 – 7F	Reverb Depth	0 – 127	00	

TOTAL SIZE = 58

3A (HEX)

<sup>\*1:</sup> Effective only when the FM organ type (F1-F3) is selected.
\*2: Effective only when the VCM organ type (H1-H3) is selected.
\*3: G Chorus, SPX Chorus, Symphonic, 816 Chorus, VCM Flanger, Cross FB Flanger, VCM Stereo Phaser, Small Phaser, Max90, Dual Phaser, Tremolo, Auto Pan, Simple Rotary, British Combo, British Lead, Small Stereo, Compressor, Auto Wah, Touch Wah, Pedal Wah, Cross Delay, Digital Delay, Analog Delay, Room Reverb, Hall Reverb, Reverse Reverb, Lo-Fi, Ring Modulator, Slicer, LP Filter, Damper Resonance, Harmonic Enhancer

[Stage Keyboard] Model YC88/YC73 MIDI Implementation Chart YAMAHA Date :25-SEP-2019 Version: 1.0

Function	Transmitted	Recognized	Remarks
Basic Default Channel Changed	1 - 16 1 - 16	1 - 16 1 - 16	Memorized
Default Mode Messages Altered	3 X ******	3 X X	Memorized
Note Number : True voice	0 - 127 ******	0 - 127 0 - 127	
Velocity Note On Note Off	O 9nH, v=1-127 X 8nH, v=64	O 9nH,v=1-127 O 9nH,v=0 or 8nH	
After Key's Touch Ch's	X X	X	
Pitch Bend	0	0	
0,32 1 7,11,67,84 64 Control 66 13,14 Change 18-25,27-31 68-70 79-83 85-91 93,94 102-119 1-119	O *2 O X O X O X O *1 O *1 O *1 O *1 O *1 O *1 O *3	O *2 O O O *2 O *2 O *1 O *1 O *1 O *1 O *1 X	Bank Select Sustain Sw Sostenuto
Prog Change : True #	0 0 - 127 *2	0 0 - 7 *2	
System Exclusive	0	0	
: Song Pos. Common : Song Sel. : Tune	X X X	X X X	
System : Clock Real Time : Commands	X X	X X	
: All Sound Off Aux : Reset All Cntrls : Local On/Off Mes- : All Notes Off sages: Active Sense : Reset	X X X X O X	O (120) O (121) X O (123-125) O X	

Notes: \*1 receive/transmit if MIDI control mode is on. \*2 receive/transmit if switch is on.

\*3 transmit if assigned to controllers.

Mode 1 : OMNI ON , POLY Mode 2 : OMNI ON , MONO Mode 3 : OMNI OFF, POLY Mode 4 : OMNI OFF, MONO O : Yes X : No

# **MEMO**

# **MEMO**

# **MEMO**



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Yamaha.io/SynthAndStageWarranty

# **Customer Service:**

Yamaha Corporation of America 6600 Orangethorpe Avenue, Buena Park, CA 90620-1273 Telephone: 800-854-1569

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Per informazioni dettagliate sulla garanzia relativa a questo prodotto Yamaha e l'assistenza in garanzia nei paesi EEA\* e in Svizzera, potete consultare il sito Web all'indirizzo riportato di seguito (è disponibile il file in formato stampabile) oppure contattare l'ufficio di rappresentanza locale della Yamaha. \* EEA: Area Economica Europea

#### Aviso importante: informações sobre as garantias para clientes da AEE\* e da Suíça

Para obter uma informação pormenorizada sobre este produto da Yamaha e sobre o serviço de garantia na AEE\* e na Suíça, visite o site a seguir (o arquivo para impressão está disponível no nosso site) ou entre em contato com o escritório de representação da Yamaha no seu país. \* AEE: Área Econômica Européia Ελληνικά

#### Σημαντική σημείωση: Πληροφορίες εγγύησης για τους πελάτες στον ΕΟΧ\* και Ελβετία

Για λεπτομερείς πληροφορίες εγγύησης σχετικά με το παρόν προϊόν της Yamaha και την κάλυψη εγγύησης σε όλες τις χώρες του ΕΟΧ και την Ελβετία, επισκεφτείτε την παρακάτω ιστοσελίδα (Εκτυπώσιμη μορφή είναι διαθέσιμη στην ιστοσελίδα μας) ή απευθυνθείτε στην αντιπροσωπεία της Yamaha στη χώρα σας. \* ΕΟΧ: Ευρωπαϊκός Οικονομικός Χώρος

#### Viktigt: Garantiinformation för kunder i EES-området\* och Schweiz

Svenska

För detaljerad information om denna Yamahaprodukt samt garantiservice i hela EES-området\* och Schweiz kan du antingen besöka nedanstående webbaddress (en utskriftsvänlig fil finns på webbplatsen) eller kontakta Yamahas officiella representant i ditt land. \* EES: Europeiska Ekonomiska Samarbetsområdet

#### Viktig merknad: Garantiinformasjon for kunder i EØS\* og Sveits

Norsk

Detaljert garantiinformasjon om dette Yamaha-produktet og garantiservice for hele EØS-området\* og Sveits kan fås enten ved å besøke nettadressen nedenfor (utskriftsversjon finnes på våre nettsider) eller kontakte kontakte Yamaha-kontoret i landet der du bor. \*EØS: Det europeiske økonomiske samarbeidsområdet

#### Vigtig oplysning: Garantioplysninger til kunder i EØO\* og Schweiz

De kan finde detaljerede garantioplysninger om dette Yamaha-produkt og den fælles garantiserviceordning for EØO\* (og Schweiz) ved at besøge det websted, der er angivet nedenfor (der findes en fil, som kan udskrives, på vores websted), eller ved at kontakte Yamahas nationale repræsentationskontor i det land, hvor De bor. \* EØO: Det Europæiske Økonomiske Område

#### Tärkeä ilmoitus: Takuutiedot Euroopan talousalueen (ETA)\* ja Sveitsin asiakkaille

Tämän Yamaha-tuotteen sekä ETA-alueen ja Sveitsin takuuta koskevat yksityiskohtaiset tiedot saatte alla olevasta nettiosoitteesta. (Tulostettava tiedosto saatavissa sivustollamme.) Voitte myös ottaa yhteyttä paikalliseen Yamaha-edustajaan. \*ETA: Euroopan talousalue

#### Ważne: Warunki gwarancyjne obowiązujące w EOG\* i Szwajcarii

Aby dowiedzieć się więcej na temat warunków gwarancyjnych tego produktu firmy Yamaha i serwisu gwarancyjnego w całym EOG\* i Szwajcarii, należy odwiedzić wskazaną poniżej stronę internetową (Plik gotowy do wydruku znajduje się na naszej stronie internetowej) lub skontaktować się z przedstawicielstwem firmy Yamaha w swoim kraju. \* EOG — Europejski Obszar Gospodarczy

#### Důležité oznámení: Záruční informace pro zákazníky v EHS\* a ve Švýcarsku

Podrobné záruční informace o tomto produktu Yamaha a záručním servisu v celém EHS\* a ve Švýcarsku naleznete na níže uvedené webové adrese (soubor k tisku je dostupný na našich webových stránkách) nebo se můžete obrátit na zastoupení firmy Yamaha ve své zemi. \* EHS: Evropský hospodářský prostor

#### Fontos figyelmeztetés: Garancia-információk az EGT\* területén és Sváicban élő vásárlók számára

Magyar

A jelen Yamaha termékre vonatkozó részletes garancia-informácjók, valamint az EGT\*-re és Svájcra kiterjedő garancjális szolgáltatás tekintetében keresse fel webhelyűnket az alábbi címen (a webhelyen nyomtatható fájlt is talál), vagy pedig lépjen kapcsolatba az országában működő Yamaha képviseleti irodával. \* EGT: Európai Gazdasági Térség

### Oluline märkus: Garantiiteave Euroopa Majanduspiirkonna (EMP)\* ja Šveitsi klientidele

Täpsema teabe saamiseks selle Yamaha toote garantii ning kogu Euroopa Majanduspiirkonna ja Šveitsi garantiiteeninduse kohta, külastage palun veebisaiti alljärgneval aadressil (meie saidil on saadaval prinditav fail) või pöörduge Teie regiooni Yamaha esinduse poole. \* EMP: Euroopa Majanduspiirkond

#### Svarīgs paziņojums: garantijas informācija klientiem EEZ\* un Šveicē

Lietuvių kalba

Lai saņemtu detalizētu garantijas informāciju par šo Yamaha produktu, kā arī garantijas apkalpošanu EEZ\* un Šveicē, lūdzu, apmeklējiet zemāk norādīto tīmekļa vietnes adresi (tīmekļa vietnē ir pieejams drukājams fails) vai sazinieties ar jūsu valsti apkalpojošo Yamaha pārstāvniecību. \* EEZ: Eiropas Ekonomikas zona

### Dėmesio: informacija dėl garantijos pirkėjams EEE\* ir Šveicarijoje

Jei reikia išsamios informacijos apie šį "Yamaha" produktą ir jo techninę priežiūrą visoje EEE\* ir Šveicarijoje, apsilankykite mūsų svetainėje toliau nurodytu adresu (svetainėje yra spausdintinas failas) arba kreipkitės į "Yamaha" atstovybę savo šaliai. \*EEE – Europos ekonominė erdvė

#### Dôležité upozornenie: Informácie o záruke pre zákazníkov v EHP\* a Švajčiarsku

Slovenčina

Podrobné informácie o záruke týkajúce sa tohto produktu od spoločnosti Yamaha a garančnom servise v EHP\* a Švajčiarsku nájdete na webovej stránke uvedenej nižšie (na našej webovej stránke je k dispozícii súbor na tlač) alebo sa obráťte na zástupcu spoločnosti Yamaha vo svojej krajine. \* EHP: Európsky hospodársky priestor

### Pomembno obvestilo: Informacije o garanciji za kupce v EGP\* in Švici

Slovenščina

Za podrobnejše informacije o tem Yamahinem izdelku ter garancijskem servisu v celotnem EGP in Švici, obiščite spletno mesto, ki je navedeno spodaj (natisljiva datoteka je na voljo na našem spletnem mestu), ali se obrnite na Yamahinega predstavnika v svoji državi. \* EGP: Evropski gospodarski prostor

# Важно съобщение: Информация за гаранцията за клиенти в ЕИП\* и Швейцария

Български език

За подробна информация за гаранцията за този продукт на Yamaha и гаранционното обслужване в паневропейската зона на ЕИП\* и Швейцария или посетете посочения по-долу уеб сайт (на нашия уеб сайт има файл за печат), или се свържете с представителния офис на Yamaha във вашата страна. \* ЕИП: Европейско икономическо пространство

### Notificare importantă: Informații despre garanție pentru clienții din SEE\* și Elveția

Pentru informații detaliate privind acest produs Yamaha și serviciul de garanție Pan-SEE\* și Elveția, vizitați site-ul la adresa de mai jos (fișierul imprimabil este disponibil pe site-ul nostru) sau contactați biroul reprezentanței Yamaha din țara dumneavoastră. \* SEE: Spațiul Economic European

#### Važna obavijest: Informacije o jamstvu za države EGP-a i Švicarske

Hrvatski

Limba română

Za detaljne informacije o jamstvu za ovaj Yamahin proizvod te jamstvenom servisu za cijeli EGP i Švicarsku, molimo Vas da posjetite web-stranicu navedenu u nastavku ili kontaktirate ovlaštenog Yamahinog dobavljača u svojoj zemlji. \* EGP: Europski gospodarski prostor

For details of products, please contact your nearest Yamaha representative or the authorized distributor listed below.

Pour plus de détails sur les produits, veuillez-vous adresser à Yamaha ou au distributeur le plus proche de vous figurant dans la liste suivante. Die Einzelheiten zu Produkten sind bei Ihrer unten aufgeführten Niederlassung und bei Yamaha Vertragshändlern in den jeweiligen Bestimmungsländern erhältlich.

Para detalles sobre productos, contacte su tienda Yamaha más cercana o el distribuidor autorizado que se lista debajo.

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#### **MEXICO**

Yamaha de México, S.A. de C.V. Av. Insurgentes Sur 1647 Piso 9, Col. San José Insurgentes, Delegación Benito Juárez, México, D.F., C.P. 03900, México Tel: +52-55-5804-0600

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Yamaha Musical do Brasil Ltda.

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