

PSR-S970**PSR-S770****Digital Workstation
Clavier Arrangeur Professionnel****Owner's Manual
Mode d'emploi**

Thank you for purchasing this Yamaha Digital Workstation!
We recommend that you read this manual carefully so that you can fully take advantage of the advanced and convenient functions of the instrument. We also recommend that you keep this manual in a safe and handy place for future reference.

Before using the instrument, be sure to read "PRECAUTIONS" on pages 5 – 6.

Merci d'avoir choisi ce Clavier Arrangeur Professionnel Yamaha !
Nous vous conseillons de lire attentivement ce mode d'emploi afin de tirer pleinement profit des fonctions avancées et très utiles de votre instrument. Nous vous recommandons également de garder ce manuel à portée de main pour toute référence ultérieure.

Avant d'utiliser l'instrument, lisez attentivement la section « PRÉCAUTIONS D'USAGE » aux pages 5 et 6.

SPECIAL MESSAGE SECTION

This product utilizes batteries or an external power supply (adapter). DO NOT connect this product to any power supply or adapter other than one described in the manual, on the name plate, or specifically recommended by Yamaha.

WARNING: Do not place this product in a position where anyone could walk on, trip over, or roll anything over power or connecting cords of any kind. The use of an extension cord is not recommended! If you must use an extension cord, the minimum wire size for a 25' cord (or less) is 18 AWG. NOTE: The smaller the AWG number, the larger the current handling capacity. For longer extension cords, consult a local electrician.

This product should be used only with the components supplied or; a cart, rack, or stand that is recommended by Yamaha. If a cart, etc., is used, please observe all safety markings and instructions that accompany the accessory product.

SPECIFICATIONS SUBJECT TO CHANGE:

The information contained in this manual is believed to be correct at the time of printing. However, Yamaha reserves the right to change or modify any of the specifications without notice or obligation to update existing units.

This product, either alone or in combination with an amplifier and headphones or speaker/s, may be capable of producing sound levels that could cause permanent hearing loss. DO NOT operate for long periods of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.

IMPORTANT: The louder the sound, the shorter the time period before damage occurs.

Some Yamaha products may have benches and / or accessory mounting fixtures that are either supplied with the product or as optional accessories. Some of these items are designed to be dealer assembled or installed. Please make sure that benches are stable and any optional fixtures (where applicable) are well secured BEFORE using.

Benches supplied by Yamaha are designed for seating only. No other uses are recommended.

NOTICE:

Service charges incurred due to a lack of knowledge relating to how a function or effect works (when the unit is operating as designed) are not covered by the manufacturer's warranty, and are therefore the owners responsibility. Please study this manual carefully and consult your dealer before requesting service.

ENVIRONMENTAL ISSUES:

Yamaha strives to produce products that are both user safe and environmentally friendly. We sincerely believe that our products and the production methods used to produce them, meet these goals. In keeping with both the letter and the spirit of the law, we want you to be aware of the following:

Battery Notice:

This product MAY contain a small non-rechargeable battery which (if applicable) is soldered in place. The average life span of this type of battery is approximately five years. When replacement becomes necessary, contact a qualified service representative to perform the replacement.

This product may also use "household" type batteries. Some of these may be rechargeable. Make sure that the battery being charged is a rechargeable type and that the charger is intended for the battery being charged.

When installing batteries, never mix old batteries with new ones, and never mix different types of batteries. Batteries MUST be installed correctly. Mismatches or incorrect installation may result in overheating and battery case rupture.

Warning:

Do not attempt to disassemble, or incinerate any battery. Keep all batteries away from children. Dispose of used batteries promptly and as regulated by the laws in your area. Note: Check with any retailer of household type batteries in your area for battery disposal information.

Disposal Notice:

Should this product become damaged beyond repair, or for some reason its useful life is considered to be at an end, please observe all local, state, and federal regulations that relate to the disposal of products that contain lead, batteries, plastics, etc. If your dealer is unable to assist you, please contact Yamaha directly.

NAME PLATE LOCATION:

The name plate is located on the bottom of the product. The model number, serial number, power requirements, etc., are located on this plate. You should record the model number, serial number, and the date of purchase in the spaces provided below and retain this manual as a permanent record of your purchase.

Model

Serial No.

Purchase Date

PLEASE KEEP THIS MANUAL

92-BP (bottom)

For PSR-S970/PSR-S770

COMPLIANCE INFORMATION STATEMENT (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 : Digital Keyboard
Model Name : PSR-S970/S770

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.
See user manual instructions if interference to radio reception is suspected.

* This applies only to products distributed by YAMAHA CORPORATION OF AMERICA.

(FCC DoC)

For AC adaptor and PSR-S970/PSR-S770

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 regulations 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.

* This applies only to products distributed by YAMAHA CORPORATION OF AMERICA.

(class B)

For AC adaptor

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_sengen)

CAN ICES-3 (B)/NMB-3(B)

- This applies only to products distributed by Yamaha Canada Music Ltd.
- Ceci ne s'applique qu'aux produits distribués par Yamaha Canada Musique Ltée.
(can_b_01)



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

- 1 Read these instructions.
- 2 Keep these instructions.
- 3 Heed all warnings.
- 4 Follow all instructions.
- 5 Do not use this apparatus near water.
- 6 Clean only with dry cloth.
- 7 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.
- 9 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.
- 11 Only use attachments/accessories specified by the manufacturer.
- 12 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.
- 14 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)

PRECAUTIONS

PLEASE READ CAREFULLY BEFORE PROCEEDING

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

For AC adaptor



WARNING

- This AC adaptor is designed for use with only Yamaha electronic instruments. Do not use for any other purpose.
- Indoor use only. Do not use in any wet environments.



CAUTION

- When setting up, make sure that the AC outlet is easily accessible. If some trouble or malfunction occurs, immediately turn off the power switch of the instrument and disconnect the AC adaptor from the outlet. When the AC adaptor is connected to the AC outlet, keep in mind that electricity is flowing at the minimum level, even if the power switch is turned off. When you are not using the instrument for a long time, make sure to unplug the power cord from the wall AC outlet.

For PSR-S970/PSR-S770



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/AC adaptor

- 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 the specified adaptor (page 111) only. Using the wrong adaptor can result in damage to the instrument or overheating.
- Check the electric plug periodically and remove any dirt or dust which may have accumulated on it.

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.



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/AC adaptor

- 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.
- Do not place objects in front of the instrument's air vent, since this may prevent adequate ventilation of the internal components, and possibly result in the instrument overheating.
- 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.

- Use only the stand specified for the instrument. When attaching it, use the provided screws only. Failure to do so could cause damage to the internal components or result in the instrument falling over.

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.

DMI-5 2/2

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 iPad, iPhone or iPod touch, 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. (Verified operating temperature range: 5° – 40°C, or 41° – 104°F.)
- 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 cloth. Do not use paint thinners, solvents, alcohol, cleaning fluids, or chemical-impregnated wiping cloths.

■ Saving data

- The edited Songs/Styles/Voices/Multi Pads and MIDI settings 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 17). Save the edited data to the instrument, or to a USB flash drive (page 28). However, the data saved to the instrument may be lost due to some failure, an operation mistake, etc. Save your important data onto a USB flash drive. For information about the handling of USB flash drive, refer to page 100.
- 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.

The model number, serial number, power requirements, etc., may be found on or near the name plate, which is at the bottom 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. _____

(bottom_en_01)

Included Accessories

- Owner's Manual (this book)
- Online Member Product Registration
The "PRODUCT ID" on the sheet will be needed when you fill out the User Registration form.
- Music rest
- AC adaptor, power cord
May not be included depending on your area. Check with your Yamaha dealer.

About the Manuals

This instrument has the following document and instructional materials.

■ Included Document



Owner's Manual (this book)

Provides overall explanations of the PSR-S970/S770 basic functions.

■ Online Materials (PDF)



Reference Manual (only in English, French, German and Spanish)

Explains advanced features of the instrument, not explained in the Owner's Manual. For example, you can learn how to create original Styles, Songs or Multi Pads, or find detailed explanations of specific parameters.



Data List

Contains various preset content lists such as Voices, Styles, Effects, as well as MIDI-related information.



Computer-related Operations

Includes instructions on connecting this instrument to a computer, and operations related to transmitting/receiving MIDI data.



iPhone/iPad Connection Manual (only in English, French, German and Spanish)

Explains how to connect the instrument to smart devices, such as an iPhone, iPad, etc.

To obtain these materials, access the Yamaha Downloads website, then enter the model name for searching the desired files.

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

- 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.
- The displays are taken from the PSR-S970, and are in English.
- iPhone, iPad and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries.
- The company names and product names in this manual are the trademarks or registered trademarks of their respective companies.

Instruction conventions in this manual

Throughout this manual, instructions with multiple steps are given in convenient shorthand, with arrows indicating the proper sequence.

Example: [FUNCTION] → TAB [▶] MENU 2 → [G] SYSTEM → TAB [◀][▶] BACKUP/RESTORE

The example above describes a four step operation:

- 1) Press the [FUNCTION] button.
- 2) Press the TAB [▶] button to select the MENU 2 tab.
- 3) Press the [G] (SYSTEM) button.
- 4) Use the TAB [◀][▶] buttons to select the BACKUP/RESTORE tab.

Formats



“GM (General MIDI)” is one of the most common Voice allocation formats. “GM System Level 2” is a standard specification that enhances the original “GM” and improves Song data compatibility. It provides for increased polyphony, greater Voice selection, expanded Voice parameters, and integrated effect processing.



XG is a major enhancement of the GM System Level 1 format, and was developed by Yamaha specifically to provide more Voices and variations, as well as greater expressive control over Voices and effects, and to ensure compatibility of data well into the future.



GS was developed by the Roland Corporation. In the same way as Yamaha XG, GS is a major enhancement of the GM specifically to provide more Voices and Drum kits and their variations, as well as greater expressive control over Voices and effects.



The Yamaha XF format enhances the SMF (Standard MIDI File) standard with greater functionality and open-ended expandability for the future. This instrument is capable of displaying Lyrics when an XF file containing Lyric data is played.



“SFF (Style File Format)” is an original Style file format by Yamaha which uses a unique conversion system to provide high-quality automatic accompaniment based on a wide range of chord types. “SFF GE (Guitar Edition)” is an enhanced format of SFF, which features improved note transposition for guitar tracks.

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.
- The followings are the titles, credits and copyright notices for some of the songs pre-installed in this instrument:

Beauty And The Beast

from Walt Disney's BEAUTY AND THE BEAST

Lyrics by Howard Ashman

Music by Alan Menken

©1991 Walt Disney Music Company and Wonderland Music Company, Inc.

All Rights Reserved Used by Permission

What Makes You Beautiful

Words and Music by Savan Kotecha, Rami Yacoub and Carl Falk

© 2011 EMI APRIL MUSIC INC., MR. KANANI SONGS, RAMI PRODUCTIONS AB and AIR CHRYSALIS SCANDINAVIA AB

All Rights for MR. KANANI SONGS Controlled and Administered by EMI APRIL MUSIC INC.

All Rights for RAMI PRODUCTIONS AB Administered by KOBALT SONGS MUSIC PUBLISHING

All Rights for AIR CHRYSALIS SCANDINAVIA AB Administered by CHRYSALIS MUSIC GROUP, INC., a BMG CHRYSALIS COMPANY

All Rights Reserved International Copyright Secured Used by Permission

■ About functions/data bundled with the instrument

- Some of the preset songs have been edited for length or arrangement, and may not be exactly the same as the original.
- This device is capable of using various types/formats of music data by optimizing them to the proper format music data for use with the device in advance. As a result, this device may not play them back precisely as their producers or composers originally intended.
- The bitmap fonts used in this instrument have been provided by and are the property of Ricoh Co., Ltd.

Table of Contents

Included Accessories.....	7	4 USB Audio Player/Recorder	
About the Manuals.....	7	– Playing Back and Recording Audio Files –	71
Formats.....	8	Playing Back Audio Files.....	71
Information.....	8	Recording Your Performance as Audio.....	74
Welcome to Digital Workstation	10	5 Multi Pads – Adding Musical Phrases to Your Performance –	76
Panel Controls and Terminals	12	Playing the Multi Pads.....	76
Setting Up	16	Using Chord Match.....	77
Power Requirements.....	16	Using the Multi Pad Synchro Start Function.....	77
Turning the Power On/Off.....	16	Creating a Multi Pad with Audio files	
Adjusting the Master Volume.....	18	(Audio Link Multi Pad).....	78
Changing the Display Language.....	18	6 Music Finder	
Playing the Demos.....	19	– Calling Up Ideal Panel Setups for Your Performance –	80
Basic Operations	20	Selecting the Desired Record (Panel Settings).....	80
Display-based Controls.....	20	Searching for Records (Panel Settings).....	81
Calling Up the Desired Display Instantly — Direct Access.....	23	Downloading Records (Panel Settings) from the Website.....	82
Messages Shown in the Display.....	23	Registering a Song, Audio or Style File to a Record.....	83
Main Display Configuration.....	24	7 Registration Memory	
File Selection Display Configuration.....	26	– Saving and Recalling Custom Panel Setups –	85
File Management.....	27	Registering Your Panel Setups.....	85
Entering Characters.....	32	Saving the Registration Memory as a Bank file.....	86
Resetting to the Factory-programmed Settings.....	33	Recalling a Registered Panel Setup.....	87
Data Backup.....	34	8 Microphone/Guitar Input – Using a Microphone or	
1 Voices – Playing the keyboard –	35	Guitar with the Instrument –	88
Playing Voices.....	35	Connecting a Microphone/Guitar.....	88
Changing the Pitch of the Keyboard.....	38	Setting Up for Using a Microphone/Guitar.....	89
Using the Wheels.....	39	Using the Talk function.....	90
Using the LIVE CONTROL Knobs.....	40	Using Vocal Harmony (PSR-S970).....	91
Applying Voice Effects.....	42	Using Synth Vocoder (PSR-S970).....	93
Creating Your Original Organ Flutes Voices.....	45	9 Mixing Console – Editing the Volume and Tonal Balance –	95
Adding New Contents — Expansion Packs.....	46	Basic Procedure.....	95
2 Styles – Playing Rhythm and Accompaniment –	48	10 Connections – Using Your Instrument with Other Devices –	97
Playing a Style with the Auto Accompaniment.....	48	Connecting a Footswitch/Foot Controller (FOOT PEDAL jacks)....	97
Operating Style Playback.....	50	Connecting Audio Devices	
Changing the Chord Fingering Type.....	52	(OUTPUT [L/L+R]/[R] jacks, [AUX IN] jack).....	98
Calling up Appropriate Panel Settings for the Current		Connecting an External Monitor	
Style (One Touch Setting).....	53	([RGB OUT] terminal) (PSR-S970).....	99
Finding Suitable Music Pieces for the Current Style		Connecting a Microphone or Guitar	
(Repertoire).....	54	([MIC/GUITAR INPUT] jack).....	99
Calling up Optimum Styles for Your Performance		Connecting USB Devices ([USB TO DEVICE] terminal)....	100
(Style Recommender).....	55	Connecting to an iPhone/iPad ([USB TO DEVICE],	
Turning On/Off Each Channel of the Style.....	56	[USB TO HOST] and MIDI terminals).....	102
Adjusting the Volume Balance Between the Parts.....	57	Connecting to a Computer ([USB TO HOST] terminal)....	102
Setting the Split Point.....	58	Connecting External MIDI Devices	
Specifying Chords with Your Right Hand while Playing		(MIDI [IN]/[OUT] terminals).....	103
Bass with Your Left Hand.....	59	11 Other Functions – Making Global Settings and	
Creating/Editing Styles (Style Creator).....	60	Using Advanced Features –	104
3 Songs – Playing, Practicing and Recording Songs –	62	Basic Procedure.....	104
Playback of Songs.....	62	Function List.....	105
Displaying Music Notation (Score).....	64	Direct Access Chart	106
Displaying Lyrics/Text.....	65	Troubleshooting	107
Turning Each Channel of the Song On/Off.....	65	Specifications	110
One-handed Practice with the Guide Function.....	66	Index	112
Repeat Playback.....	67		
Recording Your Performance.....	68		

Welcome to Digital Workstation

Extraordinarily expressive and realistic Voices

page 35

The PSR-S970/S770 has a comprehensive and sonically stunning set of authentic Voices, and gives you the tools to play these Voices more naturally and with greater expressiveness.

VOICE				
PIANO	GUITAR	STRINGS	CHOIR & PAD	DRUM KIT
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E. PIANO	BASS	BRASS	SYNTH	ORGAN FLUTES
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ORGAN	ACCORDION	WOODWIND	PERCUSSION	EXPANSION/ USER
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Play along with a backing band

page 48

The Styles of the PSR-S970/S770 make it possible to perform in a wide variety of music genres with full instrumental accompaniment, just by playing chords. Moreover, the PSR-S970 features Audio Styles which bring a fresh level of realism and expressiveness, featuring actual audio recordings of top-class studio musicians. These impart all the original feel, ambience and excitement to the drums and percussion parts of the Style, and retain the subtle nuances and grooves that are difficult to reproduce using the preset drum kits.

STYLE				
POP&ROCK	SWING&JAZZ	LATIN	ENTERTAINER	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
BALLAD	R&B	BALLROOM	WORLD	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
DANCE	COUNTRY	MOVIE&SHOW	EXPANSION/ USER	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



Voice and Style expandability

page 46

The PSR-S970/S770 is an open-ended instrument that lets you continually expand the available content for your creative explorations. Featured on our special website (<http://www.yamaha.com/awk/>) are many Voices and Styles (called Expansion Pack data) that you can get and load to the PSR-S970/S770. By using the "Yamaha Expansion Manager" software, you can manage the variety of Expansion Packs and create your own custom Pack for installing on your instrument.

Powerful DSP effect for enhancing the sound

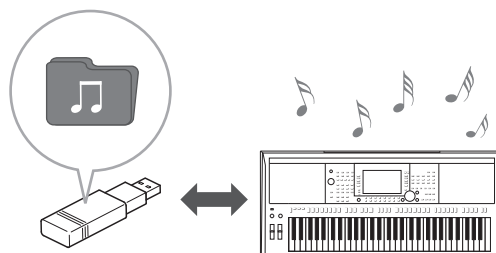
page 42

The PSR-S970/S770 has new and high-quality effect types, including Style Real Distortion and Real Reverb. On the PSR-S970, these also include VCM effects that use the same technology as the professional-level processing on Yamaha's high-end mixers. It is provided with beautifully designed virtual panel displays, with highly intuitive controls—just like actual effect devices.

Audio playing and recording with a USB flash drive

page 71

Audio files (WAV or MP3 format) saved to a USB flash drive can be played back on the instrument. You can also record your performance as audio files (WAV format) to a USB flash drive—making it easy to edit your recordings on computer as desired, and share them over the Internet, or burn your own original CDs. The instrument also provides a variety of advanced, convenient audio playback and processing functions, including Time Stretch, which lets you slow down or speed up an audio file without changing the pitch, and Pitch Shift, which allows you to change the pitch without affecting the time. Moreover, a Vocal Cancel function effectively attenuates the vocals which may be positioned in the center of a file, allowing you to sing "karaoke" style with just instrumental backing.



Connect a microphone and sing along with your keyboard performance page 88

You can directly connect a microphone and use a variety of sophisticated processing tools. The PSR-S970 features an amazing Vocal Harmony function, which automatically produces backup vocal harmonies for lead vocals that you sing into a microphone. You can even change the gender of the harmony voices — for example, adding female backup to your own male voice (or vice versa) — or use the Vocal Doubler to make your single voice sound like many. The PSR-S970 also has a Synth Vocoder feature, recreating that popular effect for a variety of luscious, other-worldly sounds.

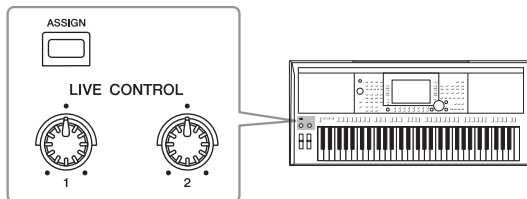
Both the PSR-S970 and PSR-S770 let you connect an electric guitar, and you can even use powerful DSP effects to process the guitar sound instead, and play that along with the keyboard sounds.



Versatile real-time controller — Live Control page 40

The two knobs to which various functions can be assigned lets you intuitively control your performance in real-time. For example, you can use the knobs to control the brightness (cutoff frequency) of the sound being played or to control the volume balance between the parts such as Voice and Style. Thus you can easily add variations to the sound without interrupting your performance.

You can also control your performance easily by using the two wheels — PITCH BEND and MODULATION. The [PITCH BEND] wheel lets you bend the notes up or down, while the [MODULATION] wheel can be used to apply a vibrato effect to the notes you play (page 39).



Playing with Arpeggios page 44


You can play arpeggios (broken chords) by simply pressing the appropriate notes on the keyboard, allowing you to instantly and automatically have complex and otherwise difficult-to-play phrases backing your performance.




Explore the Demos page 19

The Demos showcase the instrument's high-quality sounds, the variety of advanced functions, and provide helpful information for learning about your new keyboard.

DEMO



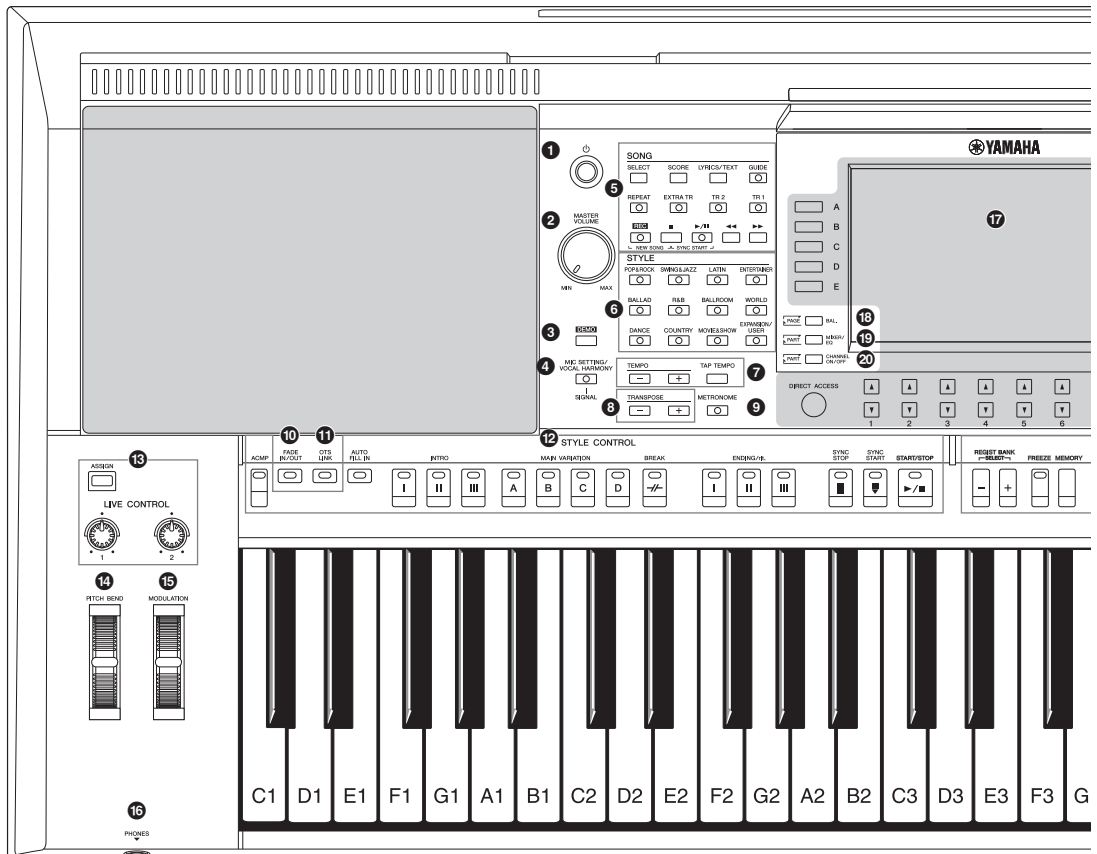
➔



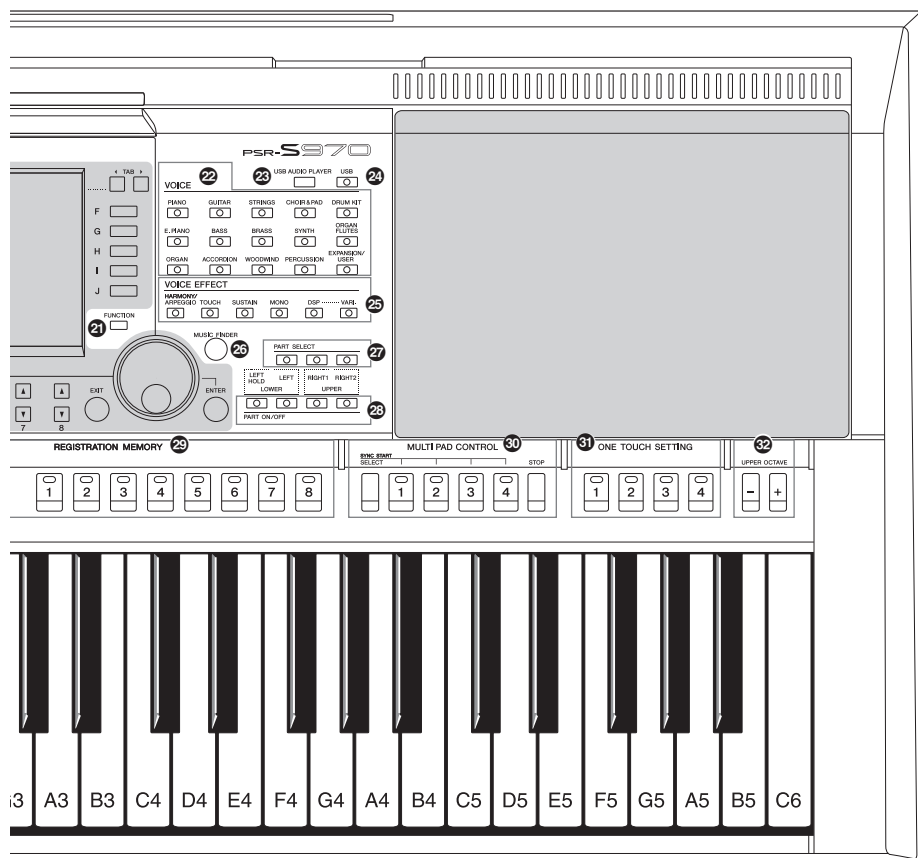
These are just a few of the many functions that enhance your musical enjoyment and expand your creative and performance possibilities. Try them out and enjoy your new keyboard!

Panel Controls and Terminals

■ Top Panel



- ❶ [] (Standby/On) switchPage 16
Turns on the instrument's power or sets to standby.
- ❷ [MASTER VOLUME] dialPage 18
Adjusts the overall volume.
- ❸ [DEMO] buttonPage 19
Calls up the display for selecting a Demo.
- ❹ [MIC SETTING/VOCAL HARMONY] button (PSR-S970) /
[MIC SETTING] button (PSR-S770)Page 88
Calls up the display from which you can make settings for
the microphone/guitar and (on the PSR-S970) Vocal Har-
mony settings.
- ❺ SONG buttonsPage 62
Selects a Song and controls Song playback.
- ❻ STYLE category selection buttonsPage 48
Selects a Style category.
- ❼ [TAP TEMPO]/TEMPO buttonsPage 51
Controls the tempo for Style, Song and Metronome playback.
- ❽ TRANSPOSE buttonsPage 38
Transposes the entire pitch of the instrument in semitone
steps.
- ❾ [METRONOME] buttonPage 37
Turns the metronome on or off.
- ❿ [FADE IN/OUT] buttonPage 52
Controls fade in/out of Style/Song playback.
- ⓫ [OTS LINK] buttonPage 54
Turns on/off the OTS Link function.
- ⓬ STYLE CONTROL buttonsPage 50
Controls Style playback.
- ⓭ [ASSIGN] button, LIVE CONTROL knobsPage 40
Assigns functions and controls sounds in real time.
- ⓮ [PITCH BEND] wheelPage 39
Bends the pitch of the keyboard played sound up or down.
- ⓯ [MODULATION] wheelPage 39
Applies vibrato effects, etc.
- ⓰ [PHONES] jackPage 15
For connecting a pair of headphones.
- ⓱ LCD and related controlsPage 20
- ⓲ [BAL.] buttonPages 57, 74
Calls up settings for the volume balance among the parts.

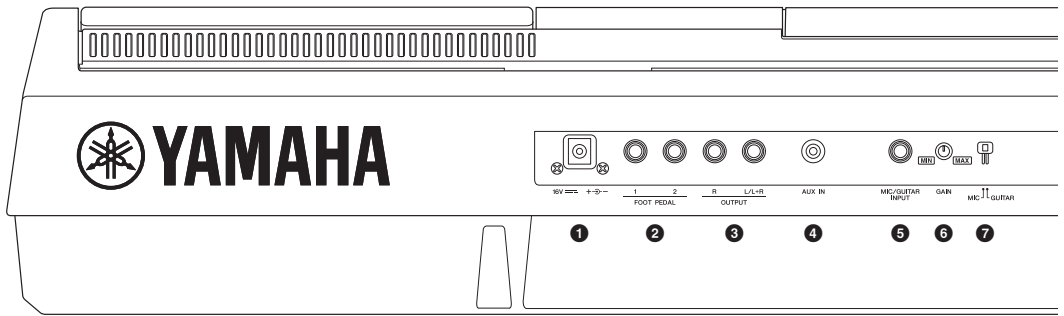


- 19 [MIXER/EQ] button**Page 95
Calls up various settings for the keyboard, Style and Song parts.
- 20 [CHANNEL ON/OFF] button**.....Pages 56, 65
Calls up settings for turning Style/Song channels on or off.
- 21 [FUNCTION] button**Page 104
Lets you make advanced settings and create your original Styles, Songs and Multi Pads.
- 22 VOICE category selection buttons**.....Page 36
Selects a Voice category.
- 23 [USB AUDIO PLAYER] button**.....Page 71
Calls up the display for playing back audio files and recording your performance in audio format.
- 24 [USB] button**Page 101
Calls up the display for selecting a file in the USB flash drive.
- 25 VOICE EFFECT buttons**Page 42
Applies various effects to the keyboard performance.
- 26 [MUSIC FINDER] button**.....Page 80
Calls up ideal panel setups for your performance.
- 27 PART SELECT buttons**Page 36
Selects a keyboard part.
- 28 PART ON/OFF buttons**.....Page 35
Turns the keyboard part on or off.
- 29 REGISTRATION MEMORY buttons**Page 85
Registers and recalls panel setups.
- 30 MULTI PAD CONTROL buttons**Page 76
Selects and plays a rhythmic or melodic Multi Pad phrase.
- 31 ONE TOUCH SETTING buttons**.....Page 53
Calls up the appropriate panel settings for the Style.
- 32 UPPER OCTAVE buttons**Page 38
Shifts the pitch of the keyboard in octave steps.

Panel Setup (Panel Settings)

By using the controls on the panel, you can make various settings as described here. These settings of the instrument are together referred to as "panel setup" or "panel settings" in this manual.

■ Rear Panel

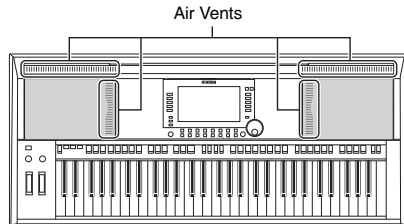


- 1 DC IN jack**Page 16
For connecting the power adaptor.
- 2 FOOT PEDAL [1]/[2] jacks**.....Page 97
For connecting Footswitches and/or Foot controllers.
- 3 OUTPUT [L/L+R]/[R] jacks**Page 98
For connecting external audio devices.
- 4 [AUX IN] jack**.....Page 98
For connecting an external audio device, such as a portable audio player.
- 5 [MIC/GUITAR INPUT] jack**.....Page 88
For connecting a microphone or guitar.
- 6 [GAIN] knob**Page 88
For adjusting the input level of the [MIC/GUITAR INPUT] jack.
- 7 [MIC GUITAR] switch**Page 88
For switching between “MIC” and “GUITAR” for proper use of the [MIC/GUITAR INPUT] jack.

Air Vents

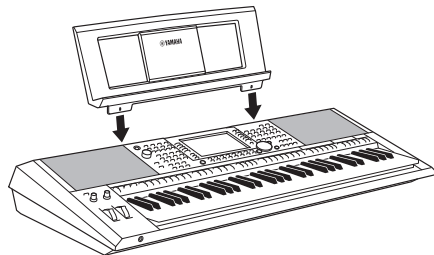
NOTICE

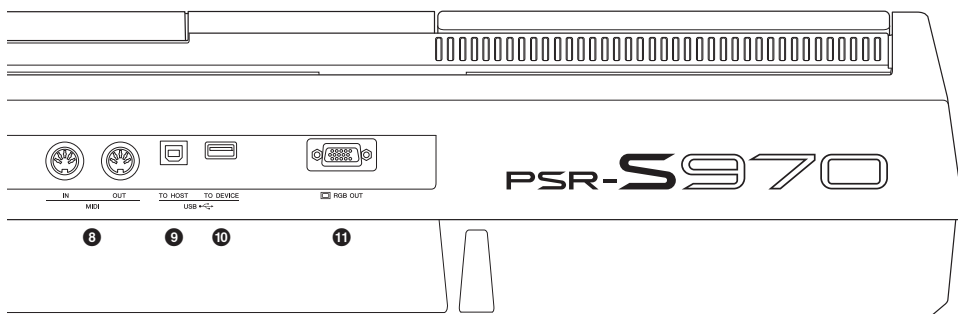
This instrument has special air vents in the top panel and rear panel. Do not place objects where they might block the air vent, since this may prevent adequate ventilation of the internal components, and possibly result in the instrument overheating.



Attaching the Music Rest

Insert the music rest into the slots as shown.

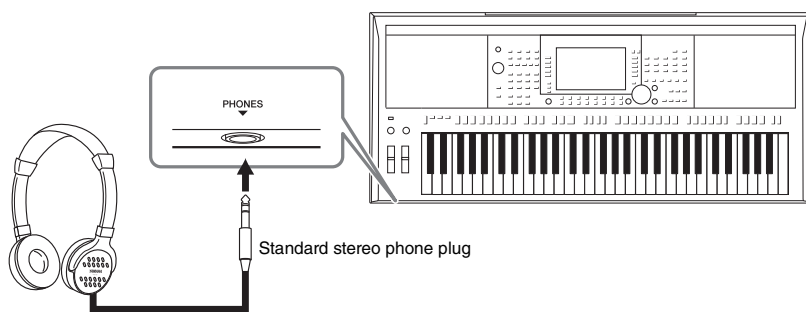




- ⑧ **MIDI [IN]/[OUT] terminals**.....Page 103
For connecting external MIDI devices.
- ⑨ **[USB TO HOST] terminal**.....Page 102
For connecting to a computer.
- ⑩ **[USB TO DEVICE] terminal**Page 100
For connecting a USB device such as a USB flash drive.
- ⑪ **[RGB OUT] terminal (PSR-S970)**Page 99
For connecting to an external monitor.

Using the Headphones

Connect a pair of headphones to the [PHONES] jack.



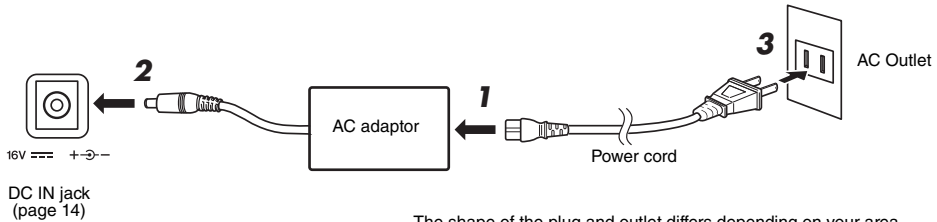
CAUTION

Do not listen with the headphones at high volume for long periods of time. Doing so may cause hearing loss.

Setting Up

Power Requirements

Connect the AC adaptor in the order shown in the illustration.



WARNING

Use the specified AC adaptor (page 111) only. Using the wrong AC adaptor can result in damage to the instrument or overheating.

CAUTION

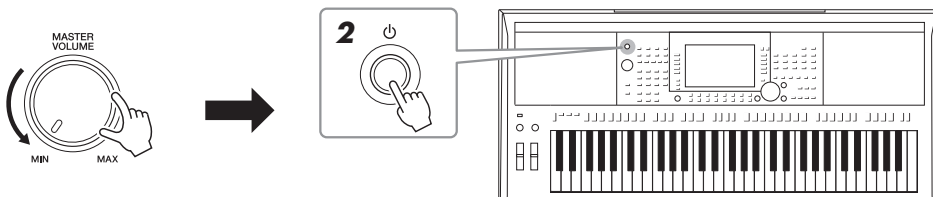
When setting up the product, make sure that the AC outlet you are using is easily accessible. If some trouble or malfunction occurs, immediately turn the power off and disconnect the plug from the outlet.

NOTE

Follow the order shown above in reverse when disconnecting the AC adaptor.

Turning the Power On/Off

- 1 Turn down the [MASTER VOLUME] dial to “MIN”:



- 2 Press the [⏻] (Standby/On) switch to turn on the power.
After the Main display appears, adjust the volume as desired while playing the keyboard.
- 3 After you finish using the instrument, turn off the power by pressing and holding the [⏻] (Standby/On) switch for about a second.

NOTE

Do not press the foot pedal or move the [PITCH BEND] wheel, etc. when turning the power on. Doing so may cause the instrument to malfunction.

NOTE

Until the Main display appears, no operations can be carried out, including power-off and keyboard performance.

CAUTION

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.

NOTICE

While recording or editing, or while a message is displayed, the power cannot be turned off even if you press the [⏻] (Standby/On) switch. If you want to turn off the power, press the [⏻] (Standby/On) switch after recording, editing, or after the message has disappeared. If you need to force-quit the instrument, hold down the [⏻] (Standby/On) switch for longer than three seconds. Note that the force-quit operation might cause data loss and damage to the instrument.

Setting the Auto Power Off function

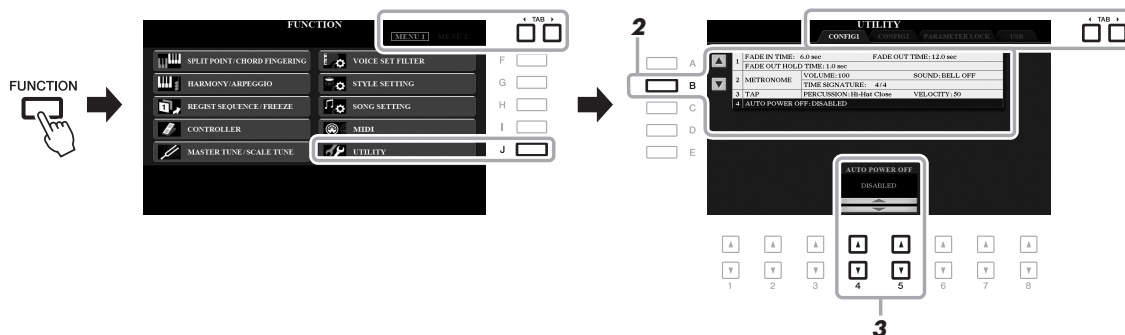
To prevent unnecessary power consumption, this instrument features an Auto Power Off function that automatically turns the power off if the instrument is not operated for a specified period of time. The amount of time that elapses before the power is automatically turned off is approximately 30 minutes by default; however, you can change the setting.

NOTICE

Any data which has not been saved to the USER or USB drive will be lost if the power automatically turns off. Make sure to save your data before the power turns off (page 28).

1 Call up the operation display.

[FUNCTION] → TAB [◀] MENU 1 → [J] UTILITY → TAB [◀] CONFIG 1



2 Press the [B] button several times to select “4 AUTO POWER OFF.”

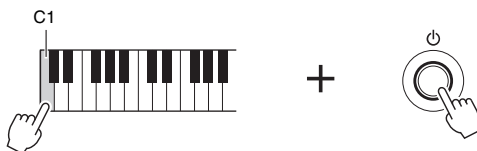
3 Use the [4 ▲▼]/[5 ▲▼] buttons to set the value.

If you do not want to turn the power off automatically (disable the Auto Power Off), select DISABLED.

Press the [EXIT] button several times to exit from the display.

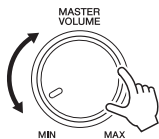
Disabling Auto Power Off (simple method)

Turn the power on while holding down the lowest key on the keyboard. A message appears briefly, then the instrument starts up with the Auto Power Off function disabled.



Adjusting the Master Volume

To adjust the volume of the entire keyboard sound, use the [MASTER VOLUME] dial while playing the keyboard.



CAUTION

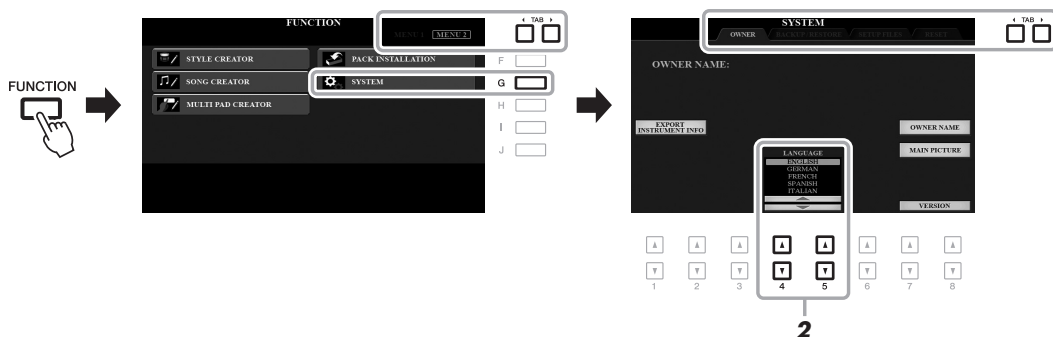
Do not use the instrument at high volume for long periods of time. Doing so may cause hearing loss.

Changing the Display Language

This determines the language (English, German, French, Spanish and Italian are available) used in the display for messages.

1 Call up the operation display.

[FUNCTION] → TAB [▶] MENU 2 → [G] SYSTEM → TAB [◀] OWNER



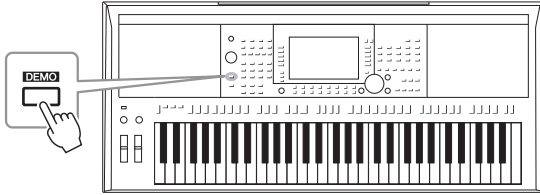
2 Use the [4 ▲▼]/[5 ▲▼] buttons to select the desired language.

Press the [EXIT] button several times to exit from the display.

Playing the Demos

The Demos provide helpful, easy-to-understand introductions to the features and functions as well as dynamic demonstrations of the high-quality sounds.

- 1 Press the [DEMO] button to call up the Demo display.**



- 2 Press one of the [A] – [E] buttons to show a specific Demo.**

Pressing one of the [F] – [J] buttons plays back the overview Demo continuously, calling up the various displays in sequence.

Sub menus may be shown on the display. Press one of the [A] – [J] buttons corresponding to the desired sub menu.

- 3 Press the [EXIT] button several times to exit from the Demo display.**

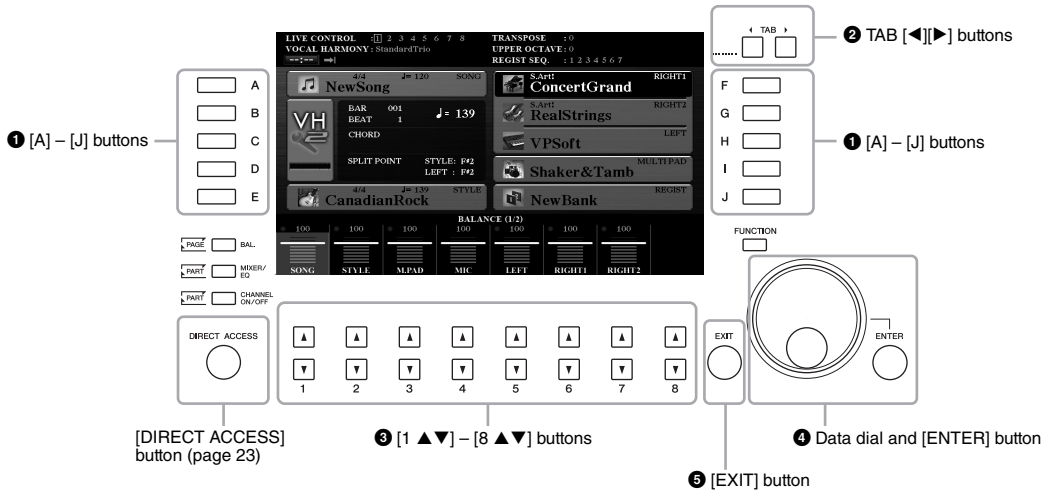
NOTE

To return to the higher level menu, press the [EXIT] button.

Basic Operations

Display-based Controls

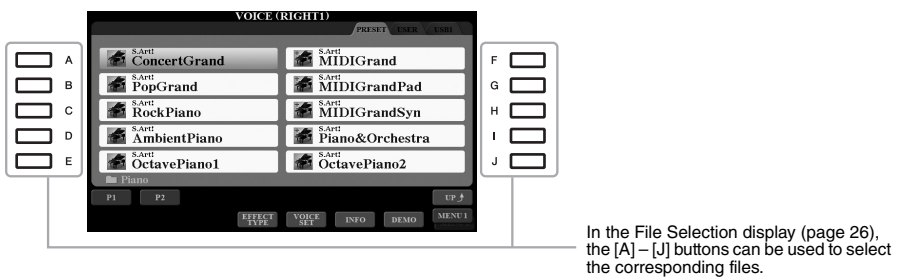
The LCD provides comprehensive at-a-glance information on all current settings. The displayed menu can be selected or changed by the controls around the LCD.



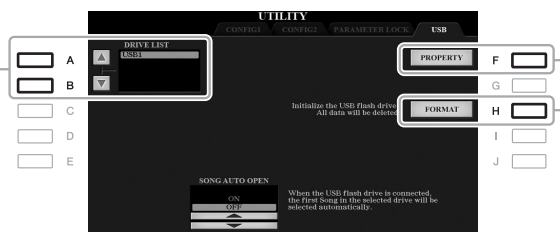
1 [A] - [J] buttons

The [A] - [J] buttons are used to select the corresponding menu items shown next to them.

• Example 1



• Example 2



The [A] and [B] buttons are used to move the cursor up or down.

The [F] and [H] buttons are used to select the corresponding parameter.

2 TAB [◀][▶] buttons

These buttons are used to change the pages of displays that have “tabs” at the top.



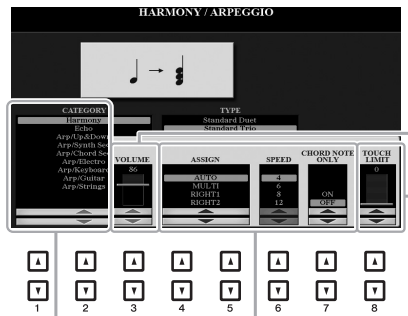
3 [1 ▲▼] – [8 ▲▼] buttons

The [1 ▲▼] – [8 ▲▼] buttons are used to make selections or adjust settings (up or down correspondingly) for functions shown directly above them.



For menus that appear in this section of the display, use the [1 ▲] – [8 ▲] buttons.

For menus that appear in this section of the display, use the [1 ▼] – [8 ▼] buttons.



For list menus that appear, use the [1 ▲▼] – [8 ▲▼] buttons to select the desired item.

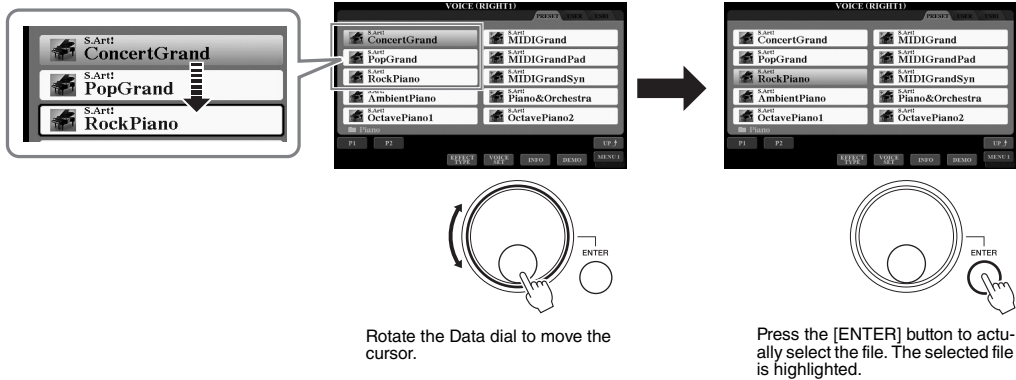
For parameters that appear in slider (or knob) form, use the [1 ▲▼] – [8 ▲▼] buttons to adjust the value.
To reset the desired parameter value to its default, simultaneously press both the [▲] and [▼] buttons below it.

4 Data dial and [ENTER] button

Depending on the selected display, the Data dial can be used in the following two ways.

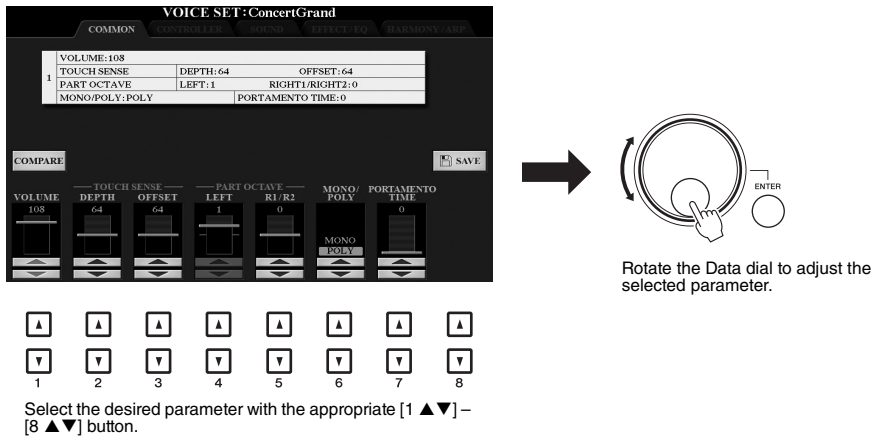
• Selecting files (Voice, Style, Song, and so on)

When one of the File Selection displays (page 26) is shown, you can use the Data dial and the [ENTER] button to select a file.



• Adjusting parameter values

You can conveniently use the Data dial in tandem with the [1 ▲▼] – [8 ▲▼] buttons to adjust parameters indicated in the display.



This convenient technique also works well with pop-up parameters such as Tempo and Transpose. Simply press the appropriate button (ex., TEMPO [+]), then rotate the Data dial to set the value.

5 [EXIT] button

Pressing the [EXIT] button returns to the previously indicated display. Pressing the [EXIT] button several times returns to the default Main display (page 24).



Calling Up the Desired Display Instantly — Direct Access

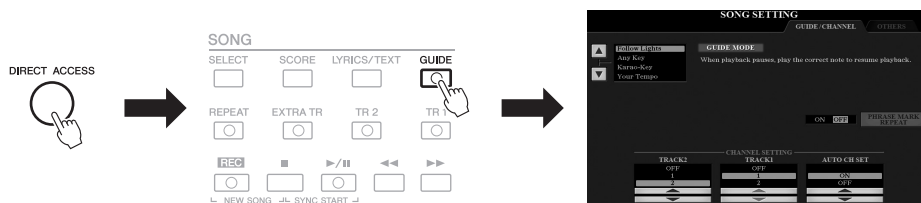
With the convenient Direct Access function, you can instantly call up the desired display — with just a single additional button press. Refer to the “Direct Access Chart” on page 106 for a list of the displays that can be called up with the Direct Access function.

1 Press the [DIRECT ACCESS] button.

A message appears in the display prompting you to press the appropriate button.

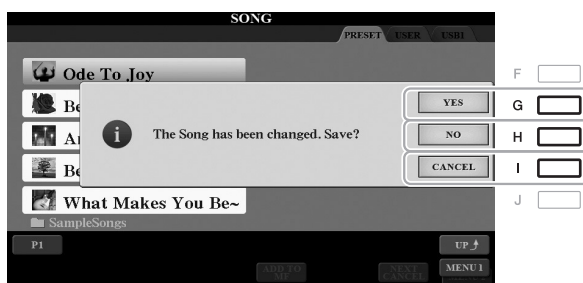
2 Press the button (or move the knob, wheel or connected pedal) corresponding to the desired setting display to instantly call up that display.

For example, pressing the [GUIDE] button calls up the display in which the Guide mode can be set.



Messages Shown in the Display

A message (information or confirmation dialog) sometimes appears on the screen to facilitate operation. When the message appears, simply press the appropriate button.

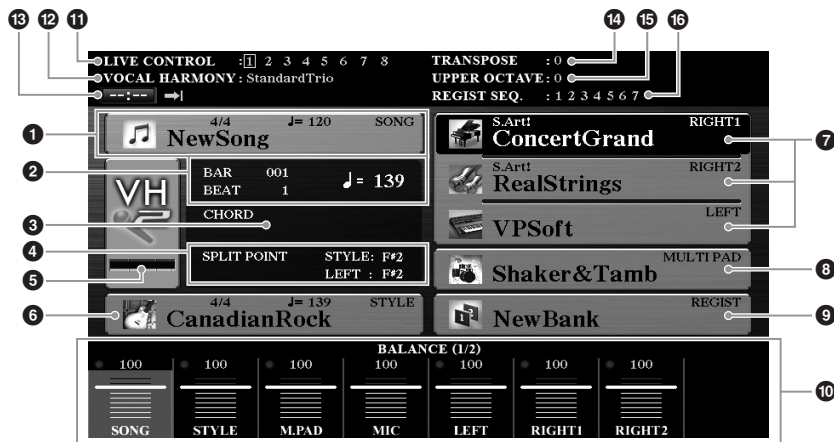


Main Display Configuration

The display that appears when the power is turned on is the Main display. This display shows the current basic settings such as the currently selected Voice and Style, allowing you to see them at a single glance. The Main display is the one you'll usually see when you play the keyboard.

NOTE

You can quickly call up the Main display by pressing the [DIRECT ACCESS] button, followed by the [EXIT] button.



1 Song name and related information

Displays the currently selected Song name, time signature and tempo. Pressing the [A] button calls up the Song Selection display (page 62).

2 BAR/BEAT/Tempo

Displays the current position (bar/beat/tempo) in Style playback or Song playback.

3 Current chord name

When the [ACMP] button is set to on, the chord specified in the chord section of the keyboard will be displayed. When the Song containing the chord data is played, the current chord name will be displayed.

4 Split Point

Displays the Split Point positions (page 58).

5 MIC/Guitar input level indicator (PSR-S970)

When a microphone/guitar is connected, this indicates the input level. Adjust the level with the [GAIN] knob on the rear panel so that the indicator lights in green or yellow (but not in red). For details on connecting a microphone/guitar, refer to page 88. Pressing the [B]/[C]/[D] buttons calls up the Vocal Harmony Type Selection display.

6 Style name and related information

Displays the currently selected Style name, time signature and tempo. Pressing the [E] button calls up the Style Selection display (page 48).

7 Voice name

Displays the Voice names currently selected for RIGHT 1, RIGHT 2 and LEFT parts (page 35). Use the [F], [G] and [H] buttons to call up the Voice Selection display for the corresponding part: Press the button once to highlight the part's Voice, then once more to call up the Voice Selection display.

8 Multi Pad Bank name

Displays the names of the selected Multi Pad Bank. Pressing the [I] button calls up the Multi Pad Bank Selection display (page 76).

9 Registration Memory Bank name

Displays the currently selected Registration Memory Bank name and Registration Memory number. Pressing the [J] button calls up the Registration Memory Bank Selection display (page 86).

10 Volume Balance or Channel On/Off settings

Displays the volume balance (page 57) or channel on/off settings (pages 56, 65) among the parts. Use the [1 ▲▼] – [8 ▲▼] buttons to change the settings.

NOTE

Press the [BAL.] button to call up the Volume Balance displays, and press the [CHANNEL ON/OFF] button to call up the CHANNEL ON/OFF displays.

11 LIVE CONTROL knob information

Indicates the currently selected number of the eight available LIVE CONTROL knob assignments (page 40).

12 Vocal Harmony type (PSR-S970)

Displays the currently selected Vocal Harmony type (page 91).

13 USB Audio Player/Recorder information

Displays information for the selected audio file in the connected USB flash drive (page 71), including the elapsed playback time, file name and Repeat mode icon. When the audio recording is in standby, a “WAITING” indication appears. While recording, “RECORDING” appears.

14 Transpose

Displays the amount of transposition in semitone units (page 38).

15 Upper Octave

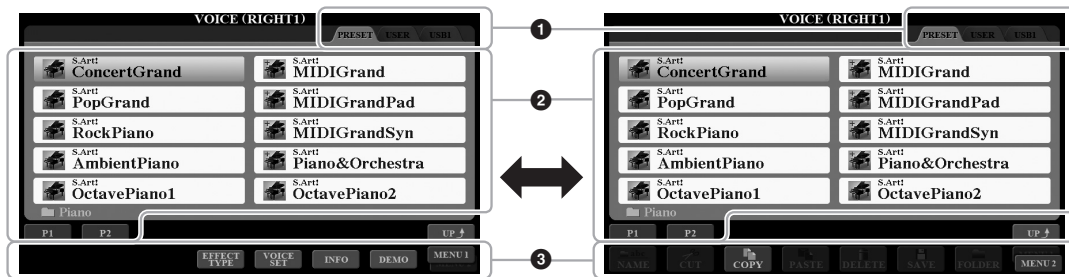
Displays the amount that the octave value is shifted (page 38).

16 Registration Sequence

Appears when the Registration Sequence is active. For instructions on programming the sequence, refer to the Reference Manual on the website, Chapter 7.

File Selection Display Configuration

The File Selection display is for selecting Voice, Styles, and other data. The File Selection display appears when you press one of the VOICE or STYLE category selection buttons, the SONG [SELECT] button, etc.



1 Location (drive) of data

- **PRESET**Location where pre-programmed (preset) data is stored.
- **USER**Location where recorded or edited data is saved. Installed Expansion Voices or Styles are also saved here in the Expansion folder.
- **USB**Location where data on USB flash drive is saved. This appears only when a USB flash drive is connected to the [USB TO DEVICE] terminal.

NOTE

Before using a USB flash drive, be sure to read "Connecting USB Devices" on page 100.

NOTE

By pressing the [USB] button, you can also access Voices, Styles, and other data files which are saved in the USB flash drive (page 101).

2 Selectable data (files)

The files that can be selected on this display are shown. If more than 10 files exist, the page numbers (P1, P2 ...) are shown below the files. Pressing the corresponding button changes the display page. When other pages follow, the "Next" button appears, and for the previous page, the "Prev." button appears.

NOTE

The data, both pre-programmed and your own original, are saved as "files."

3 MENU 1/MENU 2

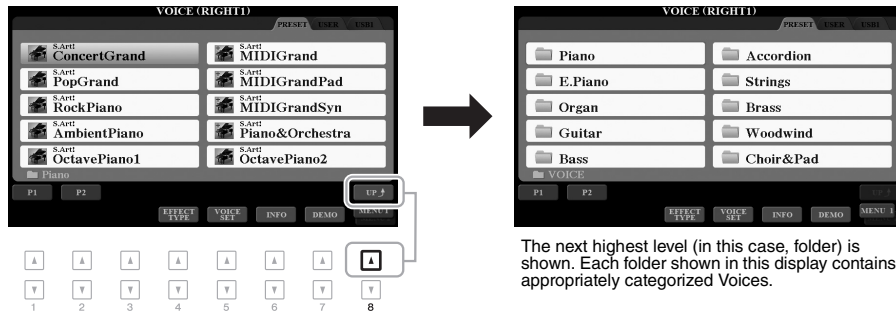
At the bottom of the File Selection display, you can toggle the indication between MENU 1 and MENU 2 by pressing the [8 ▼] button. Selecting MENU 1 shows the function names related to the current file (Voice, Style, Song, etc.) while selecting MENU 2 shows the function names of the file/folder management (page 27).

Calling up the higher level folder

When the files of a folder are displayed, “UP” is shown above the [8 ▲] button. Pressing this button calls up the next higher level folder.

Example of the PRESET Voice Selection display

The PRESET Voices are categorized and contained in appropriate folders.



This display shows the Voices in a folder.

The next highest level (in this case, folder) is shown. Each folder shown in this display contains appropriately categorized Voices.

File Management

You can save, name, copy, move, delete files, and you can create folders to manage the files with the buttons located lower area in the File Selection display. For information on the File Selection display, refer to page 26.

NOTE

Before using a USB flash drive, be sure to read “Connecting USB Devices” on page 100.

Restrictions for protected Songs

Preset Songs and most commercially available songs are copy protected to prevent illegal copying or accidental erasure. They are marked by the indications at the upper left side of the file names. The indications and relevant restrictions are detailed below.

- **Prot. 1:** Indicates Preset Songs copied to the USER drive. These only can be copied/moved/deleted in the USER drive.
- **Prot. 2 Orig:** Indicates Yamaha-protection-formatted Songs. These cannot be copied. These can be moved/saved only to the USER drive and USB flash drives with ID.
- **Prot. 2 Edit:** Indicates edited “Prot.2 Orig” Song. These cannot be copied. These can be moved/saved only to the USER drive and USB flash drives with ID.

NOTE

- Make sure that the “Prot.2 Orig” Song and the corresponding “Prot.2 Edit” Song reside in the same folder. Otherwise, the “Prot.2 Edit” Song cannot be played back. If you move this type of Song, make sure to move both the “Prot.2 Orig” and “Prot.2 Edit” Songs to the same folder.
- Do not change the “Prot.2.Orig” Song name and icon on the display. Otherwise, the corresponding “Prot.2 Edit” Song cannot be played back.

Saving a File

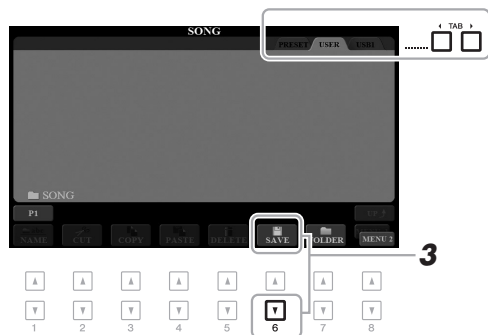
You can save your original data (such as Songs you've recorded) as a file to the USER or the USB drive in the File Selection display (page 26).

- 1 In the File Selection display, select the appropriate tab (USER or USB) to which you want to save the data by using the TAB [◀][▶] buttons.**

If you want to save the data within an existing folder, select the folder here.

NOTE

Files cannot be saved to the PRESET tab or the "Expansion" folder (page 46) in the USER tab.



- 2 Make sure that MENU 2 is shown at the bottom right corner of the display.**

If necessary, press the [8 ▼] button to call up MENU 2.

- 3 Press the [6 ▼] (SAVE) button.**

The Character Entry window is called up.



- 4 Enter the file name (page 32).**

Even if you skip this step, you can rename the file at any time after saving it (page 30).

- 5 Press the [8 ▲] (OK) button to actually save the file.**

The saved file will be automatically located at the appropriate position among the files in alphabetical order.

NOTE

To cancel the Save operation, press the [8 ▼] (CANCEL) button before step 5 below.

NOTE

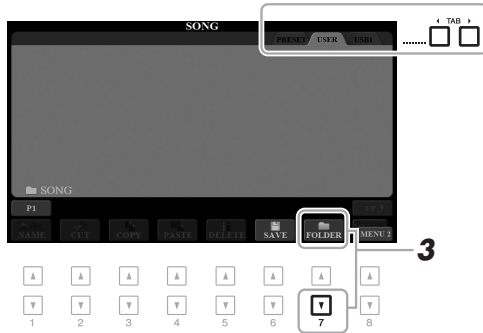
In the USER tab, the maximum total number of files which can be stored differs depending on the file size and the length of the file names.

Creating a New Folder

You can create folders to make it easier to find your original data.

1 In the File Selection display, select the appropriate tab (USER or USB) to which you want to create a new folder by using the TAB [◀][▶] buttons.

If you want to create a new folder within an existing folder, also select the folder here.



2 Make sure that MENU 2 is shown at the bottom right corner of the display.

If necessary, press the [8 ▼] button to call up MENU 2.

3 Press the [7 ▼] (FOLDER) button.

The Character Entry window is called up.



4 Enter the name of the new folder (page 32).

The created folder will be automatically located at the appropriate position among the folders in alphabetical order.

NOTE

A new folder cannot be made in the PRESET tab or the "Expansion" folder (page 46) in the USER tab.

NOTE

The maximum number of files/folders which can be saved in a folder is 500.

NOTE

In the USER tab, no more than three folder levels can be created. The maximum total number of files/folders which can be saved differs depending on the file size and the length of the file/folder names.

NOTE

To cancel creating a new folder, press the [8 ▼] (CANCEL) button.

NOTICE

Do not use "Expansion" for the folder name. Otherwise, all data contained in the "Expansion" folder will be lost when an Expansion Pack (page 46) is installed.

Renaming a File/Folder

You can rename files/folders.

- 1 In the File Selection display, select the appropriate tab (USER or USB) which contains the file/folder you want to rename by using the TAB [◀][▶] buttons.**

NOTE

Files and folders in the PRESET tab or the "Expansion" folder (page 46) in the USER tab cannot be renamed.

- 2 Make sure that MENU 2 is shown at the bottom right corner of the display.**

If necessary, press the [8 ▼] button to call up MENU 2.

- 3 Press the [1 ▼] (NAME) button.**

The window for the Rename operation appears at the bottom of the display.



- 4 Press one of the [A] – [J] buttons corresponding to the desired file/folder.**

- 5 Press the [7 ▼] (OK) button to confirm the file/folder selection.**

The Character Entry window is called up.

- 6 Enter the name of the selected file or folder (page 32).**

The renamed file/folder appears on the display at the appropriate position among the files in alphabetical order.

NOTE

To cancel the Rename operation, press the [8 ▼] (CANCEL) button.

NOTICE

Do not use "Expansion" for the folder name. Otherwise, all data contained in the "Expansion" folder will be lost when an Expansion Pack (page 46) is installed.

Copying or Moving Files

You can copy or cut files and paste them to another location (folder). You can also copy folders (but not move them) by using the same procedure.

- 1 In the File Selection display, select the appropriate tab (PRESET, USER or USB) which contains the file/folder you want to copy by using the TAB [◀][▶] buttons.**

- 2 Make sure that MENU 2 is shown at the bottom right corner of the display.**

If necessary, press the [8 ▼] button to call up MENU 2.

NOTE

- Files in the PRESET tab cannot be moved. They can only be copied.
- Files in the "Expansion" folder (page 46) in the USER tab cannot be copied/moved.
- Commercially available song data may be copy protected to prevent illegal copying.

3 Press the [3 ▼] (COPY) button to copy or [2 ▼] (CUT) to move.

The window for the Copy/Cut operation appears at the bottom of the display.



4 Press one of the [A] – [J] buttons corresponding to the desired file/folder.

Pressing a button selects (highlights) the file/folder. To cancel the selection, press the same [A] – [J] button again.

Press the [6 ▼] (ALL) button to select all files/folders indicated on the current display including the other pages. To cancel the selection, press the [6 ▼] (ALL OFF) button again.

NOTE

To cancel the Copy operation, press the [8 ▼] (CANCEL) button.

5 Press the [7 ▼] (OK) button to confirm the file/folder selection.

6 Select the destination tab (USER or USB) to paste the file/folder, by using the TAB [◀][▶] buttons.

If necessary, select the destination folder by using the [A] – [J] buttons.

7 Press the [4 ▼] (PASTE) button to paste the file/folder selected in step 4.

The pasted file/folder appears on the display at the appropriate position among the files in alphabetical order.

Deleting Files/Folders

You can delete individual or multiple files/folders.

1 In the File Selection display, select the appropriate tab (USER or USB) which contains the file/folder you want to delete by using the TAB [◀][▶] buttons.

2 Make sure that MENU 2 is shown at the bottom right corner of the display.

If necessary, press the [8 ▼] button to call up MENU 2.

3 Press the [5 ▼] (DELETE) button.

The window for the Delete operation appears at the bottom of the display.



▶ NEXT PAGE

4 Press one of the [A] – [J] buttons corresponding to the desired file/folder.

Pressing a button selects (highlights) the file/folder. To cancel the selection, press the same [A] – [J] button again.

Press the [6 ▼] (ALL) button to select all files/folders indicated on the current display including the other pages. To cancel the selection, press the [6 ▼] (ALL OFF) button again.

5 Press the [7 ▼] (OK) button to confirm the file/folder selection.

6 Follow the on-display instructions.

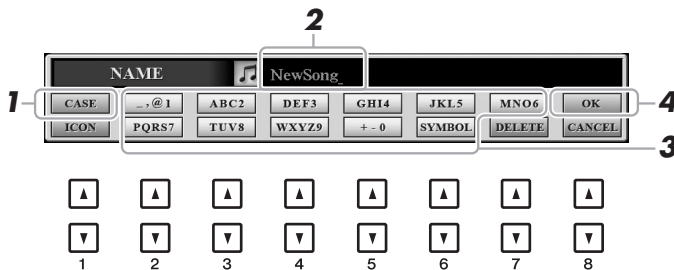
- **YES**Delete the file/folder
- **YES ALL**Delete all selected files/folders
- **NO**Leave the file/folder as is without deleting
- **CANCEL**Cancel the Delete operation

NOTE

To cancel the Delete operation, press the [8 ▼] (CANCEL) button.

Entering Characters

This section covers how to enter characters for naming your files/folders, inputting keywords on Music Finder (page 81), etc. Entering characters is done in the display shown below.



1 Change the type of character by pressing the [1 ▲] button.

- **CASE**Capital letters, numbers, marks
- **case**Lowercase letters, numbers, marks

2 Use the Data dial to move the cursor to the desired position.

3 Press the [2 ▲▼] – [6 ▲▼] and [7 ▲] buttons, corresponding to the character you wish to enter.

Several different characters are assigned to each button, and the characters change each time you press the button.

To actually enter the selected character, move the cursor or press another character-input button. Alternately, you can wait for a short time and the character will be entered automatically.

For more information on entering characters, refer to “Other character-entry operations” below.

4 Press the [8 ▲] (OK) button to actually enter the new name and return to the previous display.

NOTE

When inputting lyrics in the Song Creator function (see the Reference Manual, Chapter 3), you may also enter Japanese characters (kana and kanji).

NOTE

- The following marks cannot be entered for a file/folder name.
\\ : * ? " < >
- File names can contain up to 41 characters and folder names can contain up to 50 characters.

NOTE

To cancel the character-entering operation, press the [8 ▼] (CANCEL) button.

Other Character-entry Operations

• Deleting characters

Move the cursor to the character you wish to delete by using the Data dial, and press the [7 ▼] (DELETE) button. To delete all characters on the line at once, press and hold the [7 ▼] (DELETE) button.

• Entering marks or spaces

1. Press the [6 ▼] (SYMBOL) button to call up the mark list.
2. Use the Data dial to move the cursor to the desired mark or space, then press the [8 ▲] (OK) button.

• Selecting custom icons for files (shown at left of file name)

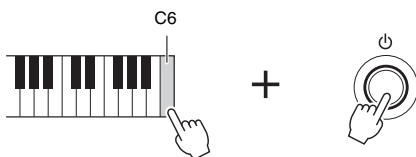
1. Press the [1 ▼] (ICON) button to call up the ICON SELECT display.
2. Select the icon by using the [A] – [J] buttons, [3 ▲▼] – [5 ▲▼] buttons or Data dial. The display includes several pages. Press the TAB [◀][▶] buttons to select different pages.
3. Press the [8 ▲] (OK) button to apply the selected icon.

NOTE

To cancel the operation, press the [8 ▼] (CANCEL) button.

Resetting to the Factory-programmed Settings

While holding the right-most key (C6) on the keyboard, turn the power on. This resets the settings of the entire instrument (referred to as the System Setup parameters) to their factory default settings. Refer to the “Parameter Chart” in the Data List on the website for details about which parameters belong to System Setup.



NOTE

The recorded Songs (page 68), Expansion Packs (page 46), and other files saved to this instrument are not deleted by this operation.

You can also reset specified settings to the factory default value or delete all files and folders in the USER drive. Call up the operation display: [FUNCTION] → TAB [▶] MENU 2 → [G] SYSTEM → TAB [▶] RESET. For details, refer to the Reference Manual on the website, Chapter 11.

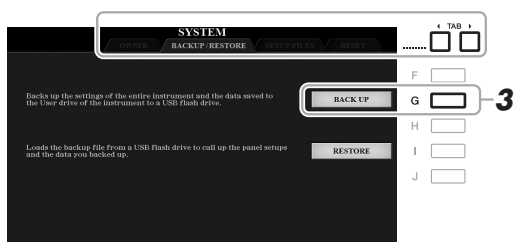
Data Backup

You can back up all data saved in the USER drive (except Protected Songs and Expansion Voices/Styles) and all settings of the instrument to a USB flash drive as a single file.

1 Connect a USB flash drive to the [USB TO DEVICE] terminal for the backup destination.

2 Call up the operation display.

[FUNCTION] → TAB [▶] MENU 2 → [G] SYSTEM → TAB [◀][▶]
BACKUP/RESTORE



3 Press the [G] (BACK UP) button to save the data to the USB flash drive.

When confirmation messages appear, follow the on-display instructions.

NOTE

Before using a USB flash drive, be sure to read "Connecting USB Devices" on page 100.

NOTE

You can also back up files in the USER drive, such as Voice, Song, Style, Multi Pad and Registration Memory, by copying them individually to a USB flash drive as desired. For instructions, refer to page 30.

NOTE

You can also back up System settings, MIDI settings, User Effect settings, and Music Finder Records individually as desired. Call up the operation display: [FUNCTION] → TAB [▶] MENU 2 → [G] SYSTEM → TAB [◀][▶] SETUP FILES. For more information, refer to the Reference Manual on the website, Chapter 11.

NOTE

Completing the backup/restore operation may take a few minutes.

Restoring the Backup File

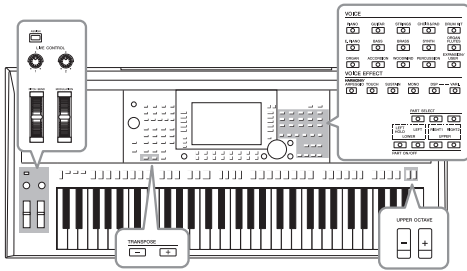
To do this, press the [I] (RESTORE) button in the BACKUP/RESTORE page (see above). When confirmation messages appear, follow the on-display instructions. When the operation is completed, the instrument will be restarted automatically.

NOTICE

Move the Protected Songs (saved to the USER drive) to a USB flash drive before restoring. If the Songs are not moved, the operation deletes the data.

Voices

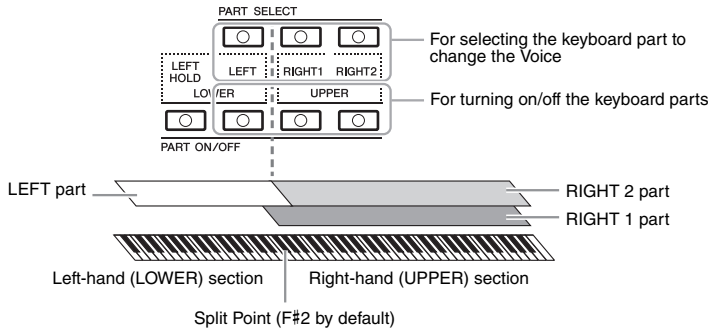
– Playing the keyboard –



The instrument features a wide variety of exceptionally realistic instrumental Voices, including piano, guitar, strings, brass, wind instruments and more.

Playing Voices

The Voices can be played via three keyboard parts: LEFT, RIGHT 1 and 2. You can combine these parts by using the PART ON/OFF buttons to create luscious instrument textures and convenient performance combinations.



NOTE

For a list of preset Voices of this instrument, refer to the "Voice List" in the Data List on the website.

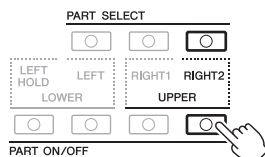
- **To play one single Voice on the entire keyboard:**
Turn on the RIGHT 1 or 2 part.
- **To play two different Voices in layer on the entire keyboard (Layer):**
Turn on the RIGHT 1 and 2 parts.
- **To play different Voices in the right- and left-hand sections of the keyboard (Split):**
Turn on the LEFT and RIGHT (1 and/or 2) parts. The F#2 and lower keys are used for the LEFT part while the upper keys (excluding F#2) are used for the RIGHT 1 and 2 parts. The key which divides the keyboard into the left-hand and right-hand sections is referred to as the "Split Point."

NOTE

The Split Point can be changed (page 58).

1 Turn on the PART ON/OFF button corresponding to the part you want to use.

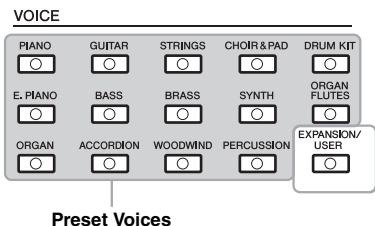
The corresponding PART SELECT button is automatically turned on.



NOTE

You can save the Voice selection and on/off setting for each part to Registration Memory (page 85).

- 2 Make sure that the **PART SELECT** button corresponding to the part you want to select the Voice is turned on.
- 3 Press one of the **VOICE** category selection buttons to select a Voice category and call up the Voice Selection display.



- **Expansion Voices**
Voices additionally installed (page 46).
- **User Voices**
Voices created with the Voice Set function (refer to the Reference Manual on the website), or Voices copied to the USER drive (page 30).

NOTE

By pressing the [8 ▲] (UP) button in the Voice Selection display, you can call up the Voice categories (folders), including "GM&XG" and "GM2," which do not have any VOICE category selection buttons.

The preset Voices are categorized and contained in appropriate folders. Voice category selection buttons correspond to the categories of the preset Voices. For example, press the [STRINGS] button to display various strings Voices.

NOTE

If you pressed the [ORGAN FLUTES] button in step 3, press the [1] (PRESETS) button before proceeding to step 4.

- 4 Press one of the [A] – [J] buttons to select the desired Voice.

You can call up the other pages by pressing the buttons that correspond to the page numbers (P1, P2 ...) or by pressing the same VOICE category selection button several times.

NOTE

The Voice characteristics are indicated above the Preset Voice name. For details on the characteristics, see page 37.



NOTE

You can call up the information for the selected Voice by pressing the [6 ▼] (INFO) button. (Some Voices do not have an information window.)

To listen to the demo phrases for each Voice

Press the [7 ▼] (DEMO) button to start the Demo for the selected Voice. To stop the demo, press the [7 ▼] button again.

NOTE

Make sure that MENU 1 is shown at the bottom right corner of the display (page 26).

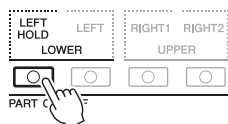
- 5 If necessary, repeat steps 1 – 4 above to select the Voice for the other part.
- 6 Play the keyboard.



Holding the LEFT part Voice (Left Hold)

By turning on the PART ON/OFF [LEFT HOLD] button when the LEFT part is ON, the LEFT part Voice is held even when the keys are released. Non-decaying Voices such as strings are held continuously, while decay-type Voices such as piano decay more slowly (as if the sustain pedal has been pressed).

This function is convenient when used along with Style playback since the sound of the chord matching Style playback is maintained. To stop the LEFT part Voice which is sounding, stop Style or Song playback, or turn the [LEFT HOLD] button off.



Using the Metronome

You can start or stop the metronome by pressing the [METRONOME] button. The metronome tempo can be adjusted by the same procedure as with Style tempo (page 51).



NOTE

You can also change the time signature, volume and sound of the metronome: [FUNCTION] → TAB [◀] MENU 1 → [J] UTILITY → TAB [◀] CONFIG 1 → [A]/[B] 2 METRONOME

Voice Characteristics

The Voice characteristics are indicated above the Voice name — S.Art!, MegaVoice, Live!, Cool!, Sweet!, etc.



• S.Art! (Super Articulation) Voices

The word “articulation” in music usually refers to the transition or continuity between notes. This is often reflected in specific performance techniques, such as staccato, legato and slur. You can call up helpful information on how to play these Voices by pressing the [6 ▼] (INFO) button on the Voice Selection display.

• Drums/Live!Drums/SFX/Live!SFX Voices (called up via the [DRUM KIT] button)

These let you play various drums and percussion instruments or SFX (sound effects) sounds on the keyboard, collected together in what are called Drum/SFX kits. For details, see the “Drum/SFX Kit List” of the Data List on the website.

• Organ Flutes Voices (called up via the [ORGAN FLUTES] button)

These let you recreate all of the classic organ sounds by adjusting the flute footage levels and the percussive sounds, just like on conventional organs. For details, refer to page 45.

For information about other Voice types, refer to the Reference Manual on the website.

NOTE

- S.Art! Voices are only compatible with other models which have those types of Voices installed. Any Song or Style data you’ve created on the instrument using these Voices will not sound properly when played back on other instruments.
- S.Art! Voices sound differently depending on the keyboard range, velocity, touch, etc. Hence, if you turn on HARMONY/ARPEGGIO (page 42), change the transpose setting (page 38) or change the Voice Set parameters (page 47), unexpected or undesired sounds may result.

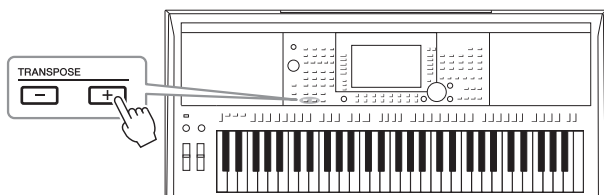
Changing the Pitch of the Keyboard

Adjusting the Pitch in Semitones (Transpose)

The TRANSPOSE [-]/[+] buttons transpose the overall pitch of the instrument (the keyboard sound, Style playback, Song playback, and so on) between -12 and 12 in semitone steps. To instantly reset the transpose value to 0, press the [+] and [-] buttons simultaneously.

NOTE

The Transpose functions do not affect the Drum Kit or SFX Kit Voices.

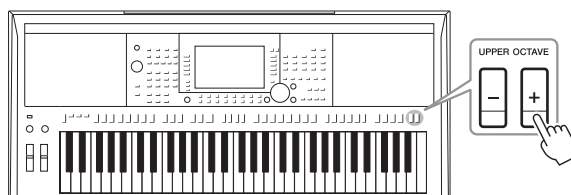


Transposing the pitch in the MIXING CONSOLE display

You can also make detailed pitch settings (transpose, octave and tune) in the MIXING CONSOLE display called up via [MIXER/EQ] → TAB [◀][▶] TUNE.

Adjusting the Pitch in Octaves

The UPPER OCTAVE [-]/[+] buttons allow you to shift the pitch of the RIGHT 1 and 2 parts up or down by one octave.



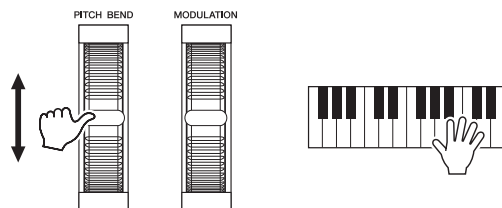
Fine tuning the Pitch

By default, the pitch of the entire instrument is set to 440.0 Hz according to equal temperament. This basic tuning can be changed in the display called up via [FUNCTION] → TAB [◀] MENU 1 → [E] MASTER TUNE/SCALE TUNE. The pitch can be shifted up or down between 414.8Hz and 466.8Hz in approximately 0.2 Hz increments. For details, refer to the Reference Manual on the website.

Using the Wheels

Using the Pitch Bend Wheel

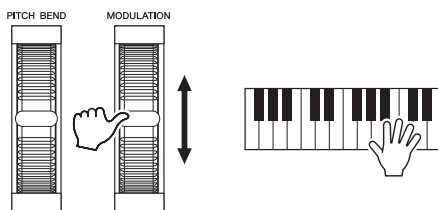
Use the [PITCH BEND] wheel to bend notes up (roll the wheel away from you) or down (roll the wheel toward you) while playing the keyboard. The Pitch Bend is applied to all the keyboard parts (RIGHT 1, 2 and LEFT). The [PITCH BEND] wheel is self-centering and will automatically return to normal pitch when released.



The maximum pitch bend range can be changed on the Mixing Console display: [MIXER/EQ] → TAB [◀][▶] TUNE → [H] PITCH BEND RANGE.

Using the Modulation Wheel

Use the [MODULATION] wheel to apply modulation effects, such as vibrato, to notes played on the keyboard. By default, this is applied to the keyboard parts (RIGHT 1, 2 and LEFT). Moving the [MODULATION] wheel up (away from you) increases the depth of the effect, while moving it down (toward you) decreases it.



You can set whether the effects caused by the [MODULATION] wheel will be applied or not to each keyboard part independently: [FUNCTION] → TAB [◀] MENU 1 → [D] CONTROLLER → TAB [▶] KEYBOARD/PANEL → [A]/[B] 2 MODULATION WHEEL.

NOTE

- The effects produced by using the [PITCH BEND] wheel may not be applied to the LEFT part during Style playback, depending on the Style setting.
- (PSR-S970) The effects produced by using the [PITCH BEND] wheel are not applied to the Vocal Harmony effect.

NOTE

Depending on the selected Voice, the [MODULATION] wheel may control volume, filter or some other parameter instead of vibrato.

NOTE

To avoid accidentally applying modulation, make sure the [MODULATION] wheel is set at minimum (down) position before you start playing.

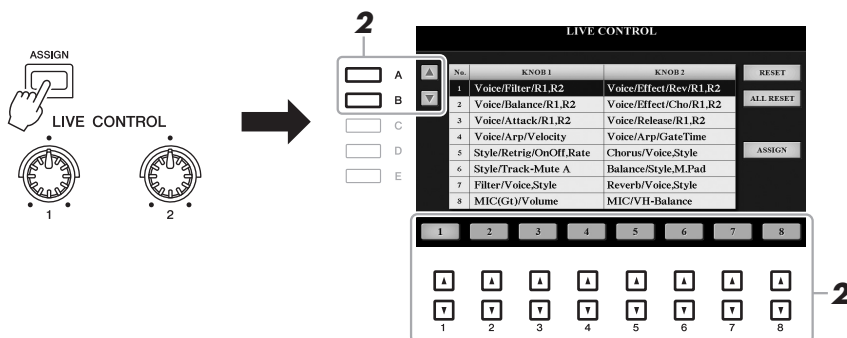
NOTE

The effects produced by using the [MODULATION] wheel may not be applied to the LEFT part during Style playback depending on the Style setting.

Using the LIVE CONTROL Knobs

You can add dynamic variations to your performance intuitively in real time by assigning various functions such as effects to the LIVE CONTROL [1] and [2] knobs.

1 Press the [ASSIGN] button to call up the LIVE CONTROL display.



2 Use the [A]/[B] buttons or the [1 ▲▼] – [8 ▲▼] buttons to select the desired combination of functions.

The selected number is indicated on the Main display (page 24).

NOTE

Pressing the [ASSIGN] button repeatedly or using the Data dial also lets you select a combination of functions.

Preset Functions

	Knob 1	Knob 2
1	Voice/Filter/R1,R2 Adjusts the cutoff frequency of the filter and the resonance for the RIGHT 1 and 2 parts to change the timbre or tone of the sound.	Voice/Effect/Rev/R1,R2 Adjusts the Reverb depth for the RIGHT 1 and 2 parts. Rotating the knob to the right makes it deeper.
2	Voice/Balance/R1,R2 Adjusts the volume balance between the RIGHT 1 and 2 parts. Rotating the knob to the left increases the RIGHT 1 volume, while rotating it to the right increases the RIGHT 2 volume.	Voice/Effect/Cho/R1,R2 Adjusts the Chorus depth for the RIGHT 1 and 2 parts. Rotating the knob to the right makes it deeper.
3	Voice/Attack/R1,R2 Adjusts the length of time until the RIGHT 1 and 2 parts reach their maximum level after the key is played. Rotating the knob to the right increases it.	Voice/Release/R1,R2 Adjusts the length of time until the RIGHT 1 and 2 parts decay to silence after the key is released. Rotating the knob to the right increases it.
4	Voice/Arp/Velocity Adjusts the volume of Arpeggio. Rotating the knob to the right increases it. For instructions on how to use the Arpeggio function, refer to page 44.	Voice/Arp/GateTime Adjusts the length of each note of Arpeggio. Rotating the knob to the right increases it.
5	Style/Retrig/OnOff,Rate Turns on/off and adjusts the length of the Style Retrigger function, which repeats a specific length of the first part of the current Style (page 48). Rotating the knob to the left-most turns the function off; rotating it to the right turns the function on and decreases the length.	Chorus/Voice,Style Adjusts the Chorus depth for all keyboard parts and the Style. Rotating the knob to the right makes it deeper.

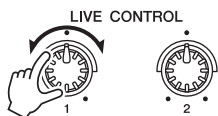
	Knob 1	Knob 2
6	Style/Track-Mute A Turns on/off playback of the Style channels. Rotating the knob to the left-most position turns on only the Rhythm 2 channel, and the other channels are turned off. By rotating the knob clockwise from that position, channels are turned on in the order of Rhythm 1, Bass, Chord 1, Chord 2, Pad, Phrase 1, Phrase 2, and all channels are turned on when the knob reaches to the right-most position. Turning the channels on/off lets you easily change the rhythmic feel. For details on the Style channels, refer to page 56.	Balance/Style,M.Pad Adjusts the volume balance between the Style and Multi Pad (page 76) playback. Rotating the knob to the left increases the Style volume, while rotating it to the right increases the Multi Pad volume.
7	Filter/Voice,Style Adjusts the cutoff frequency of the filter and the resonance for all keyboard parts and the Style to change the timbre or tone of the sound.	Reverb/Voice,Style Adjusts the Reverb depth for all keyboard parts and the Style. Rotating the knob to the right makes it deeper.
8	MIC(Gt)/Volume Adjusts the volume of the microphone or guitar sound input via the [MIC/GUITAR INPUT] jack. Rotating the knob to the right increases it.	(PSR-S970) MIC/VH-Balance Adjusts the volume balance between the sound input from the microphone and the Vocal Harmony effect. Rotating the knob to the left increases the input volume, while rotating it to the right increases the Vocal Harmony volume. For details on how to use the Vocal Harmony function, refer to page 91.
		(PSR-S770) AUX/Volume Controls the input volume from the [AUX IN] jack to adjust the volume balance with the other parts. Rotating the knob to the right increases it.

The eight function combinations can be edited on the PARAMETER ASSIGN display called up by pressing the [I] (ASSIGN) button. For instructions, refer to the Reference Manual on the website.

NOTE

The Style Retrigger function is applied only to the Main section of the Style.

3 Rotate the LIVE CONTROL knobs to control the sound while playing the keyboard or playing back the Style, etc.



NOTE

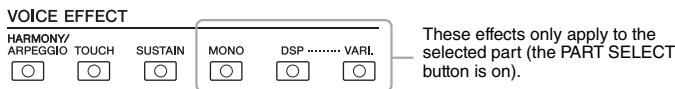
Depending on the panel settings or how you move the knob, you may not notice any change to the parameter value, or the knob may not work properly, even if you rotate it.

NOTE

Pressing the [F] (RESET) button resets the selected function's parameter value to the default, while pressing the [G] (ALL RESET) button resets all parameter values of the assignable functions.

Applying Voice Effects

You can apply various effects to enhance or change the sound of the keyboard parts (LEFT, RIGHT 1 and 2). The effects can be turned on or off by using the following buttons.



• HARMONY/ARPEGGIO

The Harmony or Arpeggio is applied to the right-hand Voices. Refer to “Applying Harmony/Echo to Your Right-hand Melody” (see below) or “Triggering Arpeggios with Your Right Hand” (page 44).

• TOUCH

This button turns the Touch Response of the keyboard on or off. When off, the same volume is produced no matter how strongly or softly you play the keyboard.

• SUSTAIN

When this Sustain function is on, all notes played on the keyboard with right-hand part (RIGHT 1 and 2) have a longer sustain.

• MONO

When this button is on, the part’s Voice is played monophonically (only one note at the time) with last note priority, letting you play single, lead sounds such as brass instruments more realistically. Depending on the Voice, Portamento may be produced when notes are played with legato.

When this button is off, the part’s Voice is played polyphonically.

• DSP/DSP VARI.

With the digital effects built into the instrument, you can add ambience and depth to your music in a variety of ways — such as adding reverb that makes you sound like you are playing in a concert hall.

The [DSP] button is used to turn the DSP (Digital Signal Processor) effect on or off for the currently selected keyboard part.

The [DSP VARI.] button is used to change between variations of the DSP effect. For example, this could be used to change the rotating speed (slow/fast) of the rotary speaker effect while you play.

NOTE

You can change the Touch Response type. For instructions, refer to the Reference Manual on the website.

NOTE

Portamento is a function that creates a smooth transition in pitch from the first note played on the keyboard to the next.

NOTE

The DSP type can be changed. On the Voice Selection display, select [5 ▼] (VOICE SET) → TAB [◀|▶] EFFECT/EQ → [A]/[B] 2 DSP. For details, refer to the Reference Manual on the website.

Applying Harmony/Echo to Your Right-hand Melody

Performance effects such as harmony (duet, trio, etc.), echo, tremolo and trill can be applied to notes played in the right-hand section of the keyboard according to the chord specified in the left-hand section of the keyboard.

1 Turn the [HARMONY/ARPEGGIO] button on.

2 Select the desired Harmony or Echo type.

2-1 Call up the operation display.

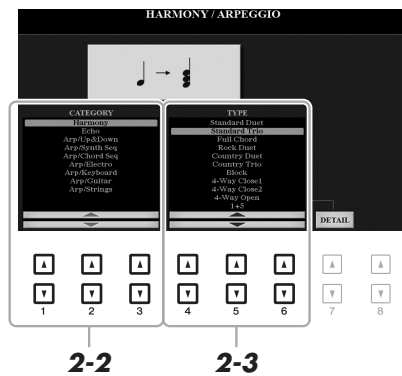
[FUNCTION] → TAB [◀] MENU 1 → [B] HARMONY/ARPEGGIO

2-2 Use the [1 ▲▼] – [3 ▲▼] buttons to select “Harmony” or “Echo.”

NOTE

When you select another Voice, the Harmony/Echo/Arpeggio type is automatically set to the default which is memorized as the Voice Set. For details on the Voice Set function, refer to the Reference Manual on the website.

2-3 Use the [4 ▲▼] – [6 ▲▼] buttons to select the desired type.



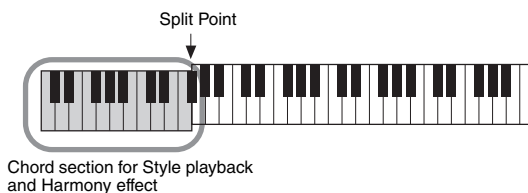
Pressing one of the [7 ▲▼] (DETAIL) buttons calls up the detail setting display. For more information, refer to the Reference Manual on the website.

■ Harmony Category

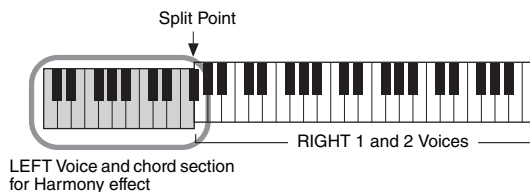
• Standard Duet — Strum

The Harmony effect is applied to the note played in the right-hand section of the keyboard according to the chord specified in the chord or left-hand section shown below.

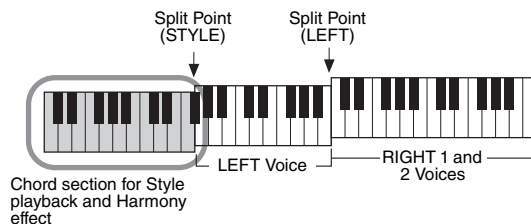
- When the [ACMP] button is on and the LEFT part is off:



- When the [ACMP] button is off and the LEFT part is on:



- When both the [ACMP] button and the LEFT part are on:



• Multi Assign

The Multi Assign effect automatically assigns notes played simultaneously on the right-hand section of the keyboard to separate parts (Voices). Both of the keyboard parts [RIGHT 1] and [RIGHT 2] should be turned on when using the Multi Assign effect. The RIGHT 1 and RIGHT 2 Voices are alternately assigned to the notes in the order you play.

NOTE

For details on the Split Point, refer to page 58.

NOTE

The “+5” and “Octave” settings are not affected by the chord.

■ Echo Category (Echo, Tremolo, Trill)

The Echo, Tremolo or Trill effect is applied to the note played in the right-hand section of the keyboard in time with the currently set tempo, regardless of the [ACMP] and the LEFT part on/off status. Keep in mind that Trill works when you hold down two notes on the keyboard simultaneously (or the last two notes, if more than two notes are held), and it plays those notes alternately.

3 Play the keyboard.

The effect selected in step 2 is applied to the right-hand melody.

To turn off the effect, turn the [HARMONY/ARPEGGIO] button off.

Triggering Arpeggios with Your Right Hand

The Arpeggio function lets you play arpeggios (broken chords) by simply pressing the notes of the chord. For example, you could play the notes C, E and G to trigger interesting phrases. This feature can be used for music production as well as performance.

1 Turn the [HARMONY/ARPEGGIO] button on.

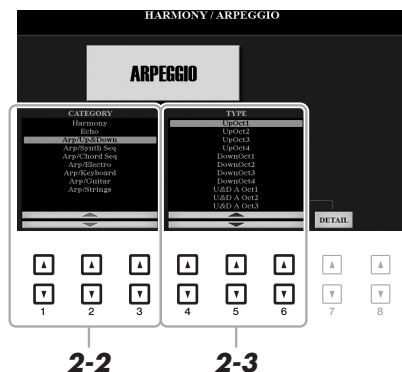
2 Select the desired Arpeggio type.

2-1 Call up the operation display.

[FUNCTION] → TAB [◀] MENU 1 → [B] HARMONY/ARPEGGIO

2-2 Use the [1 ▲▼] – [3 ▲▼] buttons to select a category other than “Harmony” and “Echo.”

2-3 Use the [4 ▲▼] – [6 ▲▼] buttons to select the desired type.



You can set the Arpeggio volume and select the part for playing the Arpeggio in the display called up via the [7 ▲▼] (DETAIL) buttons. For details, refer to the Reference Manual on the website.

3 Play a note or notes to trigger the Arpeggio.

The arpeggiated phrase differs depending on the notes played.

To turn off the effect, turn the [HARMONY/ARPEGGIO] button off.

NOTE

When you select another Voice, the Harmony/Echo/Arpeggio type is automatically set to the default which is memorized as the Voice Set. For details on the Voice Set function, refer to the Reference Manual on the website.

NOTE

By using the Arpeggio Quantize function, Arpeggio playback can be synchronized with Song/Style playback, allowing any slight imperfections in the timing to be corrected. This can be set in the display: [FUNCTION] → TAB [◀] MENU 1 → [J] UTILITY → TAB [◀|▶] CONFIG 2.

NOTE

Arpeggio playback can be continued even after the note has been released, by assigning the Arpeggio Hold function to the footswitch. For instructions, refer to page 97.

NOTE

You can control the Arpeggio volume and the length of each note by using the LIVE CONTROL knobs. For instructions on how to assign the functions to the knobs, refer to page 40.

Creating Your Original Organ Flutes Voices

You can create original Organ Flutes Voices by editing the preset Organ Flutes Voices. Just as on a traditional organ, the original Voices can be created by increasing and decreasing the levels of the flute footages. The created Voices can be saved to internal memory (USER drive) or a USB flash drive for future recall.

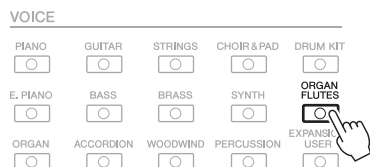
NOTE

The term "footage" is a reference to the sound generation of traditional pipe organs, in which the sound is produced by pipes of different lengths (in feet).

1 Press the [ORGAN FLUTES] button.

The FOOTAGE page of the Voice Set display of the last selected Organ Flutes Voice is called up.

If you want to edit another preset Organ Flutes Voice, press the [I] (PRESETS) button to call up the Organ Flutes Voice Selection display, and select as desired. Then, press the [5 ▼] (VOICE SET) button to return to the Voice Set display.



2 Use the [1 ▲▼] – [8 ▲▼] buttons to adjust the footage settings.

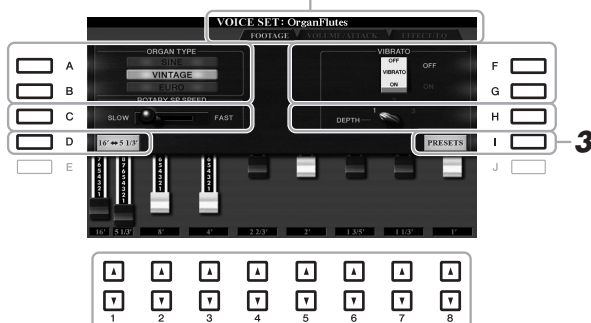
The footage settings determine the basic sound of the Organ Flutes.

The [1 ▲▼] buttons control two footages: 16' and 5 1/3'. Pressing the [D] button switches between these two footages.

For details on the VOLUME/ATTACK Page and EFFECT/EQ Page, see the Reference Manual on the website.

NOTE

Pressing the [D] button while holding down one of the [1 ▲▼] buttons can select both two footages, and lets you set the same value for them by using the Data dial.



If you want, you can select the Organ type and change other settings, such as Rotary Speaker and Vibrato.

[A]/[B]	ORGAN TYPE	Specifies the type of organ tone generation to be simulated. SINE: Produces a clean, clear sound. VINTAGE: Produces a gritty, slightly distorted sound. EURO (PSR-S970 only): Produces the sound of the transistor electronic organ equipped with the electronic tremolo.
[C]	ROTARY SP SPEED	Alternately switches between the slow and fast rotary speaker speeds when a rotary speaker effect is selected for the Organ Flutes (DSP TYPE parameter in the EFFECT/EQ Page), and the VOICE EFFECT [DSP] button is turned on.
[F]/[G]	VIBRATO	Alternately turns the vibrato effect for the Organ Flutes Voice ON or OFF.
[H]	VIBRATO DEPTH	Sets the Vibrato depth to one of three levels: 1 (low), 2 (mid), or 3 (high).

- 3** Press the [I] (PRESETS) button to call up the Organ Flutes Voice Selection display.
- 4** Save your Organ Flutes Voice by following the procedure on page 28.

NOTE

To return to the Voice Set display, press the [5 ▼] (VOICE SET) button.

NOTICE

The settings will be lost if you select another Voice or turn the power to the instrument off without carrying out the Save operation.

Adding New Contents — Expansion Packs

By installing Expansion Packs, you can add a variety of optional Voices and Styles to the “Expansion” folder in the USER drive. The installed Voices and Styles can be selected via the [EXPANSION/USER] button in the VOICE or STYLE category selection buttons, allowing you to expand your music performance and creation possibilities. You can get high quality Expansion Pack data created by Yamaha, or create your own original Expansion Pack data by using the “Yamaha Expansion Manager” software on your computer. For instructions on how to install the Expansion Packs, refer to the Reference Manual on the website.

For more information about Expansion Packs, access the following website:

<http://www.yamaha.com/awk/>

To obtain the Yamaha Expansion Manager software and its manuals, access the following website:

<http://download.yamaha.com/>

Advanced Features

Refer to the Reference Manual on the website, **Chapter 1**.



Selecting GM/XG or other Voices:

Voice Selection display → [8 ▲](UP) → [2 ▲] (P2)

Touch Response and effect-related settings

- Setting the Touch Response of the keyboard:

[FUNCTION] → TAB [◀] MENU 1 → [D] CONTROLLER → TAB [▶] KEYBOARD/PANEL → [A] 1 TOUCH RESPONSE

- Making detailed settings for Harmony/Arpeggio:

[FUNCTION] → TAB [◀] MENU 1 → [B] HARMONY/ARPEGGIO → [7 ▲▼] (DETAIL)

Pitch-related settings

- Fine-tuning the pitch of the entire instrument:

[FUNCTION] → TAB [◀] MENU 1 → [E] MASTER TUNE/SCALE TUNE → TAB [◀] MASTER TUNE

- Scale Tuning:

[FUNCTION] → TAB [◀] MENU 1 → [E] MASTER TUNE/SCALE TUNE → TAB [▶] SCALE TUNE

- Changing the part assignment of the TRANSPOSE buttons:

[FUNCTION] → TAB [◀] MENU 1 → [D] CONTROLLER → TAB [▶] KEYBOARD/PANEL → [B] 3 TRANSPOSE ASSIGN

Editing parameters assigned to the LIVE CONTROL knobs:

[ASSIGN] → [I] (ASSIGN)

Editing Voices (Voice Set):

Voice Selection display → [8 ▼] MENU 1 → [5 ▼] (VOICE SET)

Disabling automatic selection of Voice Sets (effects, etc.):

[FUNCTION] → TAB [◀] MENU 1 → [F] VOICE SET FILTER

Editing Organ Flutes Voices:

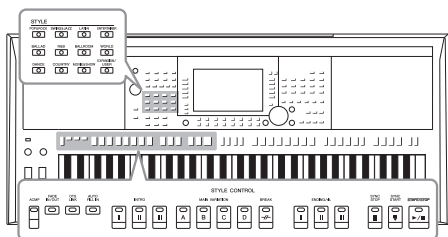
[ORGAN FLUTES] → TAB [◀][▶] VOLUME/ATTACK or EFFECT/EQ

Installing Expansion Pack data:

[FUNCTION] → TAB [▶] MENU 2 → [F] PACK INSTALLATION → [6 ▼] (INSTALL)

Styles

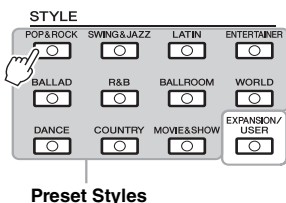
– Playing Rhythm and Accompaniment –



The instrument features various accompaniment and rhythmic backing patterns (called “Styles”) in a variety of different musical genres including pop, jazz, and many others. The Style features Auto Accompaniment, letting you produce automatic accompaniment playback simply by playing “chords” with your left hand. This lets you automatically recreate the sound of a full band or orchestra — even if you’re playing by yourself.

Playing a Style with the Auto Accompaniment

- 1 Press one of the **STYLE** category selection buttons to call up the Style Selection display.



Preset Styles

- **Expansion Styles**
Styles additionally installed (page 46).
- **User Styles**
Styles created with the Style Creator function (refer to the Reference Manual on the website), or Styles copied to the USER drive (page 30).

NOTE

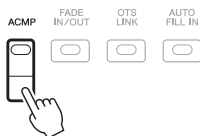
For a list of preset Styles of this instrument, refer to the “Style List” in the Data List on the website.

- 2 Press one of the **[A] – [J]** buttons to select the desired Style.

You can call up the other pages by pressing the buttons that correspond to the page numbers (P1, P2 ...) or by pressing the same STYLE category selection button several times.



- 3 Press the **[ACMP]** button to turn on the Auto Accompaniment.

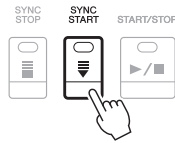


The specific left-hand section of the keyboard (page 58) becomes the chord section, and chords played in this section are automatically detected and used as a basis for fully automatic accompaniment with the selected Style.

NOTE

Although the chords will be detected according to the notes you play in the left hand section by default, you can change the chord detection area from the left hand section to the right hand section. For details, refer to page 59.

4 Press the [SYNC START] button to enable synchronized start.

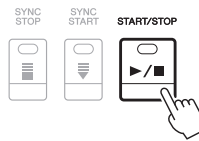


5 As soon as you play a chord with your left hand, the selected Style starts.

Try playing chords with your left hand and play a melody with your right hand.



6 Press the [START/STOP] button to stop Style playback.



NOTE

- For information on chords and Chord Fingering types, refer to page 52.
- The chord specified in the chord section is shown on the Main display (page 24).

NOTE

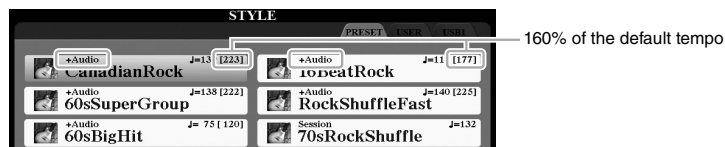
You can transpose the Style playback (page 38).

NOTE

You can use the Style Retrigger function by assigning it to one of the LIVE CONTROL knobs. For instructions, refer to page 40.

Style Characteristics

The Style type and its defining characteristics are indicated above the Style name. There are various Style characteristics; however, only the following ones are covered here. For information on others, refer to the Reference Manual on the website.



• DJ Styles

These Styles can be selected from the category called up via the [DANCE] button. These contain their own special chord progressions, so you can add chord changes to your performance simply by changing the root key. The Multi Pad (page 76) data in the “DJ Phrase” folder are specially created for these Styles. You can call up the suitable Multi Pads by using the One Touch Setting function (page 53).

NOTE

You cannot specify the chord type, such as major and minor, when using the DJ Styles.

• Audio Styles (PSR-S970)

The audio Styles (+Audio) have been specially produced by adding audio recordings of studio musicians playing in various recording studios worldwide. This adds all the natural feel, ambience and warmth to the drums and percussion of the Style, giving your performance greater expressive potential. Specifically, it retains the subtle nuances and grooves that are difficult to reproduce using the preset drum/percussion kit. Yamaha Time Stretch Technology allows the audio to follow your tempo changes without changing pitch, so everything stays in perfect sync.

NOTE

- If the tempo is set to over 160% of the default, the audio part is muted. The maximum tempo (at which the audio part can be played) is shown in brackets at the upper right corner of the Style name.
- Keep in mind that the audio Styles may take more time to load than others, and that they may have certain restrictions and differ in the specific functions that can be handled.

Style file compatibility

This instrument uses the SFF GE file format (page 8). This instrument can play back existing SFF files, but they will be saved in the SFF GE format when the file is saved (or pasted) in this instrument. Please keep in mind that the saved file can only be played back on instruments that are compatible with the SFF GE format.

Operating Style Playback

To Start/Stop Playing

- **[START/STOP] button**

Starts playback of the rhythm part of the current Style. To stop playback, press the button again.



- **[ACMP] button**

Turns the Auto Accompaniment on/off. When this button is on, both the rhythm part and Auto Accompaniment can be played back when playing chords in the chord section during Style playback.



- **[SYNC START] button**

This puts the Style playback in “standby.” The Style starts playing back when you press any note on the keyboard (when [ACMP] is off) or you play a chord with your left hand (when [ACMP] is on). While a Style is playing back, pressing this button stops the Style and puts playback in standby.



- **[SYNC STOP] button**

Make sure that the [ACMP] button is on, then press the [SYNC STOP] button, and play the keyboard. You can start and stop the Style anytime you want by simply playing or releasing the keys in the chord section of the keyboard.

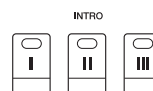


NOTE

When the Chord Fingering type (page 52) is set to FULL KEYBOARD or AI FULL KEYBOARD, Sync Stop cannot be turned on.

- **INTRO [I] – [III] buttons**

The instrument features three different Intro sections to add an introduction before starting Style playback. After pressing one of the INTRO [I] – [III] buttons, start playback of the Style. When the Intro finishes playing, Style playback automatically shifts to the Main section.



NOTE

The INTRO [I] section consists of only the Rhythm part while INTRO [II] and [III] consist of all the parts as well as the Rhythm part. When you play INTRO [II] or [III], in order to have the complete Intro section sound properly, you need to play chords in the chord section with the [ACMP] turned on.

- **ENDING/rit. [I] – [III] buttons**

The instrument features three different Ending sections to add an ending before stopping Style playback. When you press one of the ENDING/rit. [I] – [III] buttons while Style is playing back, the Style will automatically stop after the ending is played. You can have the ending gradually slow down (ritardando) by pressing the same ENDING/rit. button once again, while the ending is playing.



NOTE

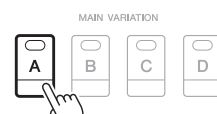
If you press the ENDING/rit. [I] button when the Style is playing, a fill-in automatically plays before the ENDING/rit [I].

Changing Pattern Variation (Sections) During Style Playback

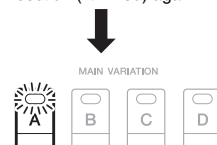
Each Style features four different Main sections, four Fill-in sections and a Break section. By using these sections effectively, you can easily make your performance sound more dynamic and professional. The section can be freely changed while the Style is playing back.

• MAIN VARIATION [A] – [D] buttons

Press one of the MAIN VARIATION [A] – [D] buttons to select the desired Main section (the button lights in red). Each is an accompaniment pattern of a few measures and it plays indefinitely. Pressing the selected MAIN VARIATION button again maintains the same section, but plays an appropriate fill-in pattern to spice up the rhythm and break the repetition.



Press the selected Main section (lit in red) again.



The fill-in of the selected Main section plays (flashes in red).

AUTO FILL function

When the [AUTO FILL IN] button is turned on, pressing any of the MAIN VARIATION [A] – [D] buttons as you play automatically plays a fill-in section for a smooth, dynamic transition into the next (or same) section.



• [BREAK] button

This lets you add dynamic breaks in the rhythm of the accompaniment. Press the [BREAK] button during Style playback. When the one-measure Break pattern finishes playing, the Style playback automatically shifts to the Main section.



About the lamp status of the section buttons (INTRO/MAIN VARIATION/BREAK/ENDING)

- **Red:** The section is currently selected.
- **Red (flashing):** The section will be played next, following the currently selected section.
 - * The MAIN VARIATION [A] – [D] buttons also flash red during fill-in playback.
- **Green:** The section contains data but is not currently selected.
- **Off:** The section contains no data and cannot be played.

Adjusting the Tempo

The TEMPO [-] and [+] buttons let you change the playback tempo of Style, Song and Metronome. The tempo of the Style and Song can also be adjusted via the [TAP TEMPO] button.

• TEMPO [-]/[+] buttons

Press the TEMPO [-] or [+] button to call up the Tempo pop-up display. Use the TEMPO [-]/[+] buttons to decrease or increase the tempo over a range of 5 – 500 beats per minute. Holding down either button can change the value continuously. Pressing both TEMPO [-] and [+] buttons simultaneously lets you call up the default tempo of the last selected Style or Song.



In the case of audio Styles (page 49), the maximum tempo at which the audio part can be played is shown under the current tempo.

NOTE

If you want to adjust the tempo of an Audio file, use the Time Stretch function on page 73.

• [TAP TEMPO] button

During playback of a Style or Song, you can change the tempo by tapping the [TAP TEMPO] button twice at the desired tempo.

When Style and Song are stopped, tapping the [TAP TEMPO] button (four times for a 4/4 time signature) starts Style playback at the tempo you tapped.



Fading In/Out

- **[FADE IN/OUT] button**

This produces smooth fade-ins and fade-outs when starting/stopping the playback of a Style or Song. Press the [FADE IN/OUT] button when playback is stopped and press the [START/STOP] button for Style (or the [PLAY/PAUSE] button for Song) to start playback with a fade in. To stop the playback with a fade out, press the [FADE IN/OUT] button during playback.



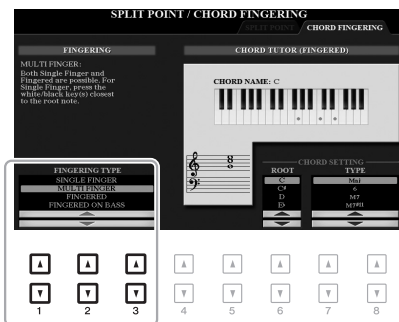
Changing the Chord Fingering Type

By changing the Chord Fingering type, you can automatically produce appropriate accompaniment even if you don't press all of the notes which comprise a chord.

1 Call up the operation display.

[FUNCTION] → TAB [◀] MENU 1 → [A] SPLIT POINT/CHORD FINGERING → TAB [▶] CHORD FINGERING

2 Press the [1 ▲▼] – [3 ▲▼] buttons to select a Chord Fingering type.



NOTE

When the chord detection area is set to "UPPER" (page 59), only "FINGERED**" is available. This type is basically same as "FINGERED," except that "1+5," "1+8" and Chord Cancel are not available.

The following types can be selected, for example.

- **SINGLE FINGER**

This method lets you easily play chords in the accompaniment range of the keyboard using only one, two or three fingers.

C



Major chord

Press the root key only.

Cm



Minor chord

Simultaneously press the root key and a black key to its left.

C7



Seventh chord

Simultaneously press the root key and a white key to its left.

Cm7



Minor seventh chord

Simultaneously press the root key and both a white and black key to its left.

- **FINGERED**

This lets you specify the chord by pressing the notes making up a chord in the left hand section of the keyboard when [ACMP] is turned on or the LEFT part is turned on. For information on which notes to press for each chord, use the Chord Tutor function (page 53) or refer to the Reference Manual on the website.

- **AI FULL KEYBOARD**

This lets you play just about anything, anywhere on the keyboard using both hands — like conventional playing of a piano — and still have appropriate accompaniment. You don't have to worry about specifying the chords. (Depending on the song arrangement, AI Full Keyboard may not always produce appropriate accompaniment.)

For other types, refer to the Reference Manual on the website.

Using the Chord Tutor Function

With this function shown in the right half of this display, you can see which notes to press for specifying the chord. If you know a chord name but don't know how to play it, use this function. Although this function shows how to play a chord only in case of "FINGERED," the indication is useful also when a type other than "SINGLE FINGER" is selected.

Use the [6 ▲▼] buttons to select the chord root then use the [7 ▲▼] – [8 ▲▼] buttons to select the chord type. The notes you need to play are shown in the display.

NOTE

Depending on the chord, some notes may be omitted.

Calling up Appropriate Panel Settings for the Current Style (One Touch Setting)

One Touch Setting (OTS) is a powerful and convenient feature that automatically calls up the most appropriate panel settings (Voices or effects, etc.) for the currently selected Style, with the touch of a single button. If you've already decided which Style you wish to use, you can have One Touch Setting automatically select the appropriate Voice for you.

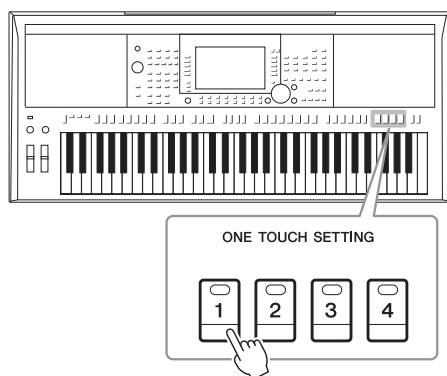
NOTE

For information on the panel settings that are called up by One Touch Setting, refer to the OTS section of "Parameter Chart" in the Data List on the website.

1 Select a Style (steps 1 – 2 on page 48).

2 Press one of the ONE TOUCH SETTING [1] – [4] buttons.

Not only does this instantly call up all the settings (Voices, effects, etc.) that match the current Style, it also automatically turns on [ACMP] and [SYNC START], so that you can immediately start playing the Style.



Confirming the One Touch Setting contents

In the Style Selection display, press the [6 ▼] (OTS INFO) button (when MENU 1 is shown at the bottom right corner of the display) to call up the Information window that shows what Voices are assigned to the ONE TOUCH SETTING [1] – [4] buttons for the current Style.

NOTE

If a Voice name is shown in gray, this indicates that the corresponding Voice part is turned off when pressing the ONE TOUCH SETTING [1] – [4] buttons.

To close the window, press the [F] (CLOSE) button.

3 As soon as you play a chord in the chord section, the selected Style starts.

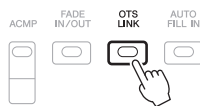
Each Style has four One Touch Setting setups. Press other ONE TOUCH SETTING [1] – [4] buttons to try out other setups.

NOTE

You can memorize original settings to One Touch Setting. For instructions, refer to the Reference Manual on the website.

Automatically changing One Touch Settings with the Main sections (OTS Link)

The convenient OTS (One Touch Setting) Link function lets you automatically have One Touch Settings change when you select a different Main section (A – D). The Main sections A, B, C and D correspond to One Touch Settings 1, 2, 3 and 4 respectively. To use the OTS Link function, turn the [OTS LINK] button on.



NOTE

You can change the timing in which the One Touch Settings change along with MAIN VARIATION [A] – [D] changes. For instructions, refer to the Reference Manual on the website.

Finding Suitable Music Pieces for the Current Style (Repertoire)

You can search for music pieces and songs that are most suitable for playing with the current Style by using the Music Finder Records (page 80). You can automatically call up appropriate settings such as Voice, effect and pedal by selecting the desired music piece.

For optimum use of the Repertoire function, we recommend that you import Music Finder Records (page 82).

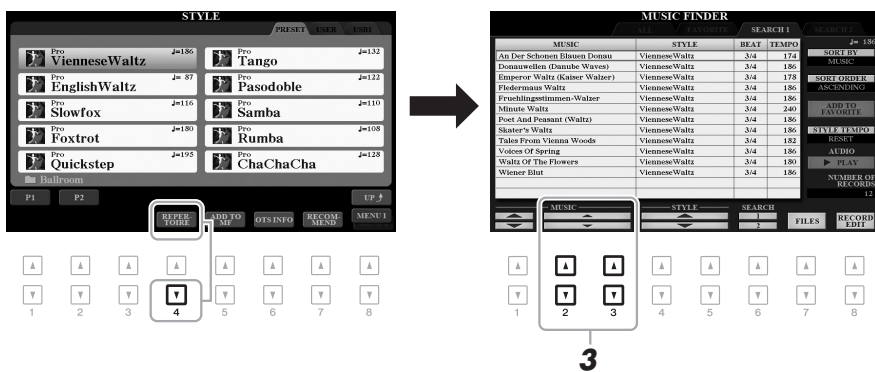
1 Select the desired Style (steps 1 – 2 on page 48).

2 Press the [4 ▼] (REPETOIRE) button.

The MUSIC FINDER display is automatically called up, and the music pieces which can be played with the current Style are shown.

NOTE

Make sure that MENU 1 is shown at the bottom right corner of the display (page 26).



3 Use the [2 ▲▼]/[3 ▲▼] buttons to select the desired music piece (Record).

The appropriate panel settings for playing the music piece are called up.

NOTE

Depending on the particular selected Style, there may not be any Records called up.

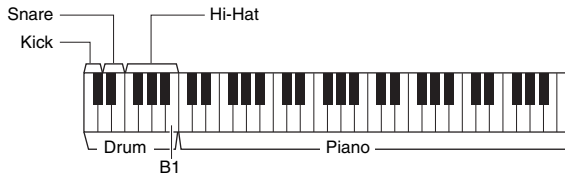
4 As soon as you play a chord in the chord section, the selected Style starts.

Calling up Optimum Styles for Your Performance (Style Recommender)

This convenient function “recommends” optimum Styles for your performance, based on the rhythm you play for one or two measures.

1 In the Style selection display (page 48), press the [7 ▼] (RECOMMEND) button to call up the STYLE RECOMMENDER display.

The keyboard is divided at the B1 key into two sections as below.



The Drum instruments (Kick, Snare and Hi-Hat) are assigned to the left of the B1 key while the Piano sound is assigned to the right.

2 Use the Style Recommender function to find the Style.

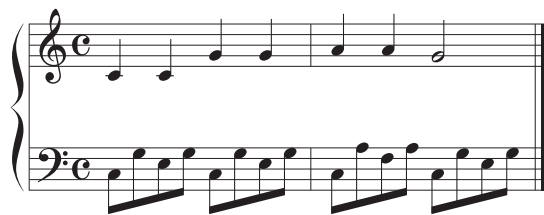
2-1 Press the [J] (START) button to start the metronome, indicating that the Style Recommender function starts.

2-2 Use the TEMPO [-]/[+] buttons or [TAP TEMPO] button to adjust the tempo, and press the [E] (METRONOME) button to select the beat.

2-3 Play what you have in mind on the Piano section (ideally by using both hands) or play the rhythm on the Drum section for one or two measures along with the metronome.

The performance is analyzed over several seconds, then playback of the most recommended Style starts. In addition, the candidates of the other recommended Styles are listed in the display.

- Example 1: Play the following song on the Piano section.



The Styles that best match your performance having similar tempos are listed.

- Example 2: Play the following rhythm on the Drum section.



The Styles that contain similar drum patterns are listed.

NOTE

Make sure that MENU 1 is shown at the bottom right corner of the display (page 26).

NOTE

Pressing the [J] button toggles between START and CANCEL.

NOTE

For better results, start playing from the next measure when a song you want to play starts from the middle of a measure, or the song has a short silence prior to the first note.

3 Select the desired Style from the list by using the [2 ▲▼] – [7 ▲▼] buttons.

Try playing the keyboard along with the Style to see if it matches what you want to play.

If the Style called up doesn't match what you want to play, press the [J] (RETRY) buttons, then return to step 2-3.

4 When you've found a Style you're satisfied with, press one of the [8 ▲▼] (OK) buttons to exit from the STYLE RECOMMENDER display.

5 Play the keyboard along with the Style you just found.

Turning On/Off Each Channel of the Style

Each Style contains the channels listed below. You can add variations and change the feeling of a Style by selectively turning channels on/off as the Style plays.

Style channels

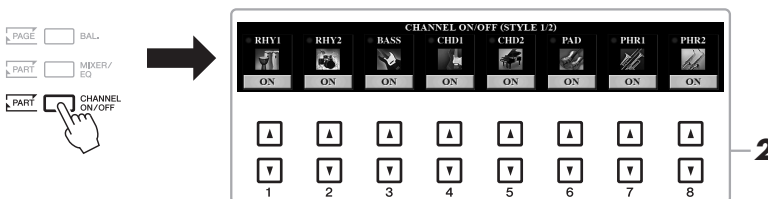
- **RHY1, 2 (Rhythm 1, 2):** These are the basic parts of the Style, containing the drum and percussion rhythm patterns.
- **BASS:** The bass part uses various appropriate instrument sounds to match the Style.
- **CHD1, 2 (Chord 1, 2):** These are rhythmic chord backing parts, commonly used with piano or guitar Voices.
- **PAD:** This part is used for sustained instruments such as strings, organ, choir, etc.
- **PHR1, 2 (Phrase 1, 2):** These parts are used for punchy brass stabs, arpeggiated chords, and other extras that make the accompaniment more interesting.

(PSR-S970)

- **AUDIO:** This is an audio part of the audio Style (page 49).

1 Press the [CHANNEL ON/OFF] button repeatedly if necessary to call up the CHANNEL ON/OFF (STYLE) display which contains the desired channel.

On the PSR-S970, there are two pages, 1/2 and 2/2 for Style channels. The PSR-S770 has only one page.



NOTE

For information on the CHANNEL ON/OFF (SONG) display, refer to page 65.

2 Use the [1 ▼] – [8 ▼] buttons to turn the channels on or off.

To listen to only one channel by itself, hold down the appropriate button for the channel to set the channel to SOLO. To cancel SOLO, simply press the appropriate channel button again.

NOTE

You can save the settings here to Registration Memory (page 85).

To change the Voice for each channel

Press one of the [1 ▲] – [8 ▲] buttons corresponding to the desired channel to call up the Voice Selection display (page 36), then select the desired Voice.

NOTE

The Audio channel does not have a Voice and, hence, cannot be changed.

3 Press the [EXIT] button to close the CHANNEL ON/OFF display.

NOTE

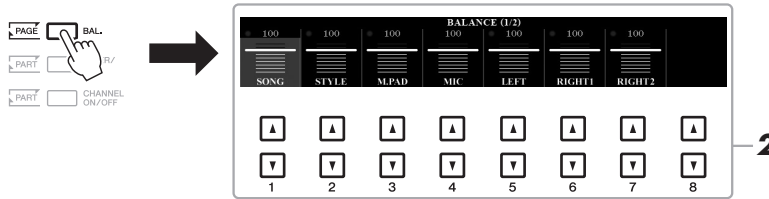
You can also turn Style channels on/off for dynamic effect by using the LIVE CONTROL knobs. For instructions on how to assign the functions to the knobs, refer to page 40.

Adjusting the Volume Balance Between the Parts

You can adjust the volume balance between the parts (Song, Style, LEFT, RIGHT 1/2, etc.).

1 Press the [BAL.] button once or twice to call up the desired page of the BALANCE display which contains the desired channel.

There are two pages, 1/2 and 2/2.



2 Use the [1 ▲▼] – [8 ▲▼] buttons to adjust the volume of the desired parts.

In the BALANCE 1/2 page, you can adjust the volume balance between the Song (page 62), Style, Multi Pad (page 76), microphone (or guitar) and keyboard parts (LEFT, RIGHT1 and 2).

In the BALANCE 2/2 page, you can adjust the volume balance between the Song (MIDI), Audio (page 71), sound input from the [AUX IN] jack, and all keyboard parts (KBD). For information on the [2 ▲▼] – [3 ▲▼] buttons, refer to page 74.

3 Press the [EXIT] button to close the BALANCE display.

NOTE

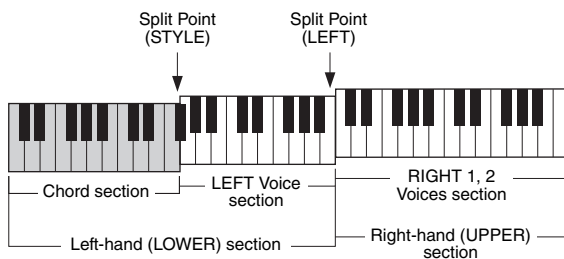
- You can also control the volume balance between the parts by using the LIVE CONTROL knobs. For instructions on how to assign the functions to the knobs, refer to page 40.
- On the VOL/VOICE page of the MIXING CONSOLE display (page 95), you can adjust the volume for the Song and Style parts independently.

NOTE

When the UD-WL01 USB Wireless LAN adaptor is connected to the instrument, "WLAN" appears in the BALANCE 2/2 page, and the volume of the audio input via an iPhone/iPad application tool (page 102) can also be adjusted.

Setting the Split Point

The key which divides the keyboard into two sections is referred to as “Split Point.” There are two Split Points: Split Point (LEFT) and Split Point (STYLE).



- **Split Point (LEFT):**

Divides the keyboard into the left-hand (LOWER) section and the right-hand (UPPER) section.

- **Split Point (STYLE):**

Divides the left-hand (LOWER) section into the chord section and the LEFT Voice section.

1 Call up the Split Point display.

[FUNCTION] → TAB [◀] MENU 1 → [A] SPLIT POINT/CHORD FINGERING → TAB [◀] SPLIT POINT

2 Set the Split Point.

NOTE

You can also specify each Split Point by note name, using the [3 ▲▼]-[6 ▲▼] buttons.

[F]	STYLE + LEFT	Sets Split Point (STYLE) and Split Point (LEFT) to the same note. Press the [F] button and rotate the Data dial. You can also specify the Split Point directly from the keyboard by pressing the desired key on the keyboard while holding the [F] button.
[G]	STYLE	Sets each Split Point individually. Press one of the desired buttons and rotate the Data dial. You can also specify the Split Point directly from the keyboard by pressing the desired key on the keyboard while holding the appropriate button, [G] or [H].
[H]	LEFT	

NOTE
Split Point (LEFT) cannot be set lower than Split Point (STYLE).

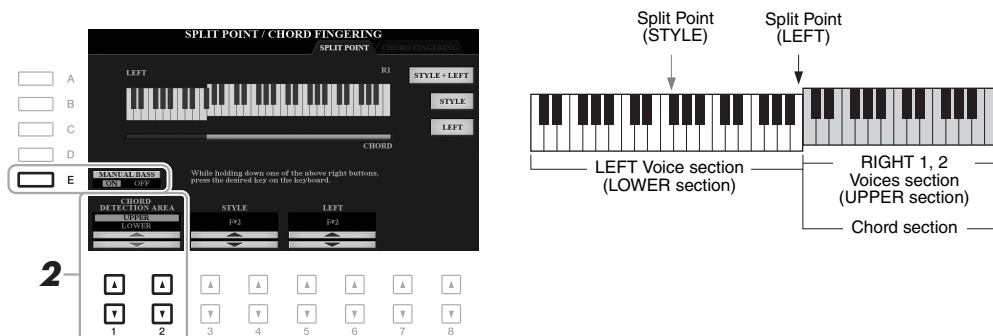
Specifying Chords with Your Right Hand while Playing Bass with Your Left Hand

By changing the chord detection area from the left-hand section to the right-hand section, you can play a bass line with your left hand while using your right hand to control Style playback.

1 Call up the Split Point display.

[FUNCTION] → TAB [◀] MENU 1 → [A] SPLIT POINT/CHORD FINGERING → TAB [◀] SPLIT POINT

2 Use the [1 ▲▼]/[2 ▲▼] buttons to set the CHORD DETECTION AREA to “UPPER.”



With this setting, the whole right-hand (UPPER) section functions as the Chord section as well as for melody performance. In this condition, note the following points:

- In the right-hand (UPPER) section, you can specify the chord type as you play the melody.
- When the Manual Bass function is turned on via the [E] button, the Voice for the Bass part of the current Style is muted and assigned to the left-hand (LOWER) section.
- The Chord Fingering setting (page 52) will be set to a specific type (“FINGERED”) automatically, in which case you should press three or more notes simultaneously to specify the chord. Pressing two or less notes does not change the chord type.
- Split Point (STYLE) is unavailable.

NOTE

This type is basically same as “FINGERED,” except that “1+5,” “1+8” and Chord Cancel are not available.

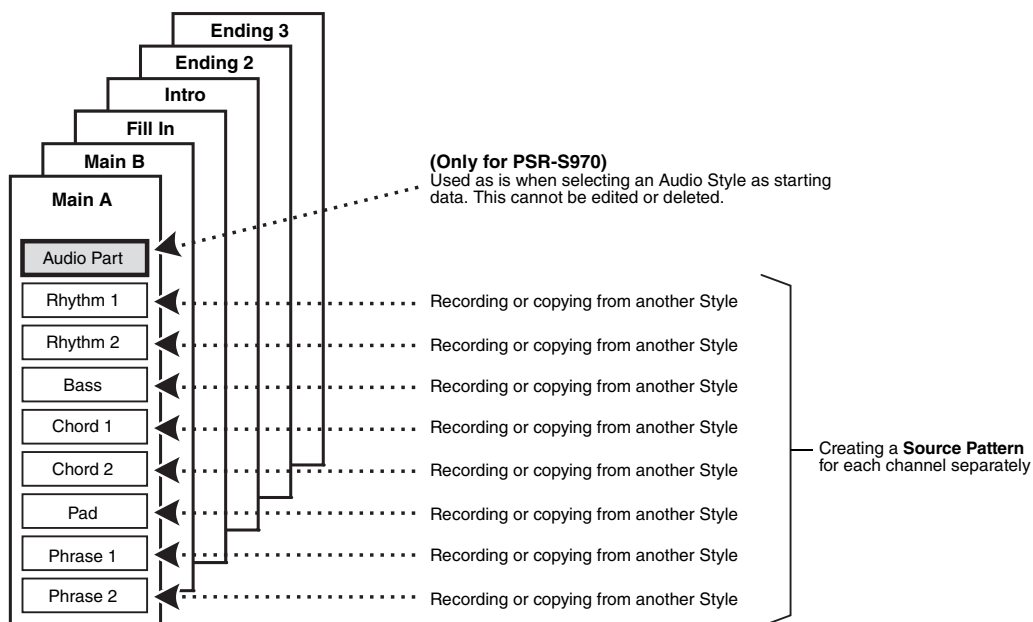
Creating/Editing Styles (Style Creator)

The Style Creator function lets you create original Styles by recording rhythm patterns from the keyboard and using already-recorded Style data. Basically, select a preset Style that is closest to the type you want to create, then record the rhythm pattern, bass line, chord backing, or phrase (referred to as “Source Pattern” in the Style Creator) for each channel of each Section.

This section gives you a brief introduction of the Style Creator function. For instructions on how to use the function, refer to the Reference Manual on the website.

Style Data Structure — Source Patterns

A Style is made up of the different Sections (Intro, Main, Ending, etc.) and each Section has eight separate channels, each of which is referred to as “Source Pattern.” With the Style Creator feature, you can create a Style by separately recording the Source Pattern for each channel, or by importing pattern data from other existing Styles.



Editing the Rhythm Part of a Style (Drum Setup)

The Rhythm parts of a preset Style consist of a preset Drum Kit, and each drum sound is assigned to a separate note. You may want to change the sound and the note assignments, or make more detailed settings such as volume balance, effect, etc. By using the Drum Setup function of the Style Creator, you can edit the Rhythm part of a Style and save it as an original Style. For details, refer to the Reference Manual on the website.

Advanced Features

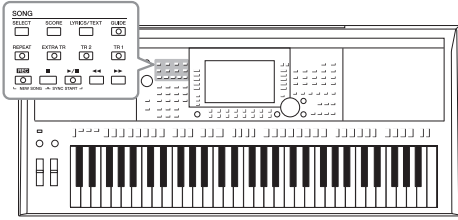
Refer to the Reference Manual on the website, **Chapter 2**.



Style playback related settings:	[FUNCTION] → TAB [◀] MENU 1 → [G] STYLE SETTING
Memorizing original One Touch Settings:	[MEMORY] + ONE TOUCH SETTING [1] – [4]
Creating/editing Styles (Style Creator):	[FUNCTION] → TAB [▶] MENU 2 → [A] STYLE CREATOR
• Realtime Recording:	→ TAB [◀] BASIC
• Step Recording:	→ TAB [▶] EDIT → [G] STEP REC
• Style Assembly:	→ TAB [◀][▶] ASSEMBLY
• Editing the rhythmic feel:	→ TAB [◀][▶] GROOVE
• Editing data for each channel:	→ TAB [◀][▶] CHANNEL
• Making Style File Format settings:	→ TAB [◀][▶] PARAMETER
• Editing the rhythm part of a Style (Drum Setup)	→ TAB [◀] BASIC → [G] DRUM SETUP

Songs

– Playing, Practicing and Recording Songs –



For the PSR-S970/S770, “Song” refers to the MIDI songs which include preset songs, commercially available MIDI format files, etc. Not only can you play back a Song and listen to it, but you can also play the keyboard along with Song playback and record your own performance as a Song.

NOTE

For instructions on playback and recording of audio files, refer to page 71.

Playback of Songs

You can play back the following types of Songs.

- Preset Songs (in the PRESET tab of the Song Selection display)
- Your own recorded Songs (page 68)
- Commercially available Song data: SMF (Standard MIDI File)

If you want to play back a Song in USB flash drive, connect the USB flash drive containing Song data to the [USB TO DEVICE] terminal beforehand.

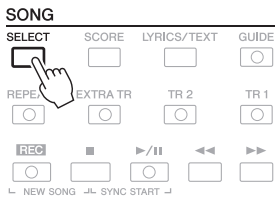
NOTE

For information on compatible data formats, refer to page 8.

NOTE

Before using a USB flash drive, be sure to read “Connecting USB Devices” on page 100.

- 1 Press the SONG [SELECT] button to call up the Song Selection display.



2

- 2 Use the TAB [◀][▶] buttons to select the location of the desired Song.
- 3 Select the desired Song by using the [A] – [J] buttons.

4 Press the SONG [▶/||] (PLAY/PAUSE) button to start playback.



NOTE

You can transpose the Song playback (page 38).

Queuing the next Song for playback

While a Song is playing back, you can queue up the next Song for playback. This is convenient for chaining it to the next Song smoothly during live performance. Select the Song you want to play next in the Song Selection display, while a Song is playing back. The “NEXT” indication appears at the upper right of the corresponding Song name. To cancel this setting, press the [7 ▼] (NEXT CANCEL) button.

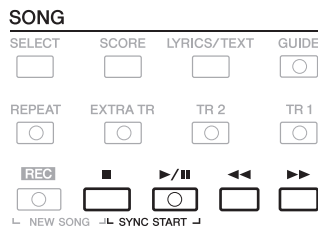
NOTE

Make sure that MENU 1 is shown at the bottom right corner of the display (page 26).

5 Press the SONG [■] (STOP) button to stop playback.



Playback-related Operations



- Synchro Start**While playback is stopped, hold down the SONG [■] (STOP) button and press the [▶/||] (PLAY/PAUSE) button. The [▶/||] (PLAY/PAUSE) button flashes, indicating the standby status. You can start playback as soon as you play the keyboard.
To cancel the Synchro Start function, press the SONG [■] (STOP) button.
- Pause**Press the [▶/||] (PLAY/PAUSE) button during playback. Pressing it again resumes Song playback from the current position.
- Rewind/Fast Forward**Press the [◀◀] (REW) or [▶▶] (FF) during playback or while the Song is stopped. Pressing either of them once moves back/forward one measure. Holding either of them scrolls backward/forward continuously.

NOTE

- You can adjust the volume balance between the Song and keyboard (page 57). On the VOL/VOICE page of the Mixing Console display (page 95), you can adjust the volume for each Song channel.
- You can also adjust the volume balance between the Song and Audio (page 74).

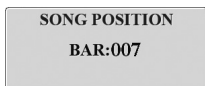
NOTE

You can also turn specific part(s) on or off (page 65).

Pressing the [◀◀] (REW) or [▶▶] (FF) button calls up a pop-up display showing the current measure number (or Phrase Mark number).

While the Song Position pop-up is shown on the display, you can also use the Data dial to adjust the value.

For Songs not containing Phrase Marks



For Songs containing Phrase Marks
You can change the unit for rewinding/fast-forwarding by pressing the [D] (BAR) or the [E] (PHRASE MARK) button.



NOTE

Phrase Mark is a pre-programmed marker in certain Song data, which indicates a specific location in the Song.

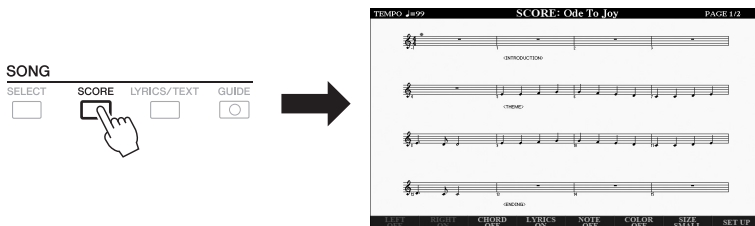
- **Adjusting the Tempo**Same procedure as with Style tempo. See page 51.
- **Fading In/Out**Same procedure as with Style. See page 52.

Displaying Music Notation (Score)

You can view the music notation (score) of the selected Song.

- 1 Select a Song (steps 1 – 3 on page 62).**
- 2 Press the [SCORE] button to call up the SCORE display.**

You can look through the entire notation by using the TAB [◀][▶] buttons when the Song playback is stopped. As Song playback starts, the “ball” bounces along through the score, indicating the current position.



NOTE

This instrument can display the music notation of your recorded Song, or commercially available MIDI files (only those which allow devices to indicate notation).

NOTE

The displayed notation is generated by the instrument based on the Song data. As a result, it may not be exactly the same as commercially available sheet music of the same song — especially when displaying notation of complicated passages or many short notes.

You can change the displayed notation style by using the [1 ▲▼] – [8 ▲▼] buttons. For details, refer to the Reference Manual on the website.

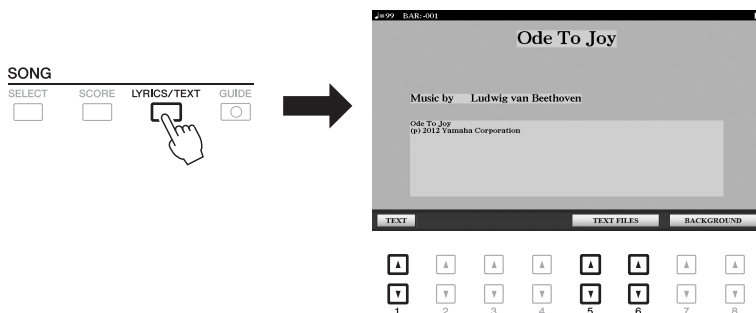
Displaying Lyrics/Text

When the selected Song contains lyrics data, you can view it on the instrument's display. Even if the Song does not contain lyrics data, you can view the lyrics on the display by loading the text file (.txt file less than 60 KB) created on a computer via USB flash drive. Text display allows for a variety of useful and convenient possibilities, such as the showing of lyrics, chord charts, and performance notes.

1 Select a Song (steps 1 – 3 on page 62).

2 Press the [LYRICS/TEXT] button to call up the LYRICS/TEXT display.

You can switch between the LYRICS display and the TEXT display by using the [1 ▲▼] buttons.



When the Song data contains lyrics data, the lyrics are shown on the LYRICS display. You can look through the entire lyrics by using the TAB [◀][▶] buttons when Song playback is stopped. As Song playback starts, the color of the lyrics changes, indicating the current position.

To view the text file on the TEXT display, press one of the [5 ▲▼]/[6 ▲▼] (TEXT FILES) buttons to call up the File Selection display and select the desired file created on your computer.

For more information about the LYRICS (TEXT) display, refer to the Reference Manual on the website.

NOTE

When the lyrics are garbled or unreadable, you may need to change the Lyrics Language setting: [FUNCTION] → TAB [◀] MENU 1 → [H] SONG SETTING.

NOTE

(PSR-S970) The Lyrics (text) can be displayed on an external monitor (page 99).

NOTE

Information about Text File selection can be memorized to the Registration Memory (page 85).

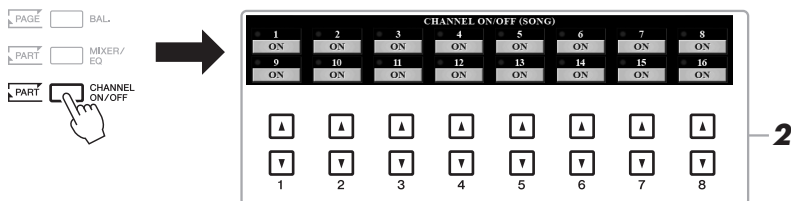
NOTE

You can conveniently turn to the next/previous text page by assigning the function to the foot pedal: [FUNCTION] → TAB [◀] MENU 1 → [D] CONTROLLER → TAB [◀] FOOT PEDAL

Turning Each Channel of the Song On/Off

A Song consists of 16 separate channels. You can independently turn each channel of the selected Song playback on or off.

1 Press the [CHANNEL ON/OFF] button several times to call up the CHANNEL ON/OFF (SONG) display.



2 Use the [1 ▲▼] – [8 ▲▼] buttons to turn each channel on or off.

If you want to play back only one particular channel (solo playback), press and hold down one of the [1 ▲▼] – [8 ▲▼] buttons to set the desired channel to SOLO. Only the selected channel is turned on and others are off. To cancel solo playback, press the same button again.

NOTE

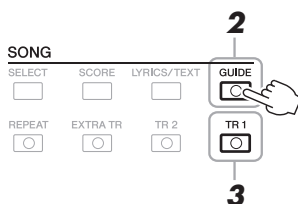
Usually, each part is recorded to the following channels.
Channels 1 – 3: keyboard parts (RIGHT 1, LEFT, RIGHT 2)
Channels 5 – 8: Multi Pad parts
Channels 9 – 16: Style parts

One-handed Practice with the Guide Function

You can mute the right-hand part to try practicing that part on your own. The explanations here apply when you practice the right-hand part with “Follow Lights” of the Guide functions. You can practice at your own pace — since the accompaniment waits for you to play the notes correctly. In the SCORE display, you can see the note to play and the current position.

1 Select a Song and call up the SCORE display (page 64).

2 Turn the [GUIDE] button on.



3 Turn the [TR 1] button off to mute the right-hand part.

You can now play that part by yourself.

4 Press the SONG [▶/||] (PLAY/PAUSE) button to start playback.



NOTE

Usually, Ch 1 (right-hand part) is assigned to [TR 1] button, Ch 2 (left-hand part) is assigned to [TR 2] button, and Ch 3 – 16 are assigned to [EXTRA TR] button.

Practice the muted part while viewing the SCORE display. The playback of the left and extra parts will wait for you to play the notes correctly.

After your practice, turn the [GUIDE] button off.

Other Guide functions

In addition to the “Follow Lights” function explained above, there are more functions in the Guide features, for practicing the timing of playing the keys (Any Key), for Karaoke or for practicing a song at your own pace (Your Tempo).

[FUNCTION] → TAB [◀] MENU 1 → [H] SONG SETTING → TAB [◀] GUIDE/CHANNEL → [A]/[B] GUIDE MODE

For more information, refer to the Reference Manual on the website.

Repeat Playback

The Song Repeat functions can be used to repeatedly play back a Song or a specific range of measures in a Song. This is useful for repeated practicing of difficult-to-play phrases.

To repeat a Song, turn the [REPEAT] button on and play back the desired Song. Turning the [REPEAT] button off cancels Repeat playback.



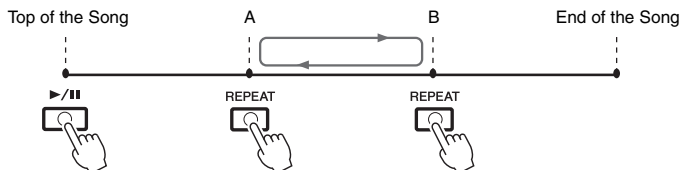
NOTE

You can play multiple Songs repeatedly:
[FUNCTION] → TAB [◀] MENU 1 →
[H] SONG SETTING → TAB [▶] OTH-
ERS → [G] REPEAT MODE.

Specifying a Range of Measures and Playing them Back Repeatedly (A-B Repeat)

- 1 Select a Song (steps 1 – 3 on page 62).
- 2 Press the SONG [▶/||] (PLAY/PAUSE) button to start playback.
- 3 Specify the repeat range.

Press the [REPEAT] button at the starting point (A) of the range to be repeated. Press the [REPEAT] button again at the ending point (B). After an automatic lead-in (to help guide you into the phrase), the range from Point A to Point B is played back repeatedly.



NOTE

Specifying only Point A results in repeat playback between Point A and the end of the Song.

NOTE

When you want to repeat from the top of the Song to the middle of the Song:

- 1 Press the [REPEAT] button, then start Song playback.
- 2 Press the [REPEAT] button again at the ending point (B).

- 4 To stop playback, press the SONG [■] (STOP) button.

The Song position returns to Point A and pressing the SONG [▶/||] (PLAY/PAUSE) button lets you start from that point again.

After you've finished practicing, press the [REPEAT] button to turn off Repeat playback.

Specifying the repeat range while Songs are stopped

1. Fast-forward the Song to Point A, then press the [REPEAT] button.
2. Fast-forward the Song to Point B, then press the [REPEAT] button again.

Recording Your Performance

You can record your performance and save it as a MIDI file (SMF format 0) to the USER drive or USB flash drive. Since the recorded data is MIDI, you can easily edit your Songs.

Two recording methods are available:

- **Quick Recording**.....see section below
You can record all parts of your performance at once or a specific part (right-hand, left-hand or Style playback).
- **Multi Track Recording**.....page 69
You can record data to each channel one by one, to create a single, multi-part Song. The channel/part assignments can be freely changed.

NOTE

For instructions on the recording of audio songs (files), see page 74.

NOTE

Audio data such as the rhythm channels created via the audio data of audio Style (page 49), Audio Link Multi Pad (page 78) and audio files (page 71) cannot be recorded to the MIDI Songs.

Quick Recording

Before recording, make the necessary settings such as Voice/Style selection. With this recording, each part will be recorded to the following channels.

- **Keyboard parts:** channels 1 – 3
- **Multi Pad parts:** channels 5 – 8
- **Style parts:** channels 9 – 16

1 Press the SONG [REC] button and the [■] (STOP) button simultaneously.



A blank Song for recording is automatically set, and the Song name on the Main display (page 24) is set to “NewSong.”

2 Press the SONG [REC] button.



The [REC] and [▶/||] (PLAY/PAUSE) buttons flashes, indicating the standby status.

3 Start recording.

You can start recording by playing the keyboard, starting a Style, playing a Multi Pad or pressing the SONG [▶/||] (PLAY/PAUSE) button.



4 After you finish your performance, press the SONG [■] (STOP) button to stop recording.



A message may appear prompting you to save the recorded data. Press the [EXIT] button to close the message.

NOTE

To cancel the recording, press the [■] (STOP) button before going on to step 3.

NOTE

You can use the metronome (page 37) while recording; however, the metronome sound will not be recorded.

- 5 Press the SONG [▶/||] (PLAY/PAUSE) button to play back the recorded performance.



- 6 Save the recorded performance as a Song.

- 6-1 Press the SONG [SELECT] button to call up the Song Selection display.
- 6-2 Save the recorded data as a file by following the instructions on page 28.

NOTICE

The recorded Song will be lost if you change to another Song or you turn the power off without carrying out the Save operation.

Recording a specific part

In place of step 2, pressing the SONG [TR1] (or [TR2]) button while holding the [REC] button enables you to record only the right-hand (or left-hand) part.

Pressing the [EXTRA TR] button while holding the [REC] button enables recording of only Style and Multi Pad playback.

Recording Each Channel Individually (Multi Track Recording)

You can create a Song consisting of 16 channels by recording your performance to each channel one by one. In recording a piano piece, for example, you can record the right-hand part to channel 1 then record the left-hand part to channel 2, allowing you to create a complete piece which may be difficult to play live with both hands together. To record a performance with Style playback, for example, record the Style playback to channels 9 – 16, then record melodies to channel 1 while listening to the already recorded Style playback.

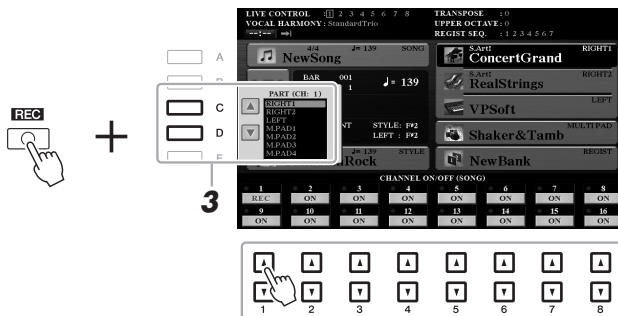
Before recording, make the necessary settings such as Voice/Style selection.

- 1 Press the SONG [REC] button and the [■] (STOP) button simultaneously.

A blank Song for recording is automatically set, and the Song name on the Main display (page 24) is set to “NewSong.”

- 2 While holding down the SONG [REC] button, press the appropriate [1 ▲▼] – [8 ▲▼] buttons to set the desired channels to “REC.”

To cancel the REC status of the channel, press the desired channel button.



- 3 Use the [C]/[D] buttons to change the part assignment for the channel to be recorded.

NOTE

To cancel the recording, press the [■] (STOP) button before going on to step 4.

4 Start recording.

You can start recording by playing the keyboard, starting a Style, playing a Multi Pad or pressing the SONG [▶/■] (PLAY/PAUSE) button.



5 After you finish your performance, press the SONG [■] (STOP) button to stop recording.

A message may appear prompting you to save the recorded data. Press the [EXIT] button to close the message.

6 Press the SONG [▶/■] (PLAY/PAUSE) button to play back the recorded performance.

7 Record your performance to another channel by repeating steps 2 to 6 above.

8 Save the recorded performance as a Song.

8-1 Press the SONG [SELECT] button to call up the Song Selection display.

8-2 Save the recorded data as a file by following the instructions on page 28.

NOTE

The Style Retrigger function (page 40) cannot be used when you are overdubbing to existing data.

NOTICE

The recorded Song will be lost if you change to another Song or you turn the power off without carrying out the Save operation.

Advanced Features

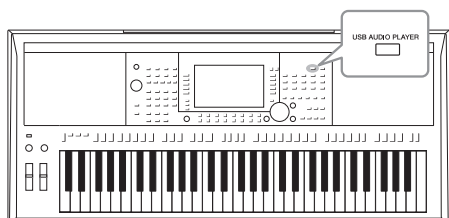
Refer to the Reference Manual on the website, **Chapter 3**.



Editing Music Notation settings:	[SCORE] → [1 ▲▼] – [8 ▲▼] buttons
Editing Lyrics/Text display settings:	[LYRICS/TEXT] → [1 ▲▼] – [8 ▲▼] buttons
Using the Auto Accompaniment features with Song Playback:	SONG [■] + [▶/■] → [ACMP] → STYLE CONTROL [SYNC START] → STYLE CONTROL [START/STOP]
Song Playback related parameters:	[FUNCTION] → TAB [◀] MENU 1 → [H] SONG SETTING
• Keyboard and vocal practice using the Guide function:	→ TAB [◀] GUIDE/CHANNEL
• Playing backing parts with the Performance Assistant Technology:	→ TAB [▶] OTHERS → [6 ▲▼]/[7 ▲▼] P.A.T.
Creating/Editing Songs (Song Creator):	[FUNCTION] → TAB [▶] MENU 2 → [B] SONG CREATOR
• Recording melodies (Step Recording):	→ TAB [◀][▶] 1-16
• Recording chords (Step Recording):	→ TAB [◀][▶] CHORD
• Selecting the setup parameters recorded to the top position of the Song	→ TAB [◀][▶] SETUP
• Re-recording a specific section — Punch In/Out:	→ TAB [◀] REC MODE
• Editing channel events:	→ TAB [◀][▶] CHANNEL
• Editing chord events, notes, System Exclusive events and lyrics:	→ TAB [◀][▶] CHORD, 1-16, SYS/EX. or LYRICS

USB Audio Player/Recorder

– Playing Back and Recording Audio Files –



The convenient USB Audio Player/Recorder function allows you to play back audio files (WAV or MP3) saved to a USB flash drive — directly from the instrument. Moreover, since you can record your performances and recordings as audio files (WAV) to a USB flash drive, it is possible to play back the files on computer, share them with your friends, and record your own CDs to enjoy as well.

NOTE

For instructions on playback and recording of MIDI Songs, refer to page 62.

Playing Back Audio Files

You can play back audio files saved to the USB flash drive in the following formats.

- **WAV**44.1 kHz sample rate, 16 bit resolution, stereo
- **MP3**MPEG-1 Audio Layer-3: 44.1/48.0 kHz sample rate, 64 – 320 kbps with variable bit rate, mono/stereo

1 Connect the USB flash drive containing the audio files to the [USB TO DEVICE] terminal.

2 Press the [USB AUDIO PLAYER] button to call up the USB AUDIO PLAYER display.



3 Press the [H] (FILES) button to call up the Audio File Selection display.

NOTE

DRM (Digital Rights Management) protected files cannot be played back.

NOTE

Before using a USB flash drive, be sure to read "Connecting USB Devices" on page 100.

NOTE

While selecting the desired audio file (WAV) in the Audio Link Multi Pad function (step 5 on page 78), the [USB AUDIO PLAYER] button does not function.

4 Press one of the [A] – [J] buttons to select the desired file.



NOTE

Audio files take a slightly longer time to load than other files.

Viewing Audio file information

Pressing the [6 ▼] (INFO) button calls up the Information window which you can view the file name, path, sample rate etc. of the selected red-framed file.

NOTE

Make sure that MENU 1 is shown at the bottom right corner of the display (page 26).

To close the window, press the [F] (OK) button.

5 Press the [7 ▼] (AUDIO PLAY) button to start playback.

The display automatically returns to the USB AUDIO PLAYER display.

6 To stop playback, press the [2 ▲▼] (STOP) button.



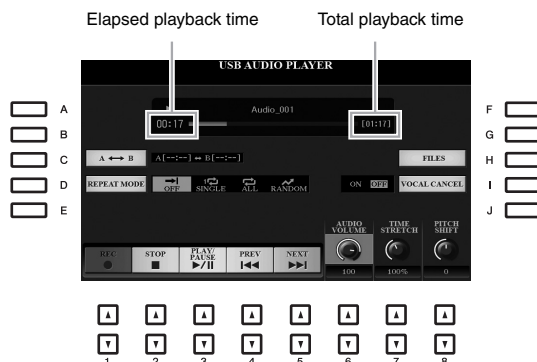
NOTE

Make sure that MENU 1 is shown at the bottom right corner of the display (page 26).

NOTICE

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

Playback-related Operations



[2 ▲▼]	STOP	Stops playback.
[3 ▲▼]	PLAY/PAUSE	Starts or pauses playback at the current position.
[4 ▲▼]	PREV	Pressing this selects the previous file; holding it moves continuously back through the current file (in seconds).
[5 ▲▼]	NEXT	Pressing this selects the next file; holding it moves continuously forward through the current file (in seconds).
[6 ▲▼]	AUDIO VOLUME	Adjusts the volume of the current audio file. NOTE The volume balance between the Song playback and audio file playback can be adjusted via the [BAL.] button. For instructions, refer to page 74.
[7 ▲▼]	TIME STRETCH	Adjusts the playback speed by stretching/compressing the audio, compared to an original speed of 100%. Higher values result in a faster tempo. NOTE • The value can be adjusted from 70% to 160%. • Time Stretch cannot be applied to MP3 files of 48.0 kHz sample rate.
[8 ▲▼]	PITCH SHIFT	Shifts the pitch between -12 and 12 in semitone steps. NOTE Pitch Shift cannot be applied to MP3 files of 48.0 kHz sample rate.
[I]	VOCAL CANCEL	Cancels or attenuates the center position of the stereo sound. This lets you sing “karaoke” style with just instrumental backing, since the vocal sound is usually at the center of the stereo image in most recordings.





A-B Repeat Playback via the [C] (A↔B) button

The specified section (between the A and B points) can be played back repeatedly.

- To set the A point, press the [C] button when playback reaches to the desired point.
The time set as the A point is shown in at “A [---]” in the display, and is indicated by the first wedge mark in the playback progress bar.
- To set the B point, press the [C] button again when playback reaches to the desired point.
The time set as the B point is shown in at “B [---]” in the display, and is indicated by the second wedge mark in the playback progress bar.
The specified A-B section of the audio file will now play back repeatedly.
- To cancel Repeat playback, press the [C] button again.

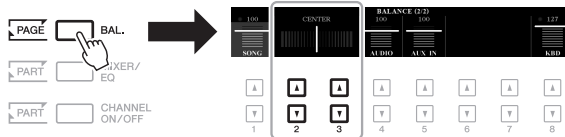


Repeat Playback mode via the [D] (REPEAT MODE) button

-  **Off**Plays through the selected file, then stops.
-  **Single**.....Plays through the selected file repeatedly.
-  **All**.....Continues playback through all the files in the current folder repeatedly.
-  **Random** Randomly and repeatedly plays back all files in the current folder.

Adjusting the Volume Balance Between Song and Audio Playback

Pressing the [BAL.] button once or twice calls up the BALANCE (2/2) display. In this display, you can adjust the volume balance between the Song (MIDI) and Audio by using the [2 ▲▼] – [3 ▲▼] buttons. When this is set to CENTER, the levels of the Song and Audio are equal. To instantly reset the balance to CENTER, press the [2 ▲] and [3 ▲] (or [2 ▼] and [3 ▼]) buttons simultaneously.



NOTE

For more information on the BALANCE displays, refer to page 57.

Recording Your Performance as Audio

You can record your performance as an audio file (WAV format — 44.1 kHz sample rate, 16 bit resolution, stereo) directly to a USB flash drive.

Sounds that can be recorded:

- Sounds that are generated via all the keyboard parts (LEFT, RIGHT 1, 2), Song parts, Style parts, and Multi Pad parts.
- Sounds of a portable audio player that are input via the [AUX IN] jack.
- Sounds of a microphone or guitar that are input via the [MIC/GUITAR INPUT] jack.

Maximum amount of recording time:

- 80 minutes per recording, though this may differ depending on the capacity of the USB flash drive.

1 Connect the USB flash drive to the [USB TO DEVICE] terminal.

2 Make the necessary settings such as Voice/Style selection and the microphone connection (if you want to record your vocal).

NOTE

Before using a USB flash drive, be sure to read "Connecting USB Devices" on page 100.

NOTE

If you want to record various parts separately or edit the data after recording on this instrument, record as MIDI files (page 68).

NOTE

Data that cannot be recorded includes: Songs protected by copyright (such as Preset Songs) and the metronome sound.

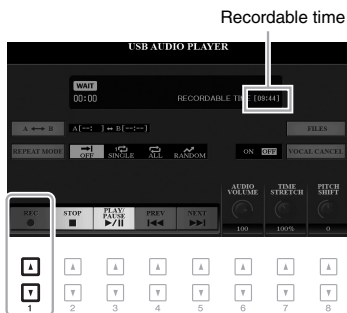
- Press the [USB AUDIO PLAYER] button to call up the USB AUDIO PLAYER display.



NOTE

The USB flash drive of "USB1" is selected as the recording destination when multiple USB flash drives are connected.

- Use the [1 ▲▼] (REC) buttons to enter recording standby. The [PLAY/PAUSE] button in the display flashes.

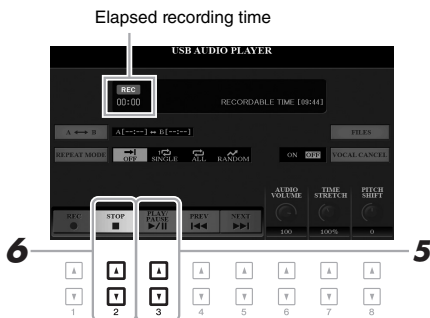


NOTE

You can use the metronome (page 37) while recording; however, the metronome sound will not be recorded.

- Start recording by using the [3 ▲▼] (PLAY/PAUSE) buttons, then start your performance.

The elapsed recording time is shown in the display while recording.



NOTICE

Do not attempt to disconnect the USB flash drive or turn the power off during recording. Doing so may corrupt the USB flash drive data or the recording data.

- After you finish your performance, use the [2 ▲▼] (STOP) buttons to stop recording.

Recorded data is automatically saved to the USB flash drive as a file with the name automatically set.

- Use the [3 ▲▼] (PLAY/PAUSE) buttons to play back the recorded performance.

To see the file of the recorded performance in the File Selection display, press the [H] (FILES) button.

NOTE

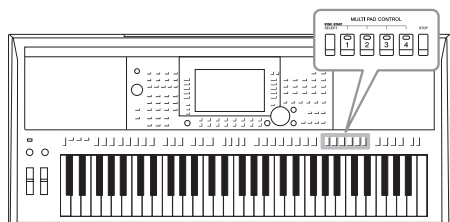
The recording operation continues, even if you close the USB AUDIO PLAYER display by pushing the [EXIT] button. Press the [USB AUDIO PLAYER] button to call up the USB AUDIO PLAYER display again, then stop the recording by pressing the [2 ▲▼] (STOP) button.

NOTE

Keep in mind that if you make a mistake in your performance, you cannot correct it by overwriting an existing file. Delete the recorded file on the File Selection display, then record your performance again.

Multi Pads

– Adding Musical Phrases to Your Performance –



The Multi Pads can be used to play a number of short pre-recorded rhythmic and melodic sequences adding impact and variety to your keyboard performances.

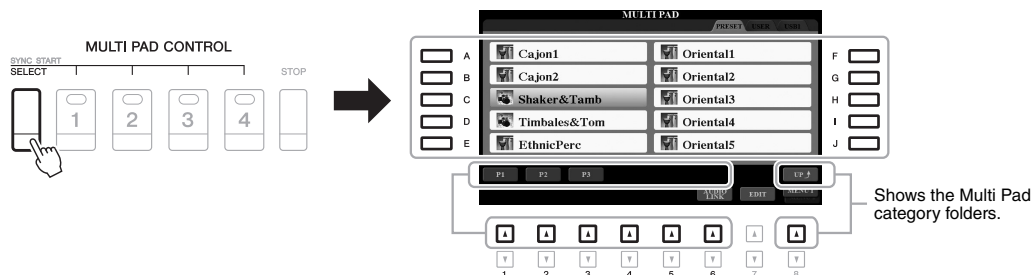
Multi Pads are grouped in Banks of four each. The instrument features a variety of Multi Pad Banks in a variety of different musical genres.

Moreover, the Audio Link Multi Pad function allows you to create a new pad with your audio data (WAV files) to play back during your performance.

Playing the Multi Pads

This section covers how to play back only Multi Pads. However, you can also play the Multi Pads during playback of a Style/Song to make your performance more interesting.

- 1 Press the **MULTI PAD CONTROL [SELECT]** button to call up the Multi Pad Bank Selection display.



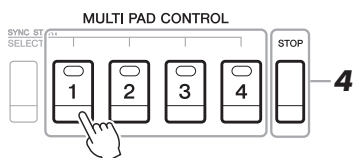
- 2 Press one of the **[A] – [J]** buttons to select the desired bank.

You can call up the other pages by pressing the buttons that correspond to the page numbers (P1, P2 ...) or pressing the **MULTI PAD CONTROL [SELECT]** button repeatedly.

Press the **[8 ▲] (UP)** button to call up the next higher level folder to which the Multi Pads are categorized.

- 3 Press any of the **MULTI PAD CONTROL [1] – [4]** buttons to play a Multi Pad phrase.

The corresponding phrase for the button starts playing back in its entirety at the currently set tempo. You can play up to four Multi Pads at the same time.



NOTE

There are two types of Multi Pad data. Some types will play back once and stop when they reach to the end. Others will be played back repeatedly (loop).

NOTE

Pressing the pad during its playback will stop playing and begin playing from the top again.

4 Press the [STOP] button to stop playback of the Multi Pad(s).

If you want to stop specific pads, simultaneously hold down the [STOP] button and press the pad(s) you wish to stop.

About the lamp status of the MULTI PAD CONTROL [1] – [4] buttons

- **Green:** Indicates that the corresponding pad contains data (phrase).
- **Red:** Indicates that the corresponding pad is playing back.
- **Red (flashing):** Indicates that the corresponding pad is in standby (Synchro Start; see below).
- **Off:** Indicates the corresponding pad contains no data and cannot be played.

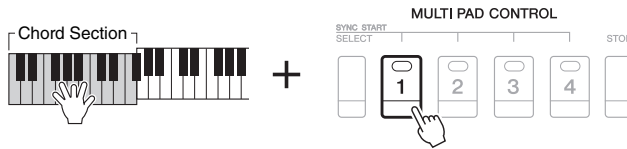
NOTE

- While the Style or Song is playing back, pressing the Multi Pad button starts playback at the top of the next measure. When the Style or Song is stopped, pressing the Multi Pad button starts playback immediately.
- While the Style or Song is playing back, pressing the STYLE CONTROL [START/STOP] or SONG [■] (STOP) button also stops playback of the Multi Pad(s). While both the Style and SONG is playing back, pressing the SONG [■] (STOP) button stops playback of the Song, Style and Multi Pad(s).

Using Chord Match

When the [ACMP] or LEFT part is on, Multi Pad phrases automatically change the pitch to match the chord you play in the chord section.

Play the chord in the chord section before/after pressing any of the Multi Pads.



NOTE

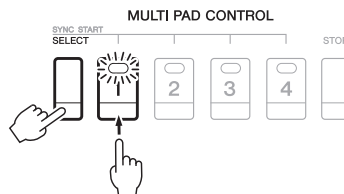
- Some Multi Pads are not affected by Chord Match.
- The Multi Pads categorized in the “DJ Phrase” folder are specially created for DJ Styles (page 49), and only the root key can be changed.

Using the Multi Pad Synchro Start Function

You can start Multi Pad playback by playing the keyboard or by starting Style playback.

1 While holding the MULTI PAD CONTROL [SELECT] button, press the desired button or buttons from [1] – [4].

The corresponding buttons flash in red, indicating the standby status.



NOTE

To cancel the standby status of the selected Pad, carry out the same operation, or simply press the [STOP] button to cancel the status of all Pads.

2 Start playback of the Multi Pad.

- When [ACMP] is off, press any note, or play back a Style.
- When [ACMP] is on, play a chord in the chord section, or play back a Style.

If you put a Multi Pad in standby during Style or Song playback, pressing any note (when [ACMP] is off) or playing a chord in the chord section (when [ACMP] is on) will start Multi Pad playback at the top of the next measure.

NOTE

When two or more Multi Pads are in the standby status, pressing any one of them starts simultaneous playback of all of them.

Creating a Multi Pad with Audio files (Audio Link Multi Pad)

You can create a new Multi Pad by making links with audio files (WAV format: 44.1 kHz sample rate, 16 bit resolution) in the USB flash drive to each of the Multi Pad. The audio files (WAV) can be data you've recorded on this instrument (page 71) as well as commercially available ones. Multi Pads to which audio files have been linked are called Audio Link Multi Pads. The new Audio Link Multi Pads can be saved to the USER drive or USB flash drive.

- 1** Connect the USB flash drive containing the audio files (WAV) to the [USB TO DEVICE] terminal.
- 2** Press the MULTI PAD CONTROL [SELECT] button to call up the Multi Pad Bank Selection display.
- 3** Press the [6 ▼] (AUDIO LINK) button to call up the AUDIO LINK MULTI PAD display.

A confirmation message may appear here. If so, follow the on-display instructions.

NOTE

Audio Link Multi Pads can neither be created nor played back during playback, recording standby or recording of audio files.

NOTE

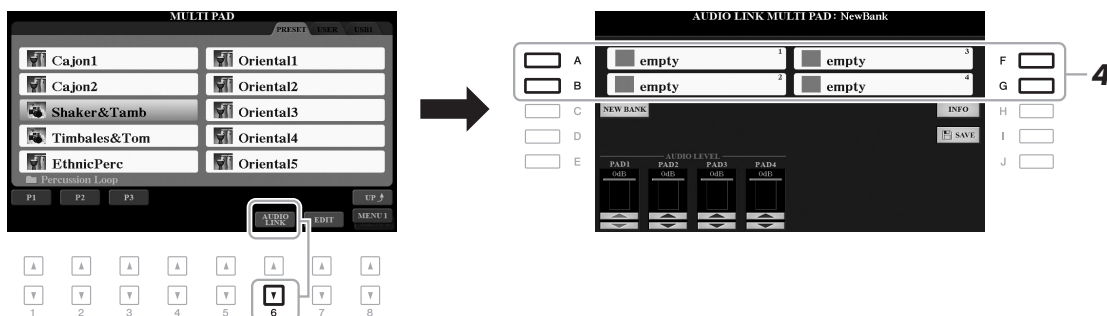
Before using a USB flash drive, be sure to read "Connecting USB Devices" on page 100.

NOTE

Make sure that MENU 1 is shown at the bottom right corner of the display (page 26).

NOTE

An audio file cannot be linked to a MIDI Multi Pad.



- 4** Select the desired Pad by pressing any of the [A], [B], [F] and [G] buttons.

The WAVE File Selection display appears.

- 5** Select the desired audio file by using the [A] – [J] buttons.

To confirm the information of the selected audio file

By pressing the [6 ▼] (INFO) button in the WAVE File Selection display, you can confirm the information (title name, bit rate and sample rate, etc.). Press the [F] (OK) button to close it.

NOTE

If an Audio Link Multi Pad has been selected when you press the [6 ▼] (AUDIO LINK) button in step 3, the links made for the selected Pad appear. In order to create a new Pad, make sure to press the [C] (NEW BANK) button. Otherwise, you are simply re-selecting the link in the selected Pad.

- 6** Press the [EXIT] button to return to the AUDIO LINK MULTI PAD display.

To confirm the path of the selected audio file

By pressing the [H] (INFO) button in the AUDIO LINK MULTI PAD display, you can confirm the path. Press the [F] (OK) button to close it.

7 If you want to link other audio files to other pads, repeat steps 4 to 6.

8 If desired, adjust the volume of each audio file by using the [1 ▲▼] – [4 ▲▼] buttons.

By pressing the desired MULTI PAD CONTROL [1] – [4] button, you can adjust the volume while playing the Multi Pad phrase.

9 Save the settings as a Multi Pad Bank.

9-1 Press the [I] (SAVE) button in the AUDIO LINK MULTI PAD display to call up the Multi Pad Bank Selection display.

9-2 Save the settings as a bank file by following the instructions on page 28.

NOTICE

The setting will be lost if you select another Audio Link Multi Pad or turn the power to the instrument off without carrying out the Save operation.

10 Press the [EXIT] button to check the new Audio Link Multi Pad in the Multi Pad Bank Selection display.

The newly created Audio Link Multi Pad is marked with “Audio Link” at the upper left of the file name.

If you want to change the Link setting:

Select the desired Audio Link Multi Pad, then carry out the same operations as in steps 3 to 10.

Playing the Audio Link Multi Pads

You can play the Multi Pad to which the audio file is assigned by selecting them in the USER or USB tab of the Multi Pad Bank Selection display. Although you can play them via the same operations in page 76, note the following limitations.

- Make sure to connect the USB flash drive including the corresponding audio files (WAV).
- Automatic repeat playback is not available.
- Only one Pad can be played back at once.
- Chord Match cannot be applied.

NOTE

Audio files (WAV) take a slightly longer time than MIDI files to load.

Advanced Features

Refer to the Reference Manual on the website, **Chapter 5**.



Creating Multi Pads (Multi Pad Creator):

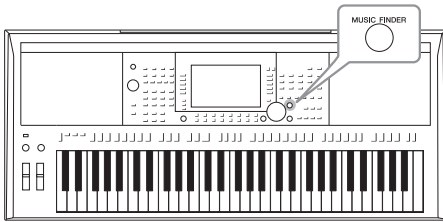
[FUNCTION] → TAB [▶] MENU 2 → [C] MULTI PAD CREATOR

Editing Multi Pads:

Multi Pad Bank Selection display → [7 ▼] (EDIT)

Music Finder

– Calling Up Ideal Panel Setups for Your Performance –



This feature helps you call up the panel settings ideal for the music you want to play simply by selecting a Music Finder “Record,” which includes Voice and Style settings. If you want to play a certain piece of music but don’t know which Style and Voice settings would be appropriate, you can search for relevant Records by the title of the piece.

Moreover, by registering the Song, audio and Style file saved in various locations into Music Finder, you can easily call up the desired file from the corresponding Record.

Selecting the Desired Record (Panel Settings)

1 Press the [MUSIC FINDER] button to call up the MUSIC FINDER display.

As necessary, select the tab by using the TAB [◀][▶] buttons.

- **ALL**.....All Music Finder Records
- **FAVORITE**.....Favorite Records you’ve added (for details, refer to the Reference Manual on the website)
- **SEARCH 1, 2** Search result (page 81)

Each entry is called a “Record.” This shows the song titles (MUSIC) and information of the Styles included.

MUSIC	STYLE	BEAT	TEMPO
A Musical Joke	Pop/Classica	4/4	124
Albino With Me	Classi/Piano/Id	4/4	72
Alde Trumsh March	Orchestra/March	4/4	112
Air On The G String	Baroque/Air	4/4	69
Air On The G String	Chillout	4/4	68
Air On The G String	Classi/Piano/Id	4/4	68
Aloha Oe	Hawaiian	4/4	102
Amazons	Disco/Cont/Pop	4/4	138
Amazons	Rumba	4/4	112
Amazing Grace	(SONG)		
Amish Polka	Part/Polka	4/4	116
American Patrol	BigBand/Part2	4/4	186
An Der Schonen Elisen Donau	Viennese/Waltz	3/4	174
Any Old Iron	Pub/Blues	4/4	116

2 Use the [2 ▲▼]/[3 ▲▼] buttons to select the desired Record.

You can also use the Data dial and the [ENTER] button.

The panel settings in the Record are called up. When the Record including the Style name is selected, the [ACMP] and [SYNC START] buttons are turned on and the corresponding Style is called up. This lets you start Style playback immediately.

Sorting the Records

Press the [F] (SORT BY) button repeatedly if necessary to change how the Records are sorted: by MUSIC (music piece), STYLE, BEAT or TEMPO. Press the [G] (SORT ORDER) button to alternate the order, ascending or descending.

When sorting the Records by MUSIC, you can use the [1 ▲▼] button to skip up or down through the Song names alphabetically. When sorting the Records by STYLE, you can use the [4 ▲▼]/[5 ▲▼] button to skip up or down through the Style names alphabetically. Simultaneously press the [▲] and [▼] buttons to move the cursor to the first Record.

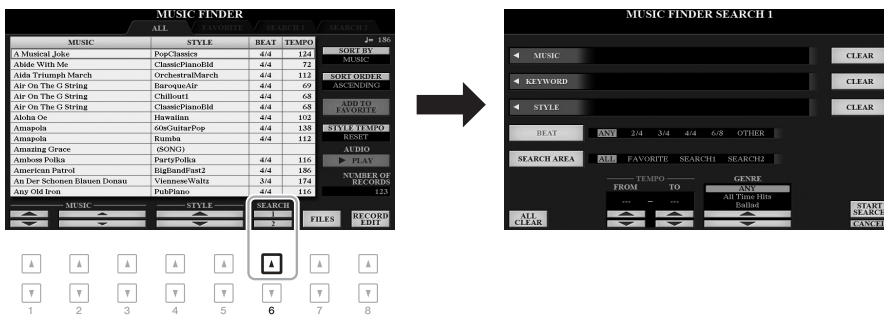
3 Start playback of the Style by specifying the chords in the chord section.

To avoid changing the tempo during Style playback when selecting another Record
 Press the [I] (STYLE TEMPO) button to set the “STYLE TEMPO” to “HOLD” or “LOCK.” When set to “LOCK,” the tempo will be locked while stopping as well as playing. If you want to reset the tempo every time you select another Record, set to “RESET.”

Searching for Records (Panel Settings)

You can search the Records by specifying a song title or keyword, using the Search function of the Music Finder.

1 In the MUSIC FINDER display, press the [6 ▲] (SEARCH 1) button to call up the MUSIC FINDER SEARCH 1 display.



2 Enter the search criteria.

[A]	MUSIC	Calls up the Character Entry window (page 32) to enter the song title. To clear the entered title, press the corresponding [F] (CLEAR) button.
[B]	KEYWORD	Calls up the Character Entry window (page 32) to enter the keyword. To clear the entered keyword, press the corresponding [G] (CLEAR) button.
[C]	STYLE	Calls up the Style Selection display (page 48). After selecting the Style by the [A] – [J] buttons, press the [EXIT] button to return to the SEARCH 1 display. To clear the entered Style name, press the corresponding [H] (CLEAR) button.
[D]	BEAT	Specifies the time signature for the search. All beat settings are included in the search if you select ANY.
[E]	SEARCH AREA	Selects a specific location (the tab of the upper part of the MUSIC FINDER display) for searching.
[1 ▲▼]	ALL CLEAR	Clears all entered search criteria.
[3 ▲▼]	TEMPO FROM	Sets the range of the tempo you want to use for the search.
[4 ▲▼]	TEMPO TO	
[5 ▲▼]/ [6 ▲▼]	GENRE	Selects the desired music genre.

NOTE

If you want to input two or more keywords, insert a comma between each word.

NOTE

If you select a beat of 2/4 or 6/8, a Style suitable for performing a song in 2/4 and 6/8 beat can be searched, but the actual Style is created by using a 4/4 beat.

NOTE

To cancel searching, press the [8 ▼] (CANCEL) button.

3 Press the [8 ▲] (START SEARCH) button to start the search.

After the Search is completed, the resulting Records appear in the SEARCH 1 tab of the MUSIC FINDER display. If no Records are listed, try steps 1 – 3 again with another song title or keyword.

4 Use the [2 ▲▼]/[3 ▲▼] buttons to select the desired Record.

5 Start playback of the Style by specifying the chords in the chord section.

NOTE

If you want to maintain the current search results and start another search, use the [6 ▼] (SEARCH 2) button in step 1. (The current search Records will remain in the SEARCH 1 tab.)

Downloading Records (Panel Settings) from the Website

As a factory default, some sample Records are provided in the Music Finder. To use the Music Finder function more conveniently and effectively, we recommend that you download the Records from the Yamaha website, and load them to this instrument.

1 On the computer, access the following website and download the Music Finder file (***.mfd) to the USB flash drive connected to a computer.

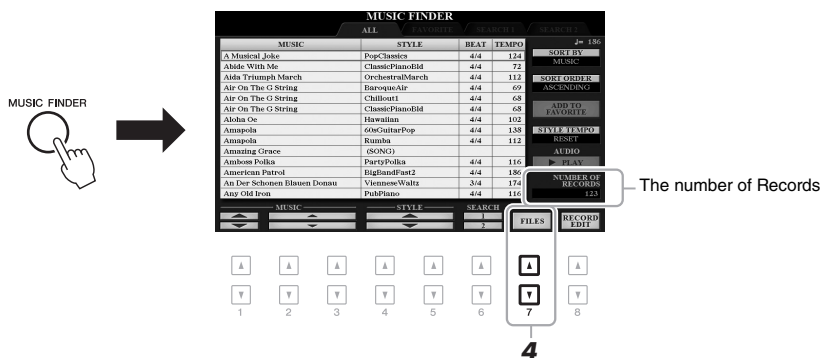
<http://download.yamaha.com/>

2 Connect the USB flash drive which contains the Music Finder file (***.mfd) to the [USB TO DEVICE] terminal of the instrument.

3 Press the [MUSIC FINDER] button to call up the MUSIC FINDER display.

NOTE

Before using a USB flash drive, be sure to read "Connecting USB Devices" on page 100.



4 Use the [7 ▲▼] (FILES) buttons to call up the File Selection display.

5 Select the Music Finder file in the USB flash drive by pressing the [A] – [J] buttons to call up a message prompting you to select REPLACE or APPEND.

6 Press the [H] (APPEND) button if you want to add Records of the selected Music Finder file, or press the [G] (REPLACE) button if you want to replace all Records with the new ones.

7 When confirmation messages appear, follow the on-display instructions.

You can confirm the Records that have been appended by checking the number of Records in the right lower corner of the display.

NOTE

Even after appending or replacing the Music Finder Records, you can reset them to their original factory settings by selecting the "MusicFinderPreset" file in PRESET tab of step 5.

Registering a Song, Audio or Style File to a Record

By registering Song, audio or Style files in various locations (PRESET, USER and USB) into Music Finder, you can easily call up your favorite files.

1 In the Song, Audio or Style Selection display, select the desired file.

For instructions on Songs, refer to page 62; for audio, page 71; and for Styles, page 48.

NOTE

- If you want to register files in the USB flash drive, connect the USB flash drive containing the data to the [USB TO DEVICE] terminal.
- Before using a USB flash drive, be sure to read "Connecting USB Devices" on page 100.



2 Press the [5 ▼] (ADD TO MF) button to call up the MUSIC FINDER RECORD EDIT display.

NOTE

Make sure that MENU 1 is shown at the bottom right corner of the display (page 26).

3 Press the [8 ▲] (OK) button to register the file.

NOTE

For details on the MUSIC FINDER RECORD EDIT display, refer to the Reference Manual on the website.

4 Check that the registered Record is shown in the MUSIC FINDER display.

In the STYLE column of the Record, the Song is registered as "(SONG)," the audio file as "(AUDIO)" and the Style is registered according to its Style name.

NOTE

To cancel the operation, press the [8 ▼] (CANCEL) button.

NEXT PAGE

6

Music Finder – Calling Up Ideal Panel Setups for Your Performance –

Calling up the Song, Audio or Style registered to Music Finder

You can call up the registered Song, Audio or Style in the same way as done in the sections “Selecting the Desired Record” (page 80) and “Searching for Records” (page 81).

The selected file can be played back as follows.

- **Song:** Press the SONG [▶/||] (PLAY/PAUSE) button or play the keyboard. To stop playback, press the SONG [■] (STOP) button.
- **Audio:** Press the [J] (▶ PLAY) button in the MUSIC FINDER display. To stop playback, press the [J] (■ STOP) button.
- **Style:** Specify the chords with your left hand and play the melody with your right hand. To stop playback, press the STYLE CONTROL [START/STOP] button.

NOTE

If you want to play back a Song, audio or Style file in the USB flash drive that has been registered as a Record, make sure to connect the same USB flash drive to the [USB TO DEVICE] terminal.

NOTE

When searching for Songs or audio files (page 81), it is necessary to set the search criteria as follows.

STYLE: Blank
BEAT: ANY
TEMPO: "----" - "----"

Advanced Features

Refer to the Reference Manual on the website, **Chapter 6**.



Creating a set of favorite Records:

[MUSIC FINDER] → TAB [◀|▶] ALL, SEARCH 1 or SEARCH 2 → [H] ADD TO FAVORITE

Editing Records:

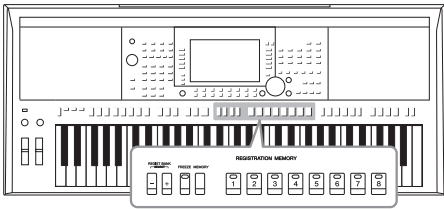
[MUSIC FINDER] → [8 ▲▼] (RECORD EDIT)

Saving the Record as a single file:

[MUSIC FINDER] → [7 ▲▼] (FILES)

Registration Memory

– Saving and Recalling Custom Panel Setups –



The Registration Memory function allows you to save (or “register”) virtually all panel settings to a Registration Memory button, and then instantly recall your custom panel settings by simply pressing a single button. The registered settings for eight Registration Memory buttons are saved as a single Bank (file).

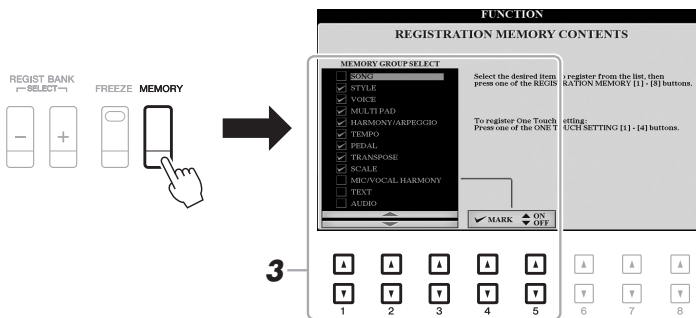
Registering Your Panel Setups

1 Make the desired panel settings, such as those for Voices, Styles and Effects.

For information on the panel settings that can be registered with the Registration Memory function, refer to the Registration section of the “Parameter Chart” in the Data List on the website.

2 Press the [MEMORY] button in the REGISTRATION MEMORY section.

The display for selecting the groups to be registered appears.



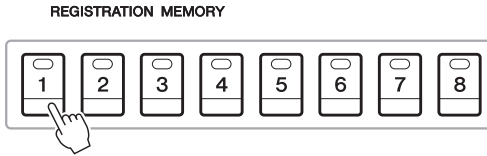
3 Determine the groups you want to register.

Select the desired item by using the [1 ▲▼] – [3 ▲▼] buttons, then enter or remove the checkmark by using the [4 ▲]/[5 ▲] (MARK ON)/[4 ▼]/[5 ▼] (MARK OFF) buttons.

NOTE

You can also use the Data dial to select items, and the [ENTER] button to enter or remove checkmarks.

- 4** Press one of the REGISTRATION MEMORY [1] – [8] buttons to which you wish to memorize the panel setup.



The memorized button becomes red, which indicates the number button contains data and its number is selected.

About the lamp status

- **Red:** Data registered and currently selected
- **Green:** Data registered but not currently selected
- **Off:** No data registered

- 5** Register various panel setups to other buttons by repeating steps 1 – 4.

The registered panel setups can be recalled by simply pressing the desired number button.

NOTICE

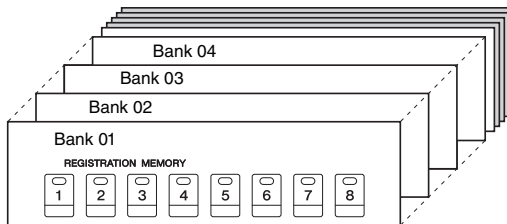
If you select the button whose lamp is lit in red or green here, the panel setup previously memorized to the button will be erased and replaced by the new settings.

NOTE

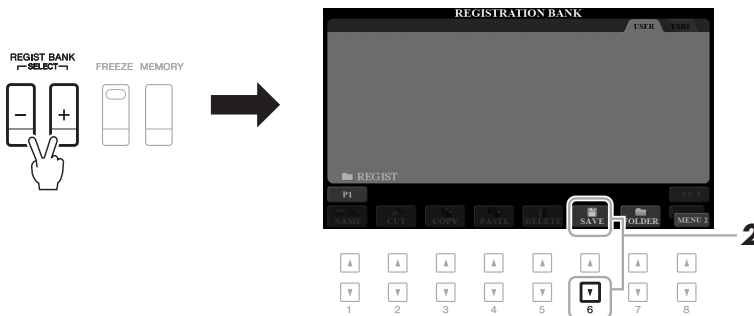
The panel setups registered in the numbered buttons are maintained even when you turn off the power. If you want to delete all the eight current panel setups, turn the power on while holding the B5 key (right-most B key on the keyboard).

Saving the Registration Memory as a Bank file

You can save all eight registered panel setups as a single Registration Memory Bank file.



- 1** Press the REGIST BANK [+/-] and [-] buttons simultaneously to call up the Registration Bank Selection Display.



- 2** Press the [6 ▼] (SAVE) button to save the Bank file.

For instructions on saving, refer to page 28.

NOTE

Make sure that MENU 2 is shown at the bottom right corner of the display (page 26).

Recalling a Registered Panel Setup

The saved Registration Memory Bank files can be recalled by using the REGIST BANK [-]/[+] buttons or the following procedure.

1 Press the REGIST BANK [+] and [-] buttons simultaneously to call up the REGISTRATION BANK Selection display.

2 Press one of the [A] – [J] buttons to select a Bank.

You can also use the REGIST BANK [-]/[+] buttons, or the Data dial and the [ENTER] button to select a Bank.

Confirming the Registration Memory Information

In the REGISTRATION BANK Selection display, press the [6 ▼] (INFO) button to call up the Information window, showing which Voices and Style are memorized to the [1] – [8] buttons of a Registration Memory Bank.

NOTE

Make sure that MENU 1 is shown at the bottom right corner of the display (page 26).

NOTE

If a Voice name is shown in gray, this indicates that the corresponding Voice part is turned off when pressing the REGISTRATION MEMORY [1] – [8] buttons.

To close the window, press the [F] (CLOSE) button.

3 Press one of the green-lit numbered buttons ([1] – [8]) in the Registration Memory section.

NOTE

- When recalling the setups including file selection of Song, Style, text, etc. from a USB flash drive, make sure that the appropriate USB flash drive including the registered Song/Style is connected into the [USB TO DEVICE] terminal.
- Before using a USB flash drive, be sure to read "Connecting USB Devices" on page 100.

NOTE

Turning the [FREEZE] button on lets you disable recall of specific item(s) as desired. For instructions, refer to the Reference Manual on the website.

Advanced Features

Refer to the Reference Manual on the website, **Chapter 7**.



Disabling recall of specific items (Freeze):

[FUNCTION] → TAB [◀] MENU 1 → [C] REGIST SEQUENCE/FREEZE → TAB [▶] FREEZE

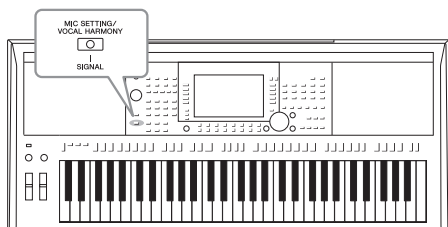
Calling up Registration Memory numbers in order (Registration Sequence):

[FUNCTION] → TAB [◀] MENU 1 → [C] REGIST SEQUENCE/FREEZE → TAB [◀] REGISTRATION SEQUENCE

7

Microphone/Guitar Input

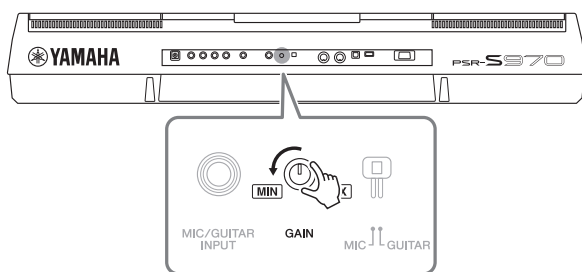
– Using a Microphone or Guitar with the Instrument –



By connecting a microphone to the [MIC/GUITAR INPUT] jack, you can enjoy singing along with your keyboard performance or with Song playback. The instrument outputs your vocals through the built-in speakers. Moreover, on the PSR-S970, you can automatically apply various Vocal Harmony effects to your voice as you sing, or you can use Synth Vocoder to graft the unique characteristics of your voice onto synthesizer and other sounds. You can also connect a guitar to the [MIC/GUITAR INPUT] jack, and output the sound from the speakers of the PSR-S970/S770.

Connecting a Microphone/Guitar

- 1 Before connecting a microphone or guitar, set the [GAIN] knob to the minimum position.



NOTE

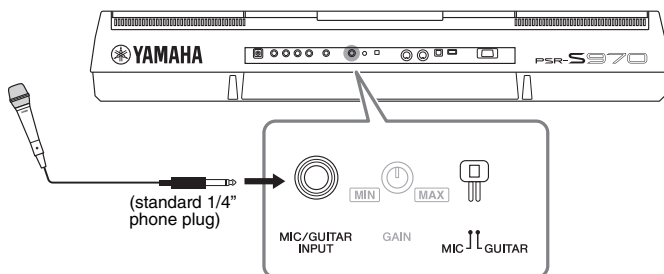
Make sure to use a conventional dynamic microphone.

NOTE

- When you are not using a microphone/guitar, disconnect the cable from the [MIC/GUITAR INPUT] jack.
- Always set the [GAIN] knob to minimum when nothing is connected to the [MIC/GUITAR INPUT] jack. Since the [MIC/GUITAR INPUT] jack is highly sensitive, it may pick up and produce noise even when nothing is connected.

- 2 Set the [MIC GUITAR] switch.

When connecting a microphone, set it to “MIC.” When connecting a guitar, set it to “GUITAR.”



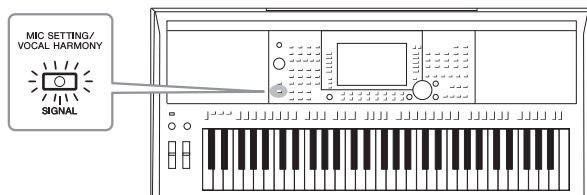
NOTE

When you use a guitar with active pickups, set the [MIC GUITAR] switch to “MIC,” since doing so can reduce noise.

- 3 Connect the microphone or guitar to the [MIC/GUITAR INPUT] jack.
- 4 Turn on the power of the instrument.

5 (If necessary, turn on the microphone.) Adjust the [GAIN] knob on the rear panel while singing into the microphone or playing the guitar.

Adjust the [GAIN] knob so that the SIGNAL lamp lights in green. Make sure that the lamp does not light in orange or red, since this indicates that the input level is too high.



NOTE

You can also see the input level on the MIC/GUITAR SETTING display called up by the [MIC SETTING/VOCAL HARMONY] (PSR-S970) or [MIC SETTING] (PSR-S770) button.

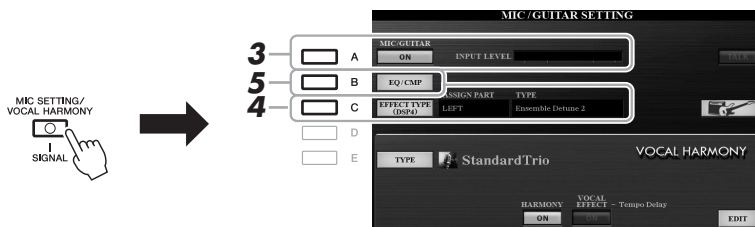
Disconnecting the microphone/guitar

1. Set the [GAIN] knob to the minimum position.
2. Disconnect the microphone/guitar from the [MIC/GUITAR INPUT] jack.

Setting Up for Using a Microphone/Guitar

1 Connect the microphone/guitar to the instrument (page 88).

2 Press the [MIC SETTING/ VOCAL HARMONY] (PSR-S970) or [MIC SETTING] (PSR-S770) button to call up the MIC/GUITAR SETTING display.



NOTE

Settings on the MIC/GUITAR SETTING display (with the exception of the EQ/CMP settings) can be memorized to the Registration Memory (page 85).

3 Press the [A] (MIC/GUITAR) button to set it to ON.

This lets you hear the input sound from the instrument when you talk/sing into the microphone or play the guitar.

4 If necessary, press the [C] (EFFECT TYPE) button to call up the EFFECT page of the MIXING CONSOLE display and select the effect type.

NOTE

For the microphone/guitar sound, the effect block should be set to DSP4. For details on the MIXING CONSOLE display, refer to the Reference Manual on the website, Chapter 9.

(PSR-S970)

4-1 Press the [B] button, then use the [1 ▲▼]/[2 ▲▼] buttons to select the effect category and use the [3 ▲▼]/[4 ▲▼] buttons to select the effect type.

4-2 Press the [EXIT] button to return to the MIC/GUITAR SETTING display.

(PSR-S770)

4-1 Use the [5 ▲▼]/[6 ▲▼] buttons to select the effect category then use the [7 ▲▼]/[8 ▲▼] buttons to select the effect type.

4-2 Press the [EXIT] button to return to the MIC/GUITAR SETTING display.

5 If necessary, press the [B] (EQ/CMP) button to call up the EQ/CMP SETTING display and make the EQ and compressor settings.

The appropriate settings for the use of microphone are provided by default. When you use a guitar, make sure to change the settings for optimum sound.

The displays below are examples of recommended settings for microphone and guitar.

NOTE

The microphone/guitar volume may change depending on the selected effect type.

NOTE

Pressing the [H] button lets you instantly reset the settings for optimum use of an electric guitar, as follows.

- [A] MIC/GUITAR: ON
- [F] TALK: OFF
- [4 ▲▼] HARMONY: OFF
- [5 ▲▼] VOCAL EFFECT: OFF
- [C] EFFECT TYPE: ASSIGN PART—MIC/GUITAR, TYPE—MultiDistBasic

Microphone settings (default settings)



Guitar settings



Make sure to save the microphone or guitar settings you made here to the internal memory via the [I] (USER MEMORY) button. Otherwise, the settings are not maintained and you need to make the same setups every time you use a microphone or a guitar.

For details, refer to the Reference Manual on the website.

6 Sing into the microphone or play the guitar.

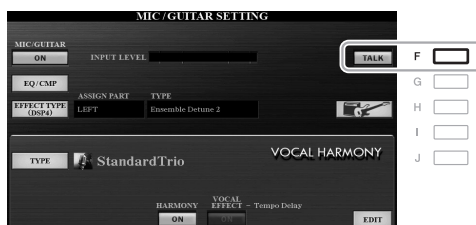
7 Adjust the volume balance between the microphone/guitar sound and the instrument sound on the BALANCE display (page 57).

NOTE

You can also adjust the microphone or the guitar volume by using the LIVE CONTROL knobs. For instructions on how to assign the functions to the knobs, refer to page 40.

Using the Talk function

Turning the Talk function on by pressing the [F] (TALK) button in the MIC/GUITAR SETTING display lets you instantly change the settings for talking. This is useful when you want to talk between songs during a performance.



NOTE

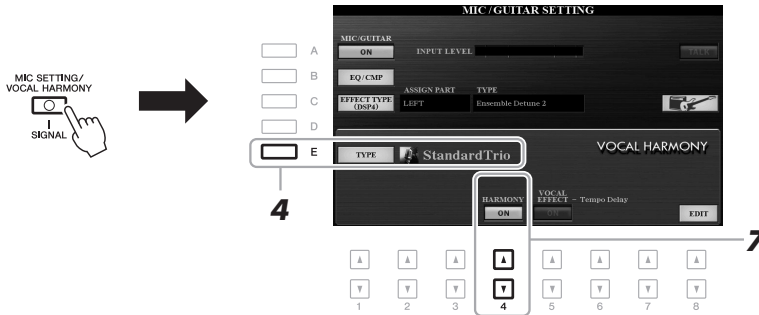
To get the most convenient use of this function, you can assign a foot pedal to turn the Talk function on/off during a performance. For details, refer to the Reference Manual on the website, Chapter 10.

You can also change the Talk settings to suit your preferences. For details, refer to the Reference Manual on the website.

Using Vocal Harmony (PSR-S970)

This section covers the Vocal Harmony Effects that can be applied to your voice via the microphone.




- 1 Connect the microphone to the instrument (page 88).
- 2 Press the [MIC SETTING/VOCAL HARMONY] button to call up the MIC/GUITAR SETTING display.



- 3 Make sure that the [A] (MIC/GUITAR) button is set to ON.
- 4 Press the [E] (TYPE) button to call up the Vocal Harmony Type Selection display.
- 5 Use the TAB [◀][▶] buttons to select the VOCAL HARMONY tab.
- 6 Press one of the [A] – [J] buttons to select the desired Vocal Harmony type.

To call up the other display pages for further selections, press one of the [1 ▲] – [5 ▲] buttons.

The Vocal Harmony features three different modes which can be selected automatically by selecting a Vocal Harmony type.

Icon	Mode	Descriptions
 (Microphone and man/woman)	Chordal	The harmony notes are determined by the chords you play in the chord section (with [ACMP] turned on), the left hand section (with [ACMP] turned off and [LEFT] turned on) or the chord data of a Song.
 (Microphone)		The harmony notes are determined in the same way as in Microphone above. However, effects such as Vocal Doubler and PokerPhaser are applied. Harmony may or may not be applied depending on the selected type. (If harmony is not applied, the [4 ▲▼] (HARMONY) buttons in the MIC/GUITAR SETTING display is set to OFF.)
 (Microphone and keyboard)	Vocoder	The microphone sound is output via the notes you play on the keyboard or via the Song play-back notes.
	Vocoder Mono	Same as the Vocoder mode basically. In this mode, only single-note melodies or lines can be played back (with last-note priority).

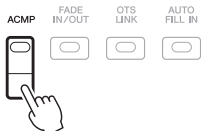
7 Make sure that the [4 ▲▼] (HARMONY) buttons in the MIC/GUITAR SETTING display is set to ON.

If necessary, use the [5 ▲▼] (VOCAL EFFECT) buttons to turn on the Vocal Harmony effect which can be set on the display called up via the [8 ▲▼] (EDIT) buttons. For details, refer to the Reference Manual on the website.

8 Follow the steps below, depending on which type (and mode) you selected.

If you selected one of the Chordal Types:

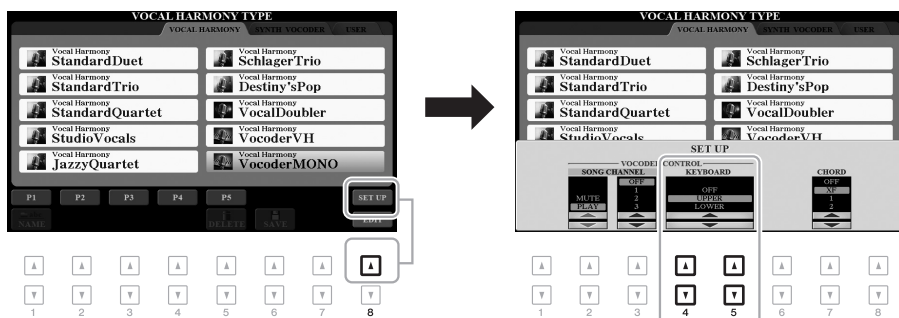
8-1 Turn the [ACMP] button on.



8-2 Play chords with your left hand, or play back the Song which contains chord data.
Vocal harmonies based on the chords are applied to your singing.

If you selected one of the Vocoder or Vocoder-Mono Types:

8-1 Call up the SET UP window in the Vocal Harmony Type Selection display by pressing the [8 ▲] button.



8-2

8-2 Use the [4 ▲▼]/[5 ▲▼] buttons to change the keyboard setting (OFF, UPPER, LOWER), if necessary.
Select UPPER to have the Vocoder effect applied by your right-hand-played part, LOWER to have it applied by your left-hand-played part, or OFF in order to not to have any Vocoder effect applied by your keyboard playing. For more information on the keyboard setting for controlling the Vocoder effect, refer to the Reference Manual on the website.

8-3 Play melodies on the keyboard or play back a Song, and sing into the microphone. You'll notice that you don't actually have to sing pitched notes. The microphone sound is output via the notes or note you play on the keyboard or Song playback.

NOTE

To return to the MIC/GUITAR SETTING display, press the [EXIT] button.

NOTE

You can adjust the volume balance between the sound input from the microphone and the Vocal Harmony effect by using the LIVE CONTROL knobs. For instructions on how to assign the functions to the knobs, refer to page 40.

NOTE

If you selected a Type having an "FX" icon, your voice will be processed with effects, but may not have harmonies applied.

NOTE

For Vocoder Types, the effect is applied to a maximum of three notes of the chord you play; for Vocoder-Mono, the effect is only applied to a single note (last note played).

Using Synth Vocoder (PSR-S970)

These are special effects that graft the characteristics of your voice input from the microphone onto synthesizer and other sounds, for unusual machine-like or robotic effects, as well as unique choir sounds, which you can control with your own singing and playing.

- 1 Carry out steps 1 – 4 in “Using Vocal Harmony” on page 91.
- 2 From the Vocal Harmony Type Selection display, use the TAB [◀][▶] buttons to select the SYNTH VOCODER tab.



- 3 Press one of the [A] – [J] buttons to select the desired Synth Vocoder type.

- 4 Make sure that the [4 ▲▼] (HARMONY) buttons in the MIC/GUITAR SETTING display is set to ON.

If necessary, use the [5 ▲▼] (VOCAL EFFECT) buttons to turn on the Vocal Harmony effect which can be set on the display called up via the [8 ▲▼] (EDIT) buttons. For details, refer to the Reference Manual on the website.

- 5 Try holding down a note on the keyboard and speak or sing into the microphone.

Also, try changing notes as you say/sing different words, hitting a separate note for each word.

NOTE

To return to the MIC/GUITAR SETTING display, press the [EXIT] button.

NOTE

You can change the keyboard setting (OFF/UPPER/LOWER), determining which part of the keyboard (or Song) controls the effect. See steps 8-1 and 8-2 on page 92.

Advanced Features

Refer to the Reference Manual on the website, **Chapter 8**.



Making the microphone/guitar settings:

(PSR-S970) [MIC SETTING/VOCAL HARMONY], **(PSR-S770)** [MIC SETTING] → [B] (EQ/CMP)

Saving the microphone/guitar settings:

(PSR-S970) [MIC SETTING/VOCAL HARMONY], **(PSR-S770)** [MIC SETTING] → [B] (EQ/CMP) → [H] (USER MEMORY) → [6 ▼] (SAVE)

(PSR-S970) Setting up the Vocal Harmony Control parameters:

[MIC SETTING/VOCAL HARMONY] → [E] (TYPE) → [8 ▲] (SET UP)

(PSR-S970) Editing the Vocal Harmony Types:

[MIC SETTING/VOCAL HARMONY] → [E] (TYPE) → TAB [◀] VOCAL HARMONY → (select a Vocal Harmony type) → [8 ▼] (EDIT)

- Editing the OVERVIEW tab parameters: → TAB [◀] OVERVIEW
- Editing the PART tab parameters: → TAB [◀][▶] PART
- Editing the DETAIL tab parameters: → TAB [▶] DETAIL

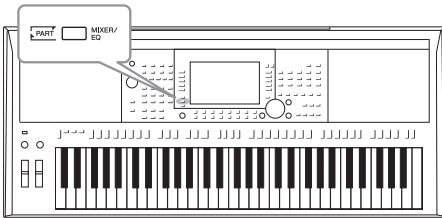
(PSR-S970) Editing the Synth Vocoder Types:

[MIC SETTING/VOCAL HARMONY] → [E] (TYPE) → TAB [◀][▶] SYNTH VOCODER → (select a Synth Vocoder type) → [8 ▼] (EDIT)

- Editing the OVERVIEW tab parameters: → TAB [◀] OVERVIEW
- Editing the DETAIL tab parameters: → TAB [▶] DETAIL

Mixing Console

– Editing the Volume and Tonal Balance –



The Mixing Console gives you intuitive control over aspects of the keyboard parts and Style/Song channels, including volume balance and the timbre of the sounds. It lets you adjust the levels and stereo position (pan) of each Voice to set the optimum balance and stereo image, and lets you set how the effects are applied.

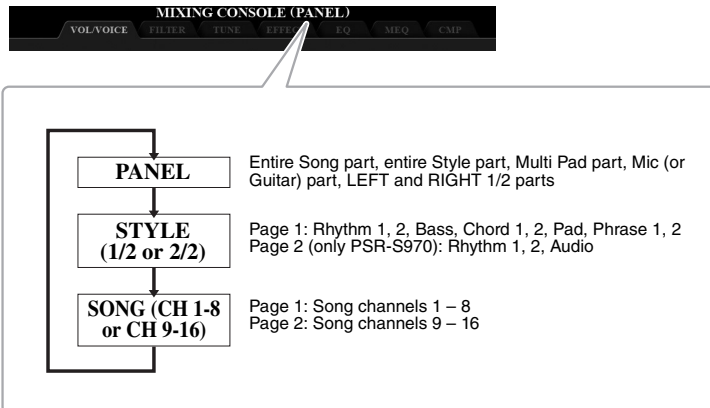
Basic Procedure

- 1 Press the [MIXER/EQ] button to call up the MIXING CONSOLE display.



- 2 Press the [MIXER/EQ] button repeatedly to call up the MIXING CONSOLE display for the relevant parts.

The part category (Panel, Style, Song) is indicated at the top of the display.



NOTE

For parts that have two pages, pressing the [A] (PART) button lets you switch between the pages.

3 Use the TAB [◀][▶] buttons to call up the desired page.

For details about each page, refer to the Reference Manual on the website.

- **VOL/VOICE**.....Changes the Voice for each part and adjusts panning and volume for each part.
- **FILTER**.....Adjusts the Harmonic Content (resonance) and sound brightness.
- **TUNE**Pitch-related settings (tuning, transpose, etc.).
- **EFFECT**.....Selects the effect type and adjusts the depth for each part.
- **EQ**Boosts/cuts the high band or low band for each part to correct the tone or timbre of the sound.
- **MEQ**Selects the master equalizer type applied to the entire sound and edit the related parameters.
- **CMP**This is the Master Compressor setting which determines the dynamics of the overall sound.

NOTE

The MEQ and CMP settings are not applied to audio playback or the metronome sound.

4 Use the [A] – [J] buttons to select a parameter, then use the [1 ▲▼] – [8 ▲▼] buttons to set the value for each part.

5 Save your Mixing Console settings.

- **To save the PANEL display settings:**
Register them to Registration Memory (page 85).
- **To save the STYLE display settings:**
Save them as Style data. If you want to recall the settings for future use, select the Style file saved here.
 1. Call up the operation display.
[FUNCTION] → TAB [▶] MENU 2 → [A] STYLE CREATOR
 2. Press the [EXIT] button to close the RECORD display.
 3. Press the [I] (SAVE) button to call up the Style Selection display, then save it (page 28).
- **To save the SONG display settings:**
First register the edited settings as part of the Song data, then save the Song. If you want to recall the settings for future use, select the Song file saved here.
 1. Call up the operation display.
[FUNCTION] → TAB [▶] MENU 2 → [B] SONG CREATOR
 2. Use the TAB [◀][▶] buttons to select the SETUP tab.
 3. Use the [8 ▲▼] (APPLY) buttons to actually apply the settings.
 4. Press the [I] (SAVE) button to call up the Song Selection display, then save it (page 28).

NOTE

You can instantly set the same value for the parameter to all of the parts, if you simultaneously hold down one of the [A] – [J] buttons and use the [1 ▲▼] – [8 ▲▼] buttons (or the Data dial).

Advanced Features

Refer to the Reference Manual on the website, **Chapter 9**.



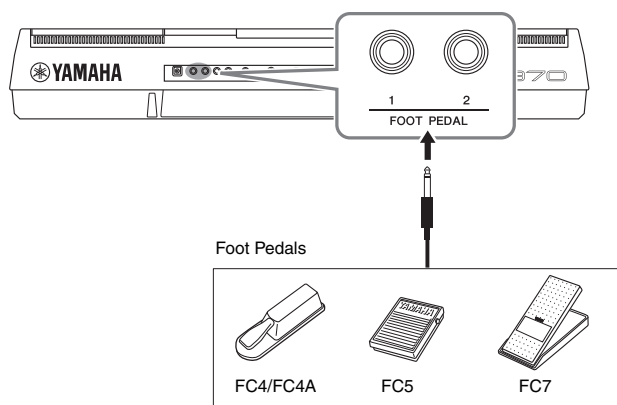
This chapter covers the connectors of this instrument. To see where the connectors are located on the instrument, refer to pages 14 – 15.

CAUTION

Before connecting the instrument to other electronic components, turn off the power of all the components. Also, before turning any components on or off, make sure to set all volume levels to minimum (0). Otherwise, damage to the components, electrical shock, or even permanent hearing loss may occur.

Connecting a Footswitch/Foot Controller (FOOT PEDAL jacks)

The FC4/FC4A or FC5 footswitches and the FC7 foot controller (sold separately) can be connected to one of the FOOT PEDAL jacks. A footswitch can be used for switching functions on and off, while a foot controller controls continuous parameters such as volume.



NOTE

Do not connect or disconnect the pedal when the power is on.

By default, each jack features the following function. Use the FC4/FC4A or FC5 footswitch.

- **FOOT PEDAL [1]** Switches sustain on or off.
- **FOOT PEDAL [2]** Controls the Super Articulation Voices (page 37).

You can also change the function assignments to the pedals as desired.

• Example: Controlling Song Start/Stop by footswitch

Connect a footswitch (FC4/FC4A or FC5) to one of the FOOT PEDAL jacks.

To assign the function to the connected pedal, select “SONG PLAY/PAUSE” in the operation display: [FUNCTION] → TAB [◀] MENU 1 → [D] CONTROLLER → TAB [◀] FOOT PEDAL.

NOTE

For details on functions that can be assigned to the pedals, refer to the Reference Manual on the website.

Advanced Features

Refer to the Reference Manual on the website, **Chapter 10**.



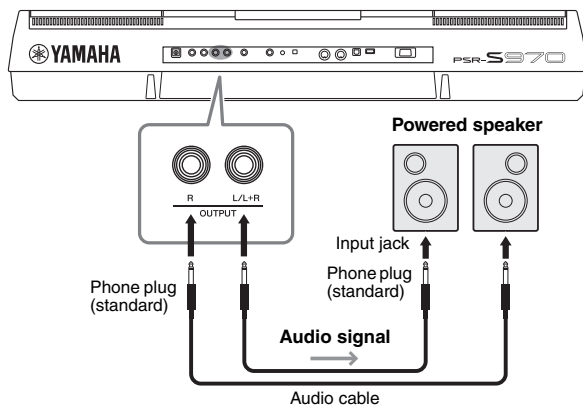
Assigning specific functions to each foot pedal:

[FUNCTION] → TAB [◀] MENU 1 → [D] CONTROLLER → TAB [◀] FOOT PEDAL

Connecting Audio Devices (OUTPUT [L/L+R]/[R] jacks, [AUX IN] jack)

Using an External Stereo System for Playback

You can connect a stereo system to amplify the instrument's sound by using the OUTPUT [L/L+R]/[R] jacks.



You can use the instrument's [MASTER VOLUME] dial to adjust the volume of the sound output to the external device.

NOTE

Use audio cables and adaptor plugs having no (zero) resistance.

NOTE

Use only the [L/L+R] jack for connection with a monaural device.

NOTICE

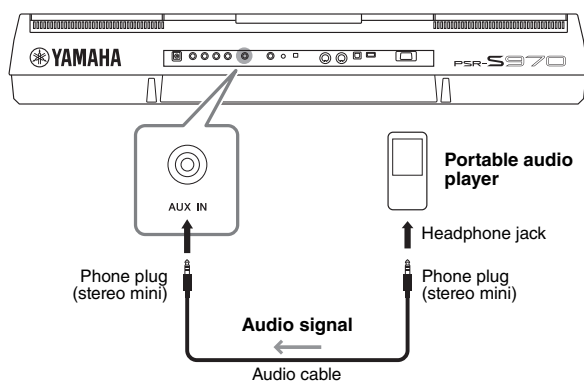
To avoid possible damage, first turn on the power to the instrument, then to the external device. When turning off the power, first turn off the power to the external device, then to the instrument. Since this instrument's power may automatically be turned off due to the Auto Power Off function (page 17), turn off the power to the external device, or disable Auto Power Off when you do not intend to operate the instrument.

NOTICE

Do not route the output from the OUTPUT jacks to the [AUX IN] jack. If you make this connection, the signal input at the [AUX IN] jack is output from the [OUTPUT] jacks and then back again, creating a feedback loop that could make normal performance impossible, and may even damage the equipment.

Playing a Portable Audio Player with the Built-in Speakers

You can connect the headphone jack of a portable audio player to the instrument's [AUX IN] jack, letting you hear the sound of that portable audio player through the built-in speakers of the instrument.



The input signal from the [AUX IN] jack is affected by the setting of the instrument's [MASTER VOLUME] dial, and the volume balance with other sounds played on the keyboard can be adjusted from the BALANCE display (page 57).

NOTICE

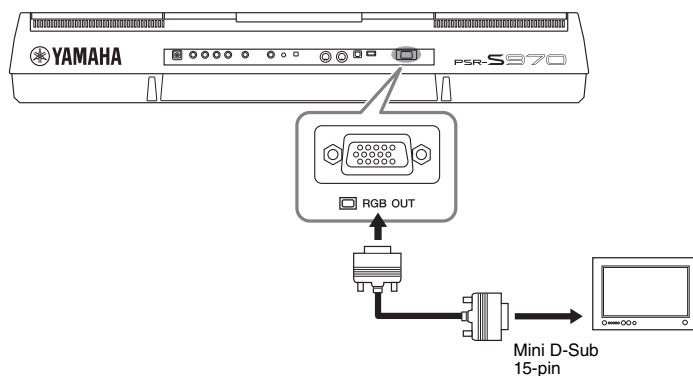
To avoid damage to the devices, first turn on the power to the external device, then to the instrument. When turning off the power, first turn off the power to the instrument, then to the external device.

NOTE

You can also adjust the input volume by using the LIVE CONTROL knobs. For instructions on how to assign the functions to the knobs, refer to page 40.

Connecting an External Monitor ([RGB OUT] terminal) (PSR-S970)

By connecting an external monitor to the [RGB OUT] terminal of the instrument, you can have the lyrics, text and display of the instrument's LCD shown on the monitor.



CAUTION

Avoid looking at the television or video monitor for prolonged periods of time since doing so could damage your eyesight. Take frequent breaks and focus your eyes on distant objects to avoid eyestrain.

Selecting Display Contents for the External Monitor

1 Call up the operation display.
[FUNCTION] → TAB [◀] MENU 1 → [J] UTILITY → TAB [◀][▶] CONFIG 2

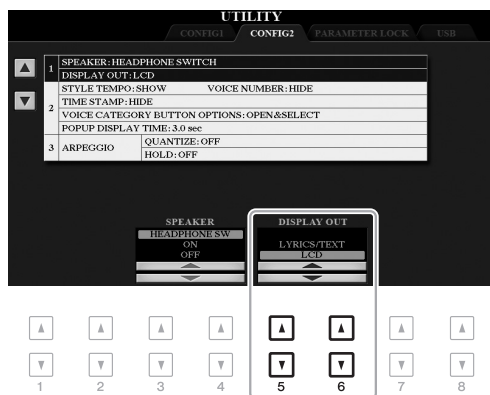
2 Use the [A]/[B] buttons to select “1 SPEAKER/DISPLAY OUT.”

3 Press the [5 ▲▼]/[6 ▲▼] buttons to select the display contents.

When you select “LYRICS/TEXT,” the connected monitor shows the LYRICS or TEXT display regardless of what is shown on the instrument's LCD. When you select “LCD,” the monitor shows the same contents as shown on the instrument's LCD.

NOTE

If the display is not aligned properly in the external monitor, change the settings on the monitor itself.



Connecting a Microphone or Guitar ([MIC/GUITAR INPUT] jack)

You can connect a microphone or guitar to the [MIC/GUITAR INPUT] jack (standard 1/4" phone jack). For instructions, refer to page 88.

Connecting USB Devices ([USB TO DEVICE] terminal)

You can connect a USB flash drive or a USB wireless LAN adaptor (sold separately) to the [USB TO DEVICE] terminal. This lets you save data you've created on the instrument to the USB flash drive (page 28). You can also connect the instrument to a smart device such as iPad via wireless LAN (page 102).

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 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
- USB hub
- USB wireless LAN adaptor (UD-WL01; may not be available depending on your area)

Other USB devices such as a 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:

<http://download.yamaha.com/>

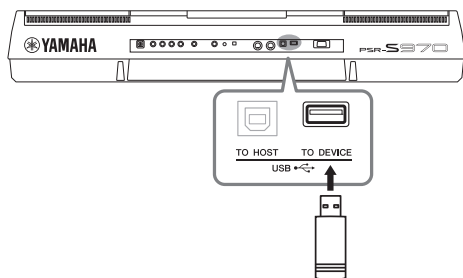
Although USB devices 1.1 to 3.0 can be used on this instrument, the amount of time for saving to or loading from the USB device may differ depending on the type of data or the status of the instrument.

NOTE

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 while executing 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.

NOTE

- If you intend to connect two devices at the same time to a terminal, you should use a bus-powered USB hub. Only one USB hub can be used. If an error message appears while using the USB hub, disconnect the hub from the instrument, then turn on the power of the instrument and re-connect the USB hub.
- When connecting a USB cable, make sure that the length is less than 3 meters.

Using a USB flash drive

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.

Maximum number of USB flash drives allowed

Up to two USB flash drives can be connected to the [USB TO DEVICE] terminal. (If necessary, use a USB hub. The number of USB flash devices that can be used simultaneously with musical instruments even when a USB hub is used is a maximum of two.)

Formatting a USB flash drive

You should format the USB flash drive only with this instrument (page 101). 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 USB flash drive you are formatting does not contain important data. Proceed with caution, especially when connecting multiple USB flash drives.

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 playback/recording or file management (such as during Save, Copy, Delete and Format operations). Failure to do so may corrupt the USB flash drive and the data.

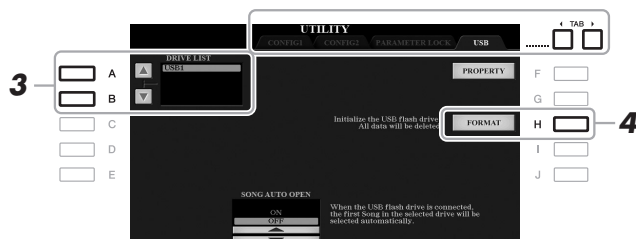
Formatting a USB Flash Drive

When a USB flash drive is connected, a message may appear prompting you to format the USB flash drive. If so, carry out the format operation.

1 Connect a USB flash drive for formatting into the [USB TO DEVICE].

2 Call up the operation display.

[FUNCTION] → TAB [◀] MENU 1 → [J] UTILITY → TAB [▶] USB



3 Use the [A]/[B] buttons to select the drive to be formatted from the drive list.

The indications USB 1 and USB 2 will be displayed depending on the number of the connected drives.

4 Press the [H] (FORMAT) button to format the USB flash drive.

5 Press the [G] (YES) button to actually carry out the Format operation.

NOTICE

The format operation deletes any previously existing data. Make sure that the USB flash drive you are formatting does not contain important data. Proceed with caution, especially when connecting multiple USB flash drives.

NOTE

Playback of Style, Song and Multi Pads will stop when formatting is started.

Confirming the remaining memory

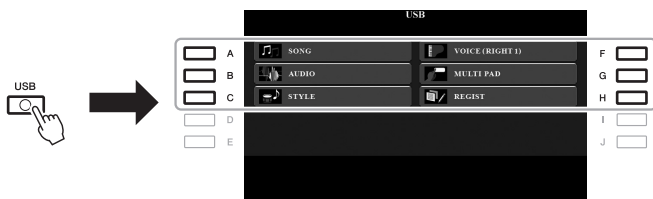
You can check the remaining memory of the connected USB flash drive by pressing the [F] (PROPERTY) button.

NOTE

To cancel the Format operation, press the [H] (NO) button.

Selecting Files in a USB Flash Drive

By pressing the [USB] button, you can access the files which are saved in the USB flash drive.



Select the desired category by using the [A] – [C] and [F] – [H] buttons, then select files by pressing one of the [A] – [J] buttons.

Connecting to an iPhone/iPad ([USB TO DEVICE], [USB TO HOST] and MIDI terminals)

You can use a smart device, such as an iPhone or iPad, with the instrument for a variety of musical purposes by connecting it to the instrument. By using application tools on your smart device, you can take advantage of convenient functions and get more enjoyment out of this instrument.

You can make connections by one of the following methods.

- Connect to the [USB TO DEVICE] terminal via the USB wireless LAN adaptor (UD-WL01, sold separately).
- Connect to the [USB TO HOST] terminal via the USB MIDI Interface for iPhone/iPod touch/iPad (i-UX1, sold separately), etc.
- Connect to the MIDI terminals via the MIDI Interface for iPhone/iPod touch/iPad (i-MX1, sold separately).

*These accessories may not be available depending on your area.

For details on connections, refer to the “iPhone/iPad Connection Manual” and the Reference Manual on the website.

For information about the compatible smart devices and application tools, access the following page:

<http://www.yamaha.com/kbdapps/>

NOTICE

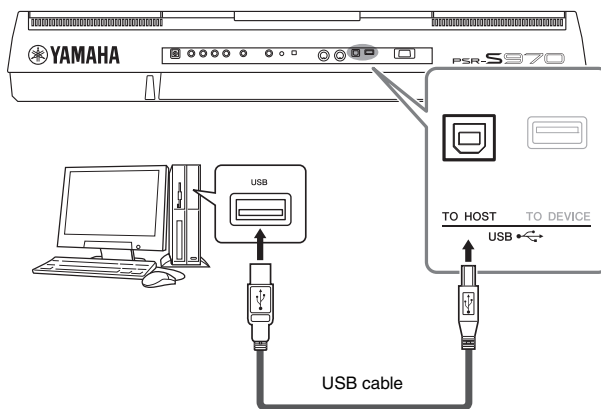
Do not place your iPhone/iPad in an unstable position. Doing so may cause the device to fall and result in damage.

NOTE

- Before using the [USB TO DEVICE] terminal, be sure to read “Precautions when using the [USB TO DEVICE] terminal” on page 100.
- When you use the instrument along with an application on your iPhone/iPad, we recommend that you first set “Airplane Mode” to “ON” then set “Wi-Fi” to “ON” on your iPhone/iPad in order to avoid noise caused by communication.

Connecting to a Computer ([USB TO HOST] terminal)

By connecting a computer to the [USB TO HOST] terminal, you can transfer data between the instrument and the computer via MIDI. For details on using a computer with this instrument, refer to the “Computer-related Operations” on the website.



NOTICE

Use an AB type USB cable of less than 3 meters. USB 3.0 cables cannot be used.

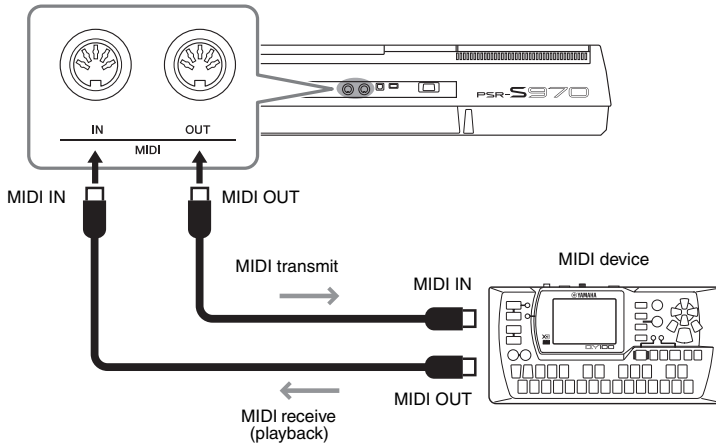
NOTE

- When using a USB cable to connect the instrument to your computer, make the connection directly without passing through a USB hub.
- The instrument will begin transmission a short time after the USB connection is made.
- For information on setting up your sequence software, refer to the owner's manual of the relevant software.

Connecting External MIDI Devices (MIDI [IN]/[OUT] terminals)

Use the MIDI [IN]/[OUT] terminals and standard MIDI cables to connect external MIDI devices (keyboard, sequencer, etc.).

- **MIDI IN**Receives MIDI messages from another MIDI device.
- **MIDI OUT**Transmits MIDI messages generated by the instrument to another MIDI device.



For detailed information about MIDI settings such as transmit/receive channels on the instrument, refer to the Reference Manual on the website.

NOTE

For a general overview of MIDI and how you can effectively use it, refer to "MIDI Basics," which is downloadable from the website.

Advanced Features

Refer to the Reference Manual on the website, **Chapter 10**.

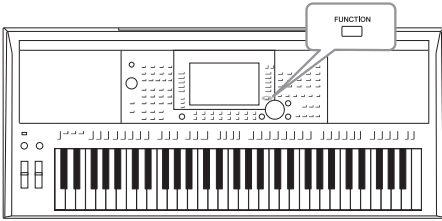


MIDI settings:

[FUNCTION] → TAB [◀] MENU 1 → [I] MIDI

Other Functions

– Making Global Settings and Using Advanced Features –



The Function menu provides a variety of convenient settings and tools for the instrument. These include general settings that affect the entire instrument, as well as detailed settings for specific functions. Also included are advanced Creator features, such as for Styles, Songs and Multi Pads.

Basic Procedure

1 Call up the operation display.

[FUNCTION] → TAB [◀][▶] MENU 1/MENU 2



2 Press one of the [A] – [J] buttons to call up the desired function page.

For information on what you can do on each page, refer to the Function List on page 105.

3 Use the TAB [◀][▶] buttons to call up desired page.

4 Change the settings or carry out the operation.

Refer to the Function List on page 105 to see where you can find detailed information.

Function List

This list briefly explains what you can do in the displays which are called up via the [FUNCTION] button. For more information, refer to the page and chapter references indicated below.

MENU 1		Description	Owner's Manual	Reference Manual	
A	SPLIT POINT/CHORD FINGERING	SPLIT POINT	Determines the Split Point.	page 58	-
		CHORD FINGERING	Determines the Chord Fingering type.	page 52	Chapter 2
B	HARMONY/ARPEGGIO	For selecting the Harmony type or the Arpeggio type.	page 42	Chapter 1	
C	REGIST SEQUENCE/FREEZE	REGISTRATION SEQUENCE	Determines the order for calling up Registration Memory settings when using the TAB [◀ ▶] buttons or the pedal.	-	Chapter 7
		FREEZE	Determines the setting groups (Voice, Style, etc.) that are to remain unchanged even when you call up panel setups via Registration Memory.	-	Chapter 7
D	CONTROLLER	FOOT PEDAL	Determines the functions assigned to the pedals.	-	Chapter 10
		KEYBOARD/PANEL	For setting the Touch Response of the keyboard, or selecting the part(s) to be affected by the [MODULATION] wheel or the TRANSPOSE [-]/[+] buttons.	page 39	Chapter 1
E	MASTER TUNE/SCALE TUNE	MASTER TUNE	For fine-tuning the pitch of the entire instrument in approx. 0.2 Hz steps.	page 38	Chapter 1
		SCALE TUNE	Determines the scale type and tuning of the pitch of the desired note (key) in cents.	page 38	Chapter 1
F	VOICE SET FILTER	For disabling automatic selection of Voice Sets (effects, etc.).	-	Chapter 1	
G	STYLE SETTING	For making Style playback related settings such as OTS Link timing, Dynamics Control, etc.	-	Chapter 2	
H	SONG SETTING	For making Song playback related settings such as Guide Function, Channel settings, Repeat settings, etc.	-	Chapter 3	
I	MIDI	For making MIDI-related settings.	-	Chapter 11	
J	UTILITY	CONFIG 1	For making general settings such as Fade in/out time, metronome sound, Tap Tempo sound, Auto Power Off.	page 17	Chapter 11
		CONFIG 2	For making general settings such as speaker, display, etc.	page 99	Chapter 11
		PARAMETER LOCK	Determines the parameters (effect, Split Point, etc.) that are to remain unchanged when the panel setups are changed via Registration Memory, One Touch Setting, etc.	-	Chapter 11
		USB	Contains operations related to a connected USB flash drive, such as formatting and confirmation of memory size.	page 101	Chapter 11

MENU 2		Description	Owner's Manual	Reference Manual	
A	STYLE CREATOR	For creating a Style by editing the preset Style, or by recording Style channels one by one.	-	Chapter 2	
B	SONG CREATOR	For creating a Song by editing the recorded Song or by entering events one by one.	-	Chapter 3	
C	MULTI PAD CREATOR	For creating a Multi Pad by editing an existing preset Multi Pad, or by recording a new one.	-	Chapter 5	
F	PACK INSTALLATION	For installing Expansion Packs for adding extra contents downloaded from the website or created on your own by using the Yamaha Expansion Manager.	-	Chapter 1	
G	SYSTEM	OWNER	For setting the Owner name, Message language, etc.	page 18	Chapter 11
		BACKUP/RESTORE	For backing up or restoring the settings and data saved in the USER drive of the instrument.	page 34	-
		SETUP FILES	For saving and recalling the specified settings of the instrument.	-	Chapter 11
		RESET	For restoring instrument settings to their factory defaults.	-	Chapter 11
H	WIRELESS LAN	For making settings for connecting the instrument to a smart device, such as an iPad, via wireless LAN. This appears only when a USB wireless LAN adaptor is connected.	-	Chapter 10	

Direct Access Chart

Press the [DIRECT ACCESS] button, then press one of the buttons (or move the appropriate knob, wheel or pedal) listed below to call up the desired display.

Control		Display called up with the Direct Access function			
STYLE CONTROL	[ACMP]	FUNCTION	SPLIT POINT/CHORD FINGERING	CHORD FINGERING	
	[AUTO FILL IN]			STYLE SETTING	
	[OTS LINK]				
	[BREAK]				
	INTRO [I], [II], [III]				
	MAIN VARIATION [A], [B], [C], [D]				
	ENDING/rit. [I], [II], [III]				
	[SYNC START]				
	[SYNC STOP]				
	[START/STOP]				
STYLE	STYLE category selection buttons	SPLIT POINT/CHORD FINGERING		SPLIT POINT	
SONG	[GUIDE]	FUNCTION	SONG SETTING	GUIDE/CHANNEL	
	[SCORE]			OTHERS	
	[LYRICS/TEXT]			GUIDE/CHANNEL	
	[TR 1], [TR 2], [EXTRA TR]			OTHERS	
	[REPEAT]			GUIDE/CHANNEL	
	[▶▶] (FF)			OTHERS	
	[◀◀] (RW)			GUIDE/CHANNEL	
	[▶/■] (PLAY/PAUSE)			OTHERS	
	[■] (STOP)			GUIDE/CHANNEL	
	[REC]			OTHERS	
[SELECT]	GUIDE/CHANNEL		OTHERS		
[TAP TEMPO]		FUNCTION	UTILITY	CONFIG 1	TAP
TEMPO	[+], [-]	FUNCTION	STYLE SETTING		
[METRONOME]			UTILITY	CONFIG 1	METRONOME
[FADE IN/OUT]		FUNCTION	CONTROLLER	KEYBOARD/PANEL	FADE IN/OUT
TRANSPOSE	[+], [-]	MIXING CONSOLE	TUNE		
UPPER OCTAVE	[+], [-]	MIXING CONSOLE	MULTIPAD EDIT		
	[SELECT]		MULTIPAD EDIT		
MULTI PAD	[STOP]	MULTI PAD Selection display	MULTIPAD EDIT		
	[1], [2], [3], [4]		MULTIPAD EDIT		
[DEMO]		FUNCTION	SYSTEM	OWNER	
[FUNCTION]		FUNCTION	MIDI	OWNER	
[MIXER/EQ]		MIXING CONSOLE	VOL/VOICE		
[BAL.]			VOL/VOICE		
[CHANNEL ON/OFF]			VOL/VOICE		
[USB]		FUNCTION	UTILITY	USB	
[USB AUDIO PLAYER]		AUDIO File Selection display (called up only when a USB flash drive is connected.)			
TAB	[◀], [▶]	-			
[ENTER]		-			
[EXIT]		MAIN			
Data dial		-			
VOICE	PART SELECT [LEFT]	FUNCTION	VOICE SET FILTER	LEFT	
	PART SELECT [RIGHT1]			RIGHT1	
	PART SELECT [RIGHT2]			RIGHT2	
	PART ON/OFF [LEFT]			LEFT	
	PART ON/OFF [RIGHT1]			RIGHT1	
	PART ON/OFF [RIGHT2]			RIGHT2	
	[LEFT HOLD]			RIGHT2	
VOICE category selection buttons	FUNCTION	SPLIT POINT/CHORD FINGERING	SPLIT POINT		
[HARMONY/ARPEGGIO]	FUNCTION	VOICE SET FILTER			
[TOUCH]	FUNCTION	CONTROLLER	KEYBOARD/PANEL	TOUCH RESPONSE	
[SUSTAIN]	MIXING CONSOLE	EFFECT			
[MONO]		TUNE			
[DSP]		EFFECT			
[VARI.]		EFFECT			
[MUSIC FINDER]		MUSIC FINDER	MUSIC FINDER SEARCH 1		
ONE TOUCH SETTING	[1], [2], [3], [4]	OTS INFORMATION			
[PSR-S970] [MIC SETTING/VOCAL HARMONY]		MIC/GUITAR SETTING	EQ/CMP SETTING	MIC/GUITAR	
[PSR-S770] [MIC SETTING]		REGIST SEQUENCE/FREEZE		REGISTRATION SEQUENCE	
REGISTRATION MEMORY	REGIST BANK [+], [-]	FUNCTION	REGISTRATION SEQUENCE		
	[FREEZE]		FREEZE		
	[MEMORY]		REGISTRATION SEQUENCE		
	[1], [2], [3], [4], [5], [6], [7], [8]	REGIST INFORMATION			
FOOT PEDAL [1], [2]		FUNCTION	CONTROLLER	FOOT PEDAL	1, 2
[MODULATION]		FUNCTION	CONTROLLER	KEYBOARD/PANEL	MODULATION WHEEL
[PITCH BEND]		MIXING CONSOLE	TUNE		
LIVE CONTROL	[1], [2]	LIVE CONTROL	PARAMETER ASSIGN		
[ASSIGN]			PARAMETER ASSIGN		

Troubleshooting

Overall	
A click or pop is heard when the power is turned on or off.	This is normal. Electrical current is being applied to the instrument.
The power is automatically turned off.	This is normal and due to the Auto Power Off function. If necessary, set the parameter of the Auto Power Off function (page 17).
Noise is heard from the instrument's speakers.	Noise may be heard if a mobile phone is used near the instrument or if the phone is ringing. Turn off the mobile phone, or use it further away from the instrument.
Noise is heard from the instrument's speakers or headphones when using the instrument with an iPhone/iPad application.	When you use the instrument along with the application on your iPhone/iPad, we recommend that you set "Airplane Mode" to "ON" on your iPhone/iPad in order to avoid noise caused by communication.
In the LCD, there are some specific points that are always lit or unlit.	These are the result of defective pixels and occasionally occur in TFT-LCDs; they do not indicate a problem in operation.
There is a slight difference in sound quality among different notes played on the keyboard.	This is normal and is a result of the instrument's sampling system.
Some Voices have a looping sound.	
Some noise or vibrato is noticeable at higher pitches, depending upon the Voice.	
The overall volume is too low or no sound is heard.	The master volume may be set too low. Set it to an appropriate level with the [MASTER VOLUME] dial.
	All keyboard parts are set to off. Use the PART ON/OFF [RIGHT 1]/[RIGHT 2]/[LEFT] button to turn it on.
	The volume of the individual parts may be set too low. Raise the volume in the BALANCE display (page 57).
	Make sure the desired channel is set to ON (pages 56, 65).
	Headphones are connected, disabling the speaker output. Unplug the headphones.
	Make sure that the Speaker setting is set to ON: [FUNCTION] → TAB [◀] MENU 1 → [J] UTILITY → TAB [◀][▶] CONFIG 2
	The [FADE IN/OUT] button is on, which mutes the sound. Press the [FADE IN/OUT] button to turn the function off.
Depending on the function assigned to the LIVE CONTROL knob or how you move the knob, you may not hear the sound properly. Check the knob settings and reset the value (page 40).	
The sound is distorted or noisy.	The volume may be turned up too high. Make sure all relevant volume settings are appropriate.
	This may be caused by certain effects or filter settings. Check the effect or filter settings and change them accordingly, referring to the Reference Manual.
Not all simultaneously played notes sound.	You are probably exceeding the maximum polyphony (page 110) of the instrument. When the maximum polyphony is exceeded, the earliest played notes will stop sounding, letting the latest played notes sound.
The keyboard volume is lower than the Song/Style playback volume.	The volume of the keyboard parts may be set too low. Raise the volume in the BALANCE display (page 57).
The Main display does not appear even when turning the power on.	This may occur if a USB flash drive has been installed to the instrument. Installation of some USB flash drives may result in a long interval between turning the power on and appearance of the Main display. To avoid this, turn the power on after disconnecting the device.

Some characters of the file/folder name are garbled.	The language settings have been changed. Set the appropriate language for the file/folder name (page 18).
An existing file is not shown.	The file extension (.MID, etc.) may have been changed or deleted. Manually rename the file, adding the appropriate extension, on a computer.
	Data files with names of more than 50 characters cannot be handled by the instrument. Rename the file, reducing the number of characters to 50 or less.
Voice	
The Voice selected from the Voice Selection display does not sound.	Check whether or not the selected part is turned on (page 35). If necessary, press the appropriate PART ON/OFF button to turn the part on.
A strange "flanging" or "doubling" sound occurs. The sound is slightly different each time the keys are played.	The RIGHT 1 and RIGHT 2 parts are set to "ON," and both parts are set to play the same Voice. Turn off the RIGHT 2 part or change the Voice of one of the parts.
Some Voices will jump an octave in pitch when played in the upper or lower registers.	This is normal. Some Voices have a pitch limit which, when reached, causes this type of pitch shift.
Style	
The Style does not start even when the [START/STOP] button is pressed.	The Rhythm channel of the selected Style may not contain any data. Turn the [ACMP] button on and play left-hand section on the keyboard to sound the accompaniment part of the Style.
Only the rhythm channel plays.	Make sure the Auto Accompaniment function is turned on; press the [ACMP] button.
	Make sure to play keys in the chord section of the keyboard (pages 58, 59).
	The Track Mute function may have been assigned to the LIVE CONTROL knob(s). Check the knob settings and reset the value (page 40).
Styles in a USB flash drive cannot be selected.	If the size of the Style data is large (about 120 KB or greater), the Style cannot be selected because the data is too large to be handled by the instrument.
Song	
Songs cannot be selected.	This may be because the language settings have been changed. Set the appropriate language for the Song file name.
	If the size of the Song data is large (about 300 KB or greater), the Song cannot be selected because the data is too large to be handled by the instrument.
Song playback does not start.	The Song has been stopped at the end of the Song data. Return to the beginning of the Song by pressing the SONG [■] (STOP) button.
	In the case of a Song to which write-protect has been applied, there are some restrictions and playback may not be possible. For details, refer to page 27.
Song playback stops before the Song is finished.	The Guide function is turned on. (In this case, playback is "waiting" for the correct key to be played.) Press the [GUIDE] button to turn off the Guide function.
The measure number is different from that of the score in the Song Position display, shown by pressing the [◀](REW)/[▶](FF) buttons.	This happens when playing back music data for which a specific, fixed tempo is set.
When playing back a Song, some channels do not play.	Playback of these channels may be set to "OFF." Turn playback on for those channels that are set to "OFF" (page 65).
The tempo, beat, measure and music notation is not displayed correctly.	Some Song data for the instrument has been recorded with special "free tempo" settings. For such Song data, the tempo, beat, measure and music notation will not be displayed correctly.

USB Audio Player/Recorder	
A message indicating the USB flash drive is unavailable appears, and the recording is aborted.	Make sure to use a compatible USB flash drive (page 100).
	The USB flash drive may not have enough memory. Check the recordable time on the display (page 75).
	If you are using a USB flash drive to which data has already been recorded, check first that no important data remains on the device, then format it (page 101) and try recording again.
Audio files cannot be selected.	The file format may not be compatible with the instrument. The compatible formats are: MP3 and WAV. DRM protected files cannot be played back.
An existing recorded file is played back at a different volume compared to when it was recorded.	The audio playback volume has been changed. Setting the volume value to 100 plays back the file at the same volume as when it was recorded (page 74).
Mixing Console	
The sound seems strange or different than expected when changing a rhythm Voice (Drum Kit, etc.) of the Style or Song from the Mixer.	When changing the rhythm/percussion Voices (Drum Kits, etc.) of the Style and Song from the VOICE parameter, the detailed settings related to the drum voice are reset, and in some cases you may be unable to restore the original sound. In the case of Song playback, you can restore the original sound by returning to the beginning of the Song and playing back from that point. In the case of Style play, you can restore the original sound by selecting the same Style again.
Microphone/Vocal Harmony, Guitar	
The microphone or guitar input signal cannot be recorded.	The microphone input signal cannot be recorded by Song recording. Use the USB Audio Player/Recorder function (page 74).
(PSR-S970) Harmony can be heard in addition to the microphone sound.	Vocal Harmony is set to "ON." Turn Vocal Harmony off (page 91).
(PSR-S970) The Vocal Harmony effect sounds distorted or out-of-tune.	Your vocal microphone may be picking up extraneous sounds, such as the Style sound from the instrument. In particular, bass sounds can cause mistracking of the Vocal Harmony. To remedy this: <ul style="list-style-type: none"> • Sing as closely to the microphone as possible. • Use a unidirectional microphone. • Turn down the Master volume, Style volume, or Song volume control (pages 18, 57).
Foot Pedal	
The on/off setting of the footswitch connected to the FOOT PEDAL jack is reversed.	Change the polarity settings: [FUNCTION] → TAB [◀] MENU 1 → [D] CONTROLLER → [I] (PEDAL POLARITY).

Specifications

		PSR-S970	PSR-S770	
Product name		Digital Keyboard	Digital Keyboard	
Size/Weight	Dimensions (W x D x H)	1,002 mm x 437 mm x 148 mm (39-7/16" x 17-3/16" x 5-13/16")	1,002 mm x 437 mm x 148 mm (39-7/16" x 17-3/16" x 5-13/16")	
	Weight	11.6 kg (25 lbs., 9 oz.)	11.1 kg (24 lbs., 8 oz.)	
Control Interface	Keyboard	Number of Keys	61	
		Type	Organ	
		Touch Response	Hard 2, Hard 1, Medium, Soft 1, Soft 2	
	Other Controllers	Pitch Bend Wheel	Yes	
		Modulation Wheel	Yes	
		Knobs	2 (Assignable)	
	Display	Type	TFT Color Wide VGA LCD	
		Size	7 inch	
		Language	English, German, French, Spanish, Italian	
	Panel	Language	English	
Voices	Tone Generation	Tone Generation Technology	AWM Stereo Sampling	
	Polyphony	Number of Polyphony (max.)	128	
	Preset	Number of Voices	989 Voices + 41 Drum/SFX Kits + 480 XG Voices	
		Featured Voices	131 S.Art!, 30 MegaVoices, 31 Sweet!, 74 Cool!, 89 Live!, 30 Organ Flutes!	
	Compatibility		XG, GS (for Song playback), GM, GM2	
	Part		Right 1, Right 2, Left	
Effects	Reverb Block		52 Preset + 3 User	
	Chorus Block		106 Preset + 3 User	
	DSP Block		322 Preset (with VCM) + 10 User	
	Master Compressor		5 Preset + 5 User	
	Master EQ		5 Preset + 2 User	
	Part EQ		27 Parts	
	Mic/Guitar Effects		Noise Gate, Compressor, 3Band EQ	
	Vocal Harmony	Number of Presets	Vocal Harmony: 44 Synth Vocoder: 10	
		Number of User Settings	60 * The number is the total of Vocal Harmony and Synth Vocoder	
		Vocal Effect	23	
	Styles	Number of Styles	450	
		Preset	Featured Styles	40 +Audio, 366 Pro, 31 Session, 10 DJ, 3 Free Play
			Fingering	Single Finger, Fingered, Fingered On Bass, Multi Finger, AI Fingered, Full Keyboard, AI Full Keyboard
Style Control			INTRO x 3, MAIN VARIATION x 4, FILL x 4, BREAK, ENDING x 3	
Other Features		Music Finder (Max.)	2,500	
One Touch Setting (OTS)			4 for each Style	
Compatibility			Style File Format (SFF), Style File Format GE (SFF GE)	
Songs (MIDI)	Preset	Number of Preset Songs	5 preset sample Songs	
	Recording	Number of Tracks	16	
		Data Capacity	approx. 300 KB/Song	
		Recording Function	Quick Recording, Multi Track Recording, Step Recording	
	Data Format	Playback	SMF (Format 0 & 1), XF	
Recording		SMF (Format 0)		
Multi Pads	Preset	Number of Multi Pad Banks	188 banks x 4 Pads	
	Audio	Audio Link	Yes	
Functions	Voices	Harmony	Yes	
		Arpeggio	Yes	
		Panel Sustain	Yes	
		Mono/Poly	Yes	
		Voice Information	Yes	
	Styles	Style Creator	Yes	
		Style Recommender	Yes	
		OTS Information	Yes	
				Yes

			PSR-S970	PSR-S770
Functions	Songs	Song Creator	Yes	Yes
		Score Display Function	Yes	Yes
		Lyrics Display Function	Yes	Yes
		Text Display Function	Yes	Yes
		Wallpaper Customization	Yes	Yes
		Guide	Follow Lights, Any Key, Karao-Key, Your Tempo	Follow Lights, Any Key, Karao-Key, Your Tempo
	Performance Assistant Technology (P.A.T.)	Yes	Yes	
	Multi Pads	Multi Pad Creator	Yes	Yes
	Registration Memory	Number of Buttons	8	8
		Control	Registration Sequence, Freeze	Registration Sequence, Freeze
	USB Audio Player/Recorder	Playback Format	.wav (WAV format: 44.1 kHz sample rate, 16 bit resolution, stereo)	.wav (WAV format: 44.1 kHz sample rate, 16 bit resolution, stereo)
			.mp3 (MPEG-1 Audio Layer-3: 44.1/48.0 kHz sample rate, 64–320 kbps and variable bit rate, mono/stereo)	.mp3 (MPEG-1 Audio Layer-3: 44.1/48.0 kHz sample rate, 64–320 kbps and variable bit rate, mono/stereo)
		Recording Format	.wav (WAV format: 44.1 kHz sample rate, 16 bit resolution, stereo)	.wav (WAV format: 44.1 kHz sample rate, 16 bit resolution, stereo)
		Recording Time (max.)	80 minutes/Song	80 minutes/Song
		Time Stretch	Yes	Yes
		Pitch Shift	Yes	Yes
		Vocal Cancel	Yes	Yes
	Demonstration		Yes	Yes
	Overall Controls	Metronome	Yes	Yes
		Tempo	5 – 500	5 – 500
		Transpose	-12 – 0 – +12	-12 – 0 – +12
Tuning		414.8 – 440.0 – 466.8 Hz	414.8 – 440.0 – 466.8 Hz	
Octave Button		Yes	Yes	
Scale Type		9 types	9 types	
Miscellaneous	Direct Access	Yes	Yes	
Expandability (Expansion Packs)	Expansion Voice		Yes (approx. 512 MB max.)	Yes (approx. 160 MB max.)
	Expansion Style		Yes (internal memory)	Yes (internal memory)
	Expansion Audio Style		Yes (approx. 128 MB max.)	-
Storage and Connectivity	Storage	Internal Memory	Yes (approx. 13 MB max.)	Yes (approx. 13 MB max.)
		External Drives	USB flash drive	USB flash drive
	Connectivity	DC IN	16 V	16 V
		Headphones	Standard stereo phone jack	Standard stereo phone jack
		Microphone/Guitar	Yes	Yes
		MIDI	IN, OUT	IN, OUT
		AUX IN	Stereo mini jack	Stereo mini jack
		OUTPUT	L/L+R, R	L/L+R, R
		RGB OUT	Yes	-
		FOOT PEDAL	1 (SUSTAIN), 2 (ARTICULATION 1), Function assignable	1 (SUSTAIN), 2 (ARTICULATION 1), Function assignable
		USB TO DEVICE	Yes	Yes
USB TO HOST	Yes	Yes		
Amplifiers/ Speakers	Amplifiers		15 W x 2	15 W x 2
	Speakers		13 cm x 2 + 2.5 cm (dome) x 2	13 cm x 2 + 5 cm x 2
Power Supply	Power Supply	Adaptor	PA-300C or an equivalent recommended by Yamaha	PA-300C or an equivalent recommended by Yamaha
	Power Consumption		20 W	19 W
	Auto Power Off		Yes	Yes
Included Accessories		<ul style="list-style-type: none"> Owner's Manual (this book) Online Member Product Registration Music rest AC adaptor* (PA-300C or an equivalent recommended by Yamaha), power cord* <p>* May not be included depending on your area. Check with your Yamaha dealer.</p>	<ul style="list-style-type: none"> Owner's Manual (this book) Online Member Product Registration Music rest AC adaptor* (PA-300C or an equivalent recommended by Yamaha), power cord* <p>* May not be included depending on your area. Check with your Yamaha dealer.</p>	
Separately Sold Accessories (May not be available depending on your area.)		<ul style="list-style-type: none"> AC adaptor: PA-300C or an equivalent recommended by Yamaha Headphones: HPH-50/HPH-100/HPH-150 Footswitches: FC4/FC4A/FC5 Foot controller: FC7 USB MIDI Interface for iPhone/iPod touch/iPad: i-UX1 MIDI Interface for iPhone/iPod touch/iPad: i-MX1 USB wireless LAN adaptor: UD-WL01 USB-MIDI Interface: UX16 Keyboard stand: L-6/L-7 <p>(The exterior size of the PSR-S970/S770 is beyond the limits as described in the L-6 Assembly Instructions. However, we have determined through tests that the stand can be safely used for the instrument.)</p>	<ul style="list-style-type: none"> AC adaptor: PA-300C or an equivalent recommended by Yamaha Headphones: HPH-50/HPH-100/HPH-150 Footswitches: FC4/FC4A/FC5 Foot controller: FC7 USB MIDI Interface for iPhone/iPod touch/iPad: i-UX1 MIDI Interface for iPhone/iPod touch/iPad: i-MX1 USB wireless LAN adaptor: UD-WL01 USB-MIDI Interface: UX16 Keyboard stand: L-6/L-7 <p>(The exterior size of the PSR-S970/S770 is beyond the limits as described in the L-6 Assembly Instructions. However, we have determined through tests that the stand can be safely used for the instrument.)</p>	

* 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 apply to the specifications of your particular product. To obtain the latest manual, access the Yamaha website then download the manual file. Since specifications, equipment or separately sold accessories may not be the same in every locale, please check with your Yamaha dealer.

Index

- A**
A-B Repeat 67, 73
AC adaptor 16, 111
Accompaniment 48
Arpeggio 44, 47
Audio Link Multi Pad 78
Audio Player 71
Audio Recorder 74
Audio Style 49
Auto Fill 51
Auto Power Off 17
AUX IN 98
- B**
Backup 34
Balance 57, 74
Break (Style) 51
- C**
Channel (Song) 65
Channel (Style) 56
Character entry 32
Chord detection area 59
Chord Fingering type 52
Chord Match 77
Chord Tutor 53
Chordal 91
CMP (Master Compressor) 96
Computer 102
Computer-related Operations 7
Connection 97
Copy 30
- D**
Data dial 22
Data List 7
Delete 31
Demo 19
Direct Access 23, 106
DJ Style 49
- Drum Kit 37
Drum Setup 60
DSP 42
- E**
Echo 42
Effect 42, 96
Ending (Style) 50
EQ (Equalizer) 96
Expansion Pack 46, 47
- F**
Factory Reset 33
Fade In/Out 52
Fast Forward 63, 73
File 26, 27
File Selection display 26
Fill-in 51
Filter 96
Fingering type 52
Folder 29
Foot controller 97
Footage 45
Footswitch 97
Format (Compatibility) 8
Format (USB flash drive) 101
Freeze 87
Function 104
- G**
GM 8, 47
GS 8
Guide 66
Guitar 88
- H**
Harmony 42, 47
Headphones 15
- I**
Intro (Style) 50
iPhone/iPad 102
iPhone/iPad Connection Manual 7
- K**
Keyboard part 35
Knob 40
- L**
Language 18
Layer 35
Left Hold 37
LEFT part 35
LIVE CONTROL knob 40
LOWER 59
Lyrics 65
- M**
Main (Style) 51
Main display 24
Master Compressor (CMP) 96
Master EQ (MEQ) 96
Master Tune 38
MegaVoice 37
MENU 26, 105
MEQ (Master EQ) 96
Metronome 37
Microphone 88
MIDI 103
Mixing Console (Mixer) 95
Modulation wheel 39
Monitor 99
Mono 42
Move 30
MP3 71
Multi Pad 76
Multi Pad Creator 79
Multi Track Recording 69
Music Finder 80

Music notation	64	RGB OUT	99	Upper Octave	38
Music rest	14	RIGHT part	35	USB (File Selection display)	26
N					
Name	30	S			
O					
One Touch Setting (OTS)	53	S.Art! (Super Articulation Voice)	37	Vocal Cancel	73
Organ Flutes Voice	45	Save	28	Vocal Harmony	91
OTS (One Touch Setting)	53	Scale Tune	38	Vocoder	91
OTS Link	54	Score	64	Vocoder Mono	91
P					
P.A.T. (Performance Assistant Technology)	70	Section	51	Voice	35
Parameter Lock	105	SFF (Style File Format)	8, 49	Voice Set	47
Part (Voice)	35	SFX Kit	37	Volume (Audio)	73
Part EQ	96	SMF (Standard MIDI File)	62	Volume (Master volume)	18
Pause	63, 73	Song	62	Volume Balance	57, 74
Pedal	97, 105	Song Creator	70	V	
Performance Assistant Technology (P.A.T.)	70	Speaker	98, 105	WAV	71, 78
Phrase Mark	64	Specifications	110	Wireless LAN	102, 105
Pitch	38, 73, 96	Split	35	W	
Pitch Bend wheel	39	Split Point	58	XF	8
Pitch Shift	73	Standard MIDI File (SMF)	62	XG	8, 47
Playback (Audio File)	71	Step Recording (Song)	70	X	
Playback (Song)	62	Step Recording (Style)	61	XF	
Playback (Style)	48	Style	48	XG	
Power	16	Style Creator	60		
PRESET (File Selection display)	26	Style File Format (SFF)	8, 49		
Protected Song	27	Style Recommender	55		
Q					
Quick Recording	68	Style Retrigger	40		
R					
Record (Music Finder)	80	Super Articulation Voice	37		
Recording (Audio)	74	Sustain	42		
Recording (Song)	68	Synchro Start (Multi Pad)	77		
Reference Manual	7	Synchro Start (Song)	63		
Registration Memory	85	Synchro Start (Style)	50		
Registration Sequence	87	Synchro Stop	50		
Repeat	67, 73, 74	Synth Vocoder	93		
Repertoire	54	T			
Reset	33	Talk	90		
Rewind	63, 73	Tap Tempo	51		
S					
T					
U					
UPPER					
59					

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 and the Directives 2002/96/EC.

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_01)

Information concernant la Collecte et le Traitement des déchets d'équipements électriques et électroniques.



Le symbole sur les produits, l'emballage et/ou les documents joints signifie que les produits électriques ou électroniques usagés ne doivent pas être mélangés avec les déchets domestiques habituels.

Pour un traitement, une récupération et un recyclage appropriés des déchets d'équipements électriques et électroniques, veuillez les déposer aux points de collecte prévus à cet effet, conformément à la réglementation nationale et aux Directives 2002/96/EC.

En vous débarrassant correctement des déchets d'équipements électriques et électroniques, vous contribuerez à la sauvegarde de précieuses ressources et à la prévention de potentiels effets négatifs sur la santé humaine qui pourraient advenir lors d'un traitement inapproprié des déchets.

Pour plus d'informations à propos de la collecte et du recyclage des déchets d'équipements électriques et électroniques, veuillez contacter votre municipalité, votre service de traitement des déchets ou le point de vente où vous avez acheté les produits.

[Pour les professionnels dans l'Union Européenne]

Si vous souhaitez vous débarrasser des déchets d'équipements électriques et électroniques veuillez contacter votre vendeur ou fournisseur pour plus d'informations.

[Information sur le traitement dans d'autres pays en dehors de l'Union Européenne]

Ce symbole est seulement valable dans l'Union Européenne. Si vous souhaitez vous débarrasser de déchets d'équipements électriques et électroniques, veuillez contacter les autorités locales ou votre fournisseur et demander la méthode de traitement appropriée.

(weee_eu_fr_01)

IMPORTANT NOTICE FOR THE UNITED KINGDOM Connecting the Plug and Cord

IMPORTANT. The wires in this mains lead are coloured in accordance with the following code:

BLUE : NEUTRAL

BROWN : LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

Making sure that neither core is connected to the earth terminal of the three pin plug.

(2 wires)

OBSERVERA!

Apparaten kopplas inte ur växelströmskällan (nätet) så länge som den är ansluten till vägguttaget, även om själva apparaten har stängts av.

ADVARSEL: Netspændingen til dette apparat er IKKE afbrudt, så længe netledningen sidder i en stikkontakt, som er tændt — også selvom der er slukket på apparatets afbryder.

VAROITUS: Laitteen toisiopiiriin kytketty käyttökytkin ei irroita koko laitetta verkosta.

(standby)

Important Notice: Guarantee Information for customers in EEA* and Switzerland (EEA) and Switzerland

English	Important Notice: Guarantee Information for customers in EEA* and Switzerland For detailed guarantee information about this Yamaha product, and Pan-EEA* and Switzerland warranty service, please either visit the website address below (Printable file is available at our website) or contact the Yamaha representative office for your country. * EEA: European Economic Area
Deutsch	Wichtiger Hinweis: Garantie-Information für Kunden in der EWR* und der Schweiz Für nähere Garantie-Information über dieses Produkt von Yamaha, sowie über den Pan-EWR*- und Schweizer Garantieservice, besuchen Sie bitte entweder die folgende angegebene Internetadresse (eine druckfähige Version befindet sich auch auf unserer Webseite), oder wenden Sie sich an den für Ihr Land zuständigen Yamaha-Vertrieb. *EWR: Europäischer Wirtschaftsraum
Français	Remarque importante: informations de garantie pour les clients de l'EEE et la Suisse Pour des informations plus détaillées sur la garantie de ce produit Yamaha et sur le service de garantie applicable dans l'ensemble de l'EEE, ainsi qu'en Suisse, consultez notre site Web à l'adresse ci-dessous (le fichier imprimable est disponible sur notre site Web) ou contactez directement Yamaha dans votre pays de résidence. * EEE : Espace Economique Européen
Nederlands	Belangrijke mededeling: Garantie-informatie voor klanten in de EER* en Zwitserland Voor gedetailleerde garantie-informatie over dit Yamaha-product en de garantieservice in heel de EER* en Zwitserland, gaat u naar de onderstaande website (u vindt een afprintbaar bestand op onze website) of neemt u contact op met de vertegenwoordiging van Yamaha in uw land. * EER: Europese Economische Ruimte
Español	Aviso importante: Información sobre la garantía para los clientes del EEE* y Suiza Para una información detallada sobre este producto Yamaha y sobre el soporte de garantía en la zona EEE* y Suiza, visite la dirección web que se incluye más abajo (la versión del archivo para imprimir está disponible en nuestro sitio web) o póngase en contacto con el representante de Yamaha en su país. * EEE: Espacio Económico Europeo
Italiano	Aviso importante: informazioni sulla garanzia per i clienti residenti nell'EEA* e in Svizzera 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
Português	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 Económica Europeia
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 όλη τη χώρα σας του ΕΟΧ* και την Ελβετία, επισκεφτείτε την παρακάτω ιστοσελίδα (εξοπλιστικό μπουφάν είναι διαθέσιμο στην ιστοσελίδα μας) ή απευθείας στην αντιπροσωπεία της Yamaha στην χώρα σας. * ΕΟΧ: Ευρωπαϊκό Οικονομικό Χώρο
Svenska	Viktigt: Garantierinformation för kunder i EES-området* och Schweiz För detaljerad information om denna Yamaha-produkt samt garantier i hela EES-området* och Schweiz kan du antingen besöka nedanstående webbadress (en utskriftsvärdig fil finns på webbplatsen) eller kontakta Yamahas officiella representant i ditt land. * EES: Europeiska Ekonomiska Samarbetsområdet
Norsk	Viktig merknad: Garantierinformasjon for kunder i EØS* og Sveits Detaljert garantierinformasjon om dette Yamaha-produktet og garantier i hele EØS-området* og Sveits kan fås enten ved å besøke nettstedene nedenfor (utskriftsversjon finnes på våre nettsider) eller kontakte kontaktpunktet Yamaha-kontoret i landet der du bor. *EØS: Det europeiske økonomiske samarbeidsområdet
Dansk	Vigtig oplysning: Garantiplysninger til kunder i EØO* og Schweiz De kan finde detaljerede garantiplysninger om dette Yamaha-produkt og den fælles garantieserviceordning 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

Suomi	Tärkeä ilmoitus: Takuutiedot Euroopan talousalueen (ETA) ja Sveitsin asiakkaille Tämän Yamaha-tuotteen sekä ETA-alueen ja Sveitsin takuuta koskevat yksityiskohtaiset tiedot saatte alla olevasta nettosoitteesta. (Tulostettava tiedosto saatavissa suositullamme.) Voitte myös ottaa yhteyttä paikalliseen Yamaha-edustajaan. *ETA: Euroopan talousalue
Polski	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
Česky	Důležité oznámení: Zaruční informace pro zákazníky v EHS* a ve Švýcarsku Podrobné zaruční informace o tomto produktu Yamaha a záruční servis 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
Magyar	Fontos figyelmeztetés: Garancia-információk az EGT* területén és Svájcban élő vásárlók számára A jelen Yamaha termékre vonatkozó részletes garancia-információk, valamint az EGT*-re és Svájcra, kiterjedő garanciális szolgáltatás tekintetében keressék fel webhelyünket az alábbi címen (a webhelyen nyomtatható fájl is látható), vagy pedig lépjen kapcsolatba az országában működő Yamaha képviselői iróddal. * EGT: Európai Gazdasági Térség
Eesti keel	Oluline märkus: Garantiteave Euroopa Majanduspiirkonna (EMP) ja Šveitsi Klientidele Täpsemat teavet saameks selle Yamaha toote garantii ning kogu Euroopa Majanduspiirkonna ja Šveitsi garantiteeninduse kohta, külastage palun veebisaiti alljärgneval aadressil (meie saitil on saadaval printitav fail) või pöörduge Teie regiooni Yamaha esinduse poole. * EMP: Euroopa Majanduspiirkond
Latviešu	Svarīgs paziņojums: garantijas informācija klientiem EEZ* un Šveicē Lai saņemtu detalizētu garantijas informāciju par šo Yamaha produktu, kā arī garantijas apkalpošanu EEZ* un Šveicē, lūdzam apmeklētiet zīmaka norādīto tīmekļa vietnes adresi (tīmekļa vietnē ir pieejams drukājams fails) vai sazināties ar jūsu valstī apkalpojošo Yamaha pārstāvniecību. * EEZ: Eiropas Ekonomikas zona
Lietuvių kalba	Dėmesio: informacija dėl garantijos priekšams 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 spausdinamas failas) arba kreipkitės į „Yamaha“ atstovybę savo šalyje. *EEE — Europos ekonominė erdvė
Slovenščina	Določite upozornenje: Informacije o zaruke pre zakažnikov v EHP* a Švajcarsku Podrobne informacije o zaruke (kajkajice sa tohto produktu od spodobnosti Yamaha a garancijom servisu v EHP* a Švajcarsku najdete na webovni strani uvedenej nižje (na naši spletni strani) ali se obratite na zastopcu spodobnosti Yamaha v svoji državi. * EHP: Evropski gospodarski prostor
Slovensščina	Pomembno obvestilo: Informacije o garanciji za kupce v EGP* in Švici Za podrobnejše informacije o tem Yamaha izdelku ter garancijskem servisu v celotnem EGP in Švici, obiščite spletno mesto, ki je navedeno spodaj (našiljiva datoteka je na voljo na našem spletnem mestu), ali se obrnite na Yamahinega predstavništva v svoji državi. * EGP: Evropski gospodarski prostor
Български език	Важно съобщение: Информация за гаранцията за клиентите в ЕИП* и Швейцария 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
Limba română	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

<http://europe.yamaha.com/warranty/>



1-YEAR LIMITED WARRANTY ON ARRANGER WORKSTATION KEYBOARDS

Thank you for selecting a Yamaha product. Yamaha products are designed and manufactured to provide a high level of defect-free performance. Yamaha Corporation of America ("Yamaha") is proud of the experience and craftsmanship that goes into each and every Yamaha product. Yamaha sells its products through a network of reputable, specially authorized dealers and is pleased to offer you, the Original Owner, the following Limited Warranty, which applies only to products that have been (1) directly purchased from Yamaha's authorized dealers in the fifty states of the USA and District of Columbia (the "Warranted Area") and (2) used exclusively in the Warranted Area. Yamaha suggests that you read the Limited Warranty thoroughly, and invites you to contact your authorized Yamaha dealer or Yamaha Customer Service if you have any questions.

Coverage: Yamaha will, at its option, repair or replace the product covered by this warranty if it becomes defective, malfunctions or otherwise fails to conform with this warranty under normal use and service during the term of this warranty, without charge for labor or materials. Repairs may be performed using new or refurbished parts that meet or exceed Yamaha specifications for new parts. If Yamaha elects to replace the product, the replacement may be a reconditioned unit. You will be responsible for any installation or removal charges and for any initial shipping charges if the product(s) must be shipped for warranty service. However, Yamaha will pay the return shipping charges to any destination within the USA if the repairs are covered by the warranty. This warranty does not cover (a) damage, deterioration or malfunction resulting from accident, negligence, misuse, abuse, improper installation or operation or failure to follow instructions according to the Owner's Manual for this product; any shipment of the product (claims must be presented to the carrier); repair or attempted repair by anyone other than Yamaha or an authorized Yamaha Service Center; (b) any unit which has been altered or on which the serial number has been defaced, modified or removed; (c) normal wear and any periodic maintenance; (d) deterioration due to perspiration, corrosive atmosphere or other external causes such as extremes in temperature or humidity; (e) damages attributable to power line surge or related electrical abnormalities, lightning damage or acts of God; or (f) RFI/EMI (Interference/noise) caused by improper grounding or the improper use of either certified or uncertified equipment, if applicable. Any evidence of alteration, erasing or forgery of proof-of-purchase documents will cause this warranty to be void. This warranty covers only the Original Owner and is not transferable.

In Order to Obtain Warranty Service: Warranty service will only be provided for defective products within the Warranted Area. Contact your local authorized Yamaha dealer who will advise you of the procedures to be followed. If this is not successful, contact Yamaha at the address, telephone number or website shown below. Yamaha may request that you send the defective product to a local authorized Yamaha Servicer or authorize return of the defective product to Yamaha for repair. If you are uncertain as to whether a dealer has been authorized by Yamaha, please contact Yamaha's Service Department at the number shown below, or check Yamaha's website at www.Yamaha.com. Product(s) shipped for service should be packed securely and must be accompanied by a detailed explanation of the problem(s) requiring service, together with the original or a machine reproduction of the bill of sale or other dated, proof-of-purchase document describing the product, as evidence of warranty coverage. Should any product submitted for warranty service be found ineligible therefore, an estimate of repair cost will be furnished and the repair will be accomplished only if requested by you and upon receipt of payment or acceptable arrangement for payment.

Limitation of Implied Warranties and Exclusion of Damages: ANY IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE SHALL BE LIMITED IN DURATION TO THE APPLICABLE PERIOD OF TIME SET FORTH ABOVE. YAMAHA SHALL NOT BE RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OR FOR DAMAGES BASED UPON INCONVENIENCE, LOSS OF USE, DAMAGE TO ANY OTHER EQUIPMENT OR OTHER ITEMS AT THE SITE OF USE OR INTERRUPTION OF PERFORMANCES OR ANY CONSEQUENCES. YAMAHA'S LIABILITY FOR ANY DEFECTIVE PRODUCT IS LIMITED TO REPAIR OR REPLACEMENT OF THE PRODUCT, AT YAMAHA'S OPTION. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state. This is the only express warranty applicable to the product specified herein; Yamaha neither assumes nor authorizes anyone to assume for it any other express warranty.

If you have any questions about service received or if you need assistance in locating an authorized Yamaha Servicer, please contact:



CUSTOMER SERVICE
Yamaha Corporation of America
6600 Orangethorpe Avenue, Buena Park, California 90620-1373
Telephone: 800-854-1569
www.yamaha.com

Do not return any product to the above address without a written Return Authorization issued by Yamaha.

©2012 Yamaha Corporation of America.

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.

NORTH AMERICA

CANADA

Yamaha Canada Music Ltd.
135 Milner Avenue, Toronto, Ontario,
M1S 3R1, Canada
Tel: 416-298-1311

U.S.A.

Yamaha Corporation of America
6600 Orangethorpe Avenue, Buena Park, CA 90620,
U.S.A.
Tel: 714-522-9011

CENTRAL & SOUTH AMERICA

MEXICO

Yamaha de México, S.A. de C.V.
Av. Insurgentes Sur 1647 "Prisma Insurgentes",
Col. San Jose Insurgentes, Del. Benito Juarez,
03900, Mexico, D.F.
Tel: 55-5804-0600

BRAZIL

Yamaha Musical do Brasil Ltda.
Rua Fidêncio Ramos, 302 - Cj 52 e 54 - Torre B -
Vila Olímpia - CEP 04551-010 - São Paulo/SP
Tel: 011-3704-1377

ARGENTINA

**Yamaha Music Latin America, S.A.,
Sucursal Argentina**
Olga Cossetini 1553, Piso 4 Norte,
Madero Este-C1107CEK
Buenos Aires, Argentina
Tel: 54-11-4119-7000

VENEZUELA

**Yamaha Music Latin America, S.A.,
Sucursal Venezuela**
C.C. Manzanares Plaza P4
Ofic. 0401- Manzanares-Baruta
Caracas Venezuela
Tel: 58-212-943-1877

PANAMA AND OTHER LATIN AMERICAN COUNTRIES/ CARIBBEAN COUNTRIES

Yamaha Music Latin America, S.A.
Torre Banco General, Piso No.7, Marbella,
Calle 47 y Aquilino de la Guardia,
Ciudad de Panamá, República de Panamá
Tel: +507-269-5311

EUROPE

THE UNITED KINGDOM/IRELAND

Yamaha Music Europe GmbH (UK)
Sherbourne Drive, Tilbrook, Milton Keynes,
MK7 8BL, U.K.
Tel: 01908-366700

GERMANY

Yamaha Music Europe GmbH
Siemensstraße 22-34, 25462 Rellingen, Germany
Tel: 04101-3030

SWITZERLAND/LIECHTENSTEIN

**Yamaha Music Europe GmbH
Branch Switzerland in Zürich**
Seefeldstrasse 94, 8008 Zürich, Switzerland
Tel: 044-387-8080

AUSTRIA

Yamaha Music Europe GmbH Branch Austria
Schleiergasse 20, A-1100 Wien, Austria
Tel: 01-60203900

CZECH REPUBLIC/HUNGARY/ ROMANIA/SLOVAKIA/SLOVENIA

**Yamaha Music Europe GmbH
Branch Austria (Central Eastern Europe Office)**
Schleiergasse 20, A-1100 Wien, Austria
Tel: 01-60203900

POLAND/LITHUANIA/LATVIA/ ESTONIA

**Yamaha Music Europe GmbH
Branch Poland Office**
ul. Wrotkowa 14 02-553 Warsaw, Poland
Tel: +48 22 88 00 888

BULGARIA

Dinacord Bulgaria LTD.
Bul. Iskarsko Schose 7 Targowski Zentar Ewropa
1528 Sofia, Bulgaria
Tel: 02-978-20-25

MALTA

Olimpus Music Ltd.
The Emporium, Level 3, St. Louis Street Msida
MSD06
Tel: 02133-2144

NETHERLANDS/BELGIUM/ LUXEMBOURG

Yamaha Music Europe Branch Benelux
Clarissenhof 5-b, 4135 AB Vianen, Netherlands
Tel: 0347-358 040

FRANCE

Yamaha Music Europe
7 rue Ambroise Croizat, Zone d'activites Pariest,
77183 Croissy-Beaubourg, France
Tel: 01-64-61-4000

ITALY

Yamaha Music Europe GmbH, Branch Italy
Viale Italia 88, 20020 Lainate (Milano), Italy
Tel: 02-935-771

SPAIN/PORTUGAL

**Yamaha Music Europe GmbH Ibérica, Sucursal
en España**
Ctra. de la Coruna km. 17,200, 28231
Las Rozas (Madrid), Spain
Tel: +34-91-639-88-88

GREECE

Philippos Nakas S.A. The Music House
147 Skiathou Street, 112-55 Athens, Greece
Tel: 01-228 2160

SWEDEN

**Yamaha Music Europe GmbH Germany filial
Scandinavia**
J. A. Wettergrensgata 1, Box 30053
S-400 43 Göteborg, Sweden
Tel: +46 31 89 34 00

DENMARK

**Yamaha Music Europe GmbH, Tyskland - filial
Denmark**
Generatorvej 6A, DK-2730 Herlev, Denmark
Tel: 44 92 49 00

FINLAND

F-Musiikki Oy
Kluuvikatu 6, P.O. Box 260,
SF-00101 Helsinki, Finland
Tel: 09 618511

NORWAY

**Yamaha Music Europe GmbH Germany -
Norwegian Branch**
Grini Næringspark 1, N-1361 Østerås, Norway
Tel: 67 16 78 00

ICELAND

Skifan HF
Skeifan 17 P.O. Box 8120, IS-128 Reykjavik,
Iceland
Tel: 525 5000

RUSSIA

Yamaha Music (Russia) LLC.
Room 37, bld. 7, Kievskaya street, Moscow,
121059, Russia
Tel: 495 626 5005

TURKEY/CYPRUS

**Yamaha Music Europe GmbH
Merkezi Almanya Türkiye Istanbul Şubesi**
Maslak Meydan Sokak No:5 Spring Giz Plaza
Bağımsız Böl. No:3, 34398 Şişli, Istanbul
Tel: +90-212-999-8010

OTHER EUROPEAN COUNTRIES

Yamaha Music Europe GmbH
Siemensstraße 22-34, 25462 Rellingen, Germany
Tel: +49-4101-3030

AFRICA/MIDDLE EAST

SOUTH AFRICA

**Global Music Instruments
World of Yamaha**
19 Eastern Service Road, Eastgate Ext.6, Sandton,
South Africa
Tel: +27-11-259-7700

OTHER COUNTRIES

Yamaha Music Gulf FZE
LOB 16-513, P.O.Box 17328, Jebel Ali,
Dubai, United Arab Emirates
Tel: +971-4-881-5868

ASIA

THE PEOPLE'S REPUBLIC OF CHINA

Yamaha Music & Electronics (China) Co.,Ltd.
2F, Yunhedasha, 1818 Xinzha-lu, Jingan-qu,
Shanghai, China
Tel: 400-051-7700

HONG KONG

Tom Lee Music Co., Ltd.
11/F., Silvercord Tower 1, 30 Canton Road,
Tsimshatsui, Kowloon, Hong Kong
Tel: 2737-7688

INDIA

Yamaha Music India Pvt. Ltd.
Spazedge building, Ground Floor, Tower A, Sector
47, Gurgaon- Sohna Road, Gurgaon, Haryana, India
Tel: 0124-485-3300

INDONESIA

PT. Yamaha Musik Indonesia (Distributor)
Yamaha Music Center Bldg. Jalan Jend. Gatot
Subroto Kav. 4, Jakarta 12930, Indonesia
Tel: 021-520-2577

KOREA

Yamaha Music Korea Ltd.
8F, 9F, Dongsung Bldg. 158-9 Samsung-Dong,
Kangnam-Gu, Seoul, Korea
Tel: 02-3467-3300

MALAYSIA

Yamaha Music (Malaysia) Sdn., Bhd.
No.8, Jalan Perbandaran, Kelana Jaya, 47301
Petaling Jaya, Selangor, Malaysia
Tel: 03-78030900

SINGAPORE

Yamaha Music (Asia) Private Limited
Block 202 Hougang Street 21, #02-00,
Singapore 530202, Singapore
Tel: 65-6747-4374

TAIWAN

Yamaha Music & Electronics Taiwan Co.,Ltd.
2F., No.1, Yuandong Rd. Banqiao Dist.
New Taipei City 22063 Taiwan
Tel: 02-7741-8888

THAILAND

Siam Music Yamaha Co., Ltd.
3, 4, 15 and 16th floor, Siam Motors Building,
891/1 Rama 1 Road, Wangmai,
Pathumwan, Bangkok 10330, Thailand
Tel: 02-215-2622

VIETNAM

Yamaha Music Vietnam Company Limited
15th Floor, Nam A Bank Tower, 201-203 Cach
Mang Thang Tam St., Ward 4, Dist.3,
Ho Chi Minh City, Vietnam
Tel: +84-8-3818-1122

OTHER ASIAN COUNTRIES

<http://asia.yamaha.com>

OCEANIA

AUSTRALIA

Yamaha Music Australia Pty. Ltd.
Level 1, 99 Queensbridge Street, Southbank,
Victoria 3006, Australia
Tel: 3-9693-5111

NEW ZEALAND

Music Works LTD
P.O.BOX 6246 Wellesley, Auckland 4680,
New Zealand
Tel: 9-634-0099

COUNTRIES AND TRUST

TERRITORIES IN PACIFIC OCEAN

<http://asia.yamaha.com>



Yamaha Global Site
<http://www.yamaha.com/>

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

Manual Development Department
© 2015 Yamaha Corporation

Published 07/2015 POZC*.***B0
Printed in Indonesia

ZP52790



ZP52790